UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

MAR 11 2016

Lynn Fiedler, Chief
Michigan Department of Environmental Quality
Air Quality Division
P.O. Box 30260
Lansing, Michigan 48909-7760

Dear ~~Ms.~~ Fiedler: Lynn

I am pleased to transmit to you the final report of the New Source Review program evaluation that took place on October 21 and 22, 2014. Representatives of the U.S. Environmental Protection Agency met with Michigan Department of Environmental Quality (MDEQ) managers and staff as part of EPA's initiative to evaluate the State's New Source Review permit program implementation. This marks the third review of MDEQ's permitting program by EPA, which includes the 2003 and 2009 reviews.

We see that MDEQ's Air Permit Section is committed to issuing construction permits that meet the requirements of the state implementation plan and the Clean Air Act in a timely, expeditious manner. We note MDEQ's efforts to issue permits quickly and track permit applications as they are developed into permits. We note MDEQ has made efforts to improve working with the regulated community, interested general public, Tribal representatives, and EPA during the permitting process. MDEQ continues to keep EPA informed of individual construction permit issues and general permit program implementation issues. The monthly calls held between MDEQ and EPA to discuss pending construction permit applications continue to build the positive working relationship between your department and EPA.

EPA has identified one concern through the 2014 evaluation. EPA recommends that MDEQ ensures that the permits that are below the 90% significance threshold and are, therefore, not subject to public comment, have practically enforceable emission limits to effectively limit the potential to emit (PTE). As these permits are later on being carried over into the renewable operating permit program, EPA has found that some permits have lacked adequate emission limits to restrict the facility's PTE. EPA has commented to MDEQ on these draft operating permit conditions, but believes these issues would be best addressed when the construction permit is being issued. EPA has provided comments to MDEQ regarding PTE limit conditions in construction permits which have gone through a public comment period, and will continue to review these draft permits as part of our oversight responsibilities. EPA has provided a compilation of relevant guidance to MDEQ and the Region 5 states concerning effective permit conditions limiting a facility's potential to emit.

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (100% Post-Consumer)

If you or any of your staff have any questions or concerns about this report, please contact Constantine Blathras, of my staff, at (312) 886-0671.

Sincerely,

George T. Czerniak
Director
Air and Radiation Division

Michigan New Source Review Program Review

Performed by USEPA Region 5

October 21-22, 2014

I. Executive Summary

On October 21 and 22, 2014, the U.S. Environmental Protection Agency met with the Michigan Department of Environmental Quality (MDEQ) to perform an evaluation of MDEQ's Clean Air Act (CAA) Prevention of Significant Deterioration (PSD) and nonattainment New Source Review (NSR) Programs (collectively, NSR program). The purpose of the evaluation was to review permit issuance and the permitting process in Michigan, to review the status of the NSR State Implementation Plan (SIP), and to assess the quality of construction permits issued by MDEQ. The evaluation consisted of a discussion based on the Region 5 Questionnaire for NSR Program Evaluation and MDEQ's responses to those questions. A discussion of EPA's findings and recommendations is included as part of this report.

II. Introduction

In 2003, as part of its oversight role, EPA began a four year initiative to review the implementation of the NSR program by permitting authorities throughout the country. As part of that initiative, EPA conducted a review of the MDEQ's permit program in 2003 and a follow-up evaluation in 2009.[1] From the previous evaluations, MDEQ has worked to address any EPA concerns and areas of improvement, and they have been fully resolved. The previous evaluation reports can be found on the EPA Region 5 correspondence website.

Region 5 developed a questionnaire for NSR program evaluations, which consists of questions on areas of concern including: 1) permit process and comments, application forms, permit and technical support documents, response to public comments, and permit process; 2) overarching issues resulting from permit review and program oversight, environmental justice, synthetic minor permits, and start up shutdown and malfunction provisions; 3) SIP approval status; and 4) state feedback.

This final report summarizes EPA's findings and conclusions regarding MDEQ's compliance with the statutory and regulatory requirements for NSR permitting programs, based on the answers MDEQ gave to the questionnaire, our discussion of MDEQ's responses during the face-to-face meeting in October, follow up discussions regarding responses, and EPA staff knowledge of the program from experience with reviewing MDEQ permits and programs. However, this program evaluation is not comprehensive in its scope, and did not evaluate all facets of MDEQ's implementation of the Permit to Install (PTI) program.

III. Description of the MDEQ Program

The Air Quality Division of MDEQ is responsible for issuing NSR construction permits, known as permits to install, or PTIs, to ensure that new or modified sources of air pollution will not have a detrimental impact on human health, welfare, or the environment and will comply with all applicable state and federal requirements. Part 55 (Air Pollution Control) of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended, provides the statutory authority for the Michigan permitting program. The MDEQ air permitting program has

[1] The reports of EPA's findings for the 2003 and 2009 evaluations can be found at: http://yosemite.epa.gov/r5/r5ard.nsf/Permit+Correspondence!OpenView

specific outputs and measures as identified from EPA's national program guidance, regulations and policy. As outlined in the annual Section 105 grant, the commitments for the PTI program include the following items: 1) issue PSD and NSR permits for new major sources and major modifications to major sources (major NSR permits) within one year of receiving a complete permit application; 2) issue major NSR permits consistent with the CAA requirements and enter Best Available Control Technology/Lowest Achievable Emission Rate (BACT/LAER) determinations in the RACT/BACT/LAER Clearinghouse (RBLC); 3) provide data in a timely manner on PSD permits issued for new major sources and major modifications by entering data including "the application accepted date" and "the permit issuance date" into the RBLC national database; and 4) provide PSD/NSR permit applications to EPA prior to the start of the public comment period.

The MDEQ has worked to achieve these goals and has been meeting these objectives on a consistent basis. MDEQ has been implementing its permitting program, as required by Michigan rule 336.1206, to issue permits within 240 days of application receipt. For fiscal year 2014, MDEQ issued major PSD/NSR permits within one year of application receipt, with an average being 350 days. For the first and second quarters of fiscal year 2015, MDEQ has acted upon major PSD/NSR permits within 165 days of application receipt.

IV. Findings

Application forms

The MDEQ has made many significant revisions to its PTI application review process, such as implementing an extensive screening and tracking process under its LEAN efficiency program to reduce the time from receipt of a permit application to the final permit issuance. In October 2014, as a result of the LEAN process review, MDEQ began a trial program which increased the level of detail they look for in initial screening of PTI applications and attempted to make additional information requests sooner in the permit review process. The intent of this was to shorten the time necessary to get complete applications for processing which would result in a shortened processing time. In addition, MDEQ is implementing more frequent communications with each applicant. The goal of this action is to speed up the information exchanges and eliminate long delays in the review process.

In fiscal year (FY) 2014, MDEQ acted upon 401 permit applications. As discussed further below, MDEQ implements a computerized tracking system with specific permit application milestone events. MDEQ managers review these tracking reports and are aware of milestone actions that exceeded the expected delivery dates.

Prior to MDEQ accepting a permit application, it is screened for administrative completeness, and it is then assigned to a permit engineer for a general review of key items for technical completeness. The Governor of Michigan has developed a benchmark in which MDEQ should issue permits within a 90 day average of receipt (on a quarterly and annual basis), which also includes the public comment period. The permitting timeframes provide the permit engineer approximately 75 days of available time to work on the permit. As described above, MDEQ's processing times are contained within the Michigan air pollution control rule 1206. This rule

provides that MDEQ take final action on an application within 180 days of receipt if public comment is not required, and within 240 days of receipt if public comment is required. For the third quarter of fiscal year 2015, MDEQ's average processing time for all applications was 53 days.

MDEQ has not made any changes to the PTI application form since 2006.[2] MDEQ has its PTI forms available online on its website. Additionally, MDEQ has application forms available for various general construction permits for source categories such as coating lines with low volatile organic compounds (VOC) emissions, ethylene oxide sterilizers, natural gas fired burn-off ovens, and low rating propane and natural gas fired boilers.

Permit scoping meetings and pre-application meetings are available to applicants, which help facilitate expedited permit issuance. As part of the pre-application meeting for a PSD application, MDEQ will inform the applicant as to what is expected as part of the BACT top-down analysis and modeling analysis. In a permit scoping meeting, MDEQ will involve necessary staff, from 10-15 people, to review information and potentially issue a permit immediately. Of the 401 permit applications acted upon in FY2014, five were PSD permits.[3] In the attachments to this report, MDEQ has provided a table of PSD permits issued by year (since 1991, the most PSD permits MDEQ issued in a year was 17 in 2010). MDEQ has developed templates for the fact sheet (staff report), and response to comments document. MDEQ also has a list of potential boilerplate permit conditions for the PTI permit that staff can access as needed.

The PSD application contains a modeling analysis which is a requirement of the PSD permitting program to address both National Ambient Air Quality Standards (NAAQS) and PSD increment impacts. In addition, MDEQ may conduct a modeling analysis for minor sources to demonstrate compliance with the applicable NAAQS and PSD increments. This modeling may also be used as a demonstration of compliance with the state's air toxics program. The air modeling analysis begins initially with a screening model, followed by an AERMOD modeling analysis, as needed. For minor sources, MDEQ follows the 40 C.F.R. Part 51, Appendix W protocol. MDEQ always uses allowable emissions for modeling to demonstrate compliance with the NAAQS. MDEQ models minor sources ambient impacts in the same manner as major sources. The only exception is that one year of modeling is required for minor sources as long as the maximum impacts for all pollutants meet the ambient air quality standards. If the maximum impacts do not meet the short term averaging times, then a five year analysis can be performed. MDEQ maintains an allowable emission inventory for existing sources to use in modeling analysis through the Michigan Air Emissions Reporting System (MAERS) database for actual emission information, and its Permit Cards database list for allowable emission information. The database information is updated as new PTI permits are issued. Sources will provide information on a yearly basis of their actual emission information which is added to the MAERS database.

---

[2] MDEQ has made minor changes to the application forms in September 2015, after the audit was performed.

[3] In calendar year 2014, MDEQ issued the following five PSD permits: 1) General Motors LLC (209-00E, 5/9/14); 2) Seyerstal Dearborn LLC (182-05C, 5/12/14); 3) Severstal Dearborn LLC (20-14, 9/10/14); 4) Gerdau Macsteel Monroe (102-12A, 10/27/14); and 5) EES Coke Battery LLC (51-08C, 11/21/14).

MDEQ will also utilize the CALPUFF modeling system or the VisScreen programs when addressing impacts related to Class I visibility and in the Additional Impacts Analysis required in PSD permit review. MDEQ uses EPA's distance guidance of 100 kilometers for PSD projects that may have an impact on Class I areas. However, for some larger or controversial projects, MDEQ will use a 300 km distance in evaluating potential PSD Class I increment impacts.

Permit process

MDEQ provides a 30 day public notice for all PSD/NSR permits, all netting applications, all opt outs (which take on practically enforceable permit conditions to avoid major source permitting requirements) with emissions greater than 90% of the significance thresholds, all minor modifications greater than 90% of the significance thresholds, and all controversial applications. Controversial permitting actions are generally, but not limited to, permitting actions that have citizen and/or environmental group interest or sources with a history of compliance issues. MDEQ may extend the public comment period beyond 30 days due to requests related to concerns raised by the public. The MDEQ uses its discretion in determining which permit applications it considers controversial and is aware of EPA's efforts in promoting Environmental Justice (EJ) in low income and minority communities. MDEQ has provided enhanced public participation measures for some PTI actions considered controversial. Some of these actions, either requested by the applicant, stakeholders, or EPA, have included additional days for the public comment period, outreach to community groups and representatives, holding informational meetings to answer citizen questions on actions, encouraging the facility to reach out to provide information to the local community.

MDEQ accepts comments during the public comment period in writing, orally if a public hearing is held, and via its PTI website. EPA Region 5 utilizes MDEQ's PTI application website to submit its formal comments during the public comment period. EPA staff have also contacted MDEQ permit engineers directly with technical questions on permit actions, in which a written comment was not necessary.

When MDEQ issues a Renewable Operating Permit (ROP) Program (Title V) permit, MDEQ will "void" a PTI permit after transferring the PTI permit terms to the ROP. Voided PTI permits are those permits that are no longer active, or have been voided rolled into an ROP. When issuing a new or renewed ROP, MDEQ permit staff will ensure that all applicable PTI conditions are properly and completely transferred to the ROP. This process involves communication between MDEQ district staff who work on the ROPs and permit staff who write the PTIs. The appendix in the ROP lists all PTIs that have been incorporated into the ROP since its initial issuance. Additionally, MDEQ will incorporate into the ROP all applicable additional requirements which have become effective since issuance of the prior ROP. This includes National Emission Standards for Hazardous Air Pollutants (NESHAPs), New Source Performance Standards (NSPSs), and acid rain program requirements. The ROP permit will include additional requirements not found in the PTI, such as the general conditions, compliance assurance monitoring, exempted emission units, Acid Rain Program requirements, and deviation report requirements. This communication between MDEQ staff involves the MDEQ district and

permit staff as well as the facility being permitted. The ROPs are then subject to a public comment period and EPA's 45 day comment period for all initial and renewed ROPs.

MDEQ permit writing

MDEQ permit engineers undergo initial and ongoing training in permit writing and applicable permitting regulations. The more experienced air permits staff also conduct trainings, offering information on roles and responsibilities of the various permitting units, Michigan rules and statutes. Permit engineers also attend smoke school for visible emissions and EPA developed classes.

MDEQ holds permit scoping and pre-application meetings with permit applicants. MDEQ believes that these meetings can result in better and more complete initial applications, which can lead to faster issuance of final PTIs. The MDEQ permit engineer works with the MDEQ district office compliance inspector to review the permit application to ensure all units are included and all applicable requirements are incorporated into the permit. The permit engineer will tend to focus on either sources in the thermal unit grouping or the general manufacturing grouping to facilitate consistency of permits.

MDEQ permitting

MDEQ issues PTI permits pursuant to its Michigan SIP-approved rules, particularly Part 2 (general construction permitting program), Part 18 (PSD rules), and Part 19 (non-attainment area NSR rules). EPA has approved into the Michigan SIP, the Part 18 and 19 rules. EPA is working with MDEQ to resolve EPA's concerns with Part 2 rule revisions. MDEQ expects to address EPA's concerns with the Part 2 rules and provide an updated Part 2 rule for approval into the SIP. Over the past few years, MDEQ has not submitted any written permit applicability determination requests for EPA input. During the monthly conference calls between MDEQ and EPA, staff discuss applicability issues as they arise. MDEQ keeps track of source modifications and PTI permits received, which are confirmed by compliance inspections at the facilities. Often sources consult with the MDEQ prior to making physical changes to their facilities, including changes which may be exempted and fall under the definition of being a routine repair and replacement modification. Sources may also submit to MDEQ an applicability determination, including past actual to project actual emission calculations, documenting that a PTI permit is not required. Sources are also required to keep records when using Michigan's Part 2 permit exemptions. These records are available to MDEQ as well as EPA during compliance inspections or upon request. It is the responsibility of the permit engineer to check to make sure that they include existing synthetic minor conditions from any previous permits.

MDEQ tracks exempted units through its ROP permits, even if the exempted unit does not have any applicable requirements. Michigan's Part 2 rules, (rule 278a) require a source owning or operating an exempt process or equipment to be able to provide information demonstrating the applicability of the exemption. MDEQ staff confirm and check to ensure that facilities have the proper permits both during PTI and ROP permitting.

MDEQ generally does not include provisions for affirmative defense for periods of start-up, shut-down, and malfunction in its PTI permits. However, EPA recently has become aware that Michigan has incorporated in PTIs language taken from federal consent decrees that includes references to force majeure and affirmative defenses. EPA recognizes that resolution of the problem must involve several EPA offices, and is working with MDEQ to determine how to address the issue. Michigan does have provisions in its Part 2 rules regarding an affirmative defense (rule 216), however, MDEQ is working to address concerns raised by EPA and is evaluating potential changes to rule 216.

MDEQ has encountered concerns in implementing the particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) requirements under PSD/NSR. These concerns include having valid $PM_{2.5}$ emission data for additional sources in a cumulative NAAQS analysis, and limiting impacts to levels below the more stringent standards. MDEQ has also encountered concerns in implementing the ozone modeling requirements under PSD/NSR. MDEQ has experienced difficultly in modeling compliance with the 1-hour nitrogen dioxide and sulfur dioxide NAAQS for sources going through permitting.

MDEQ has been working effectively with the recently redesignated PSD non-Federal Class I area of the Forest County Potawatomi Community of Wisconsin (FCP)[4]. MDEQ provides PSD permit applications to both the Federal Class I land managers for PSD Class I areas near applicant sites, as well as the FCP at the same time for review. MDEQ solicits comments and input on PSD permit applications, and works with the Class I and FCP land managers to address any concerns or comments prior to sending the draft PSD permit out for public comment. EPA Region 5 also provides notice to the FCP of any PSD permit applications we receive that are located in the Michigan Upper Peninsula.

MDEQ has in the past issued permits to sources that were located within the exterior boundaries of Tribal reservations. MDEQ acknowledges that EPA implements and administers the Clean Air Act (CAA) for sources located within the exterior boundaries of a Tribal reservation. However, MDEQ will continue to require and enforce state law permits for sources on Tribal lands. While MDEQ asserts that it will implement its own state permitting program for "sources on tribal lands" such activities are outside the scope of Michigan's delegated federal program and therefore not relevant to this report. EPA takes no position with respect to MDEQ's authority to issue non-CAA permits under its own state authority, and this permitting practice remains a matter of relative jurisdictional assertions as between the state and each of the tribes whose reservation lands are within Michigan's boundary. On August 28, 2015, EPA issued a Part 49 "after the fact" synthetic minor construction permit to Summit Petroleum Corporation located on the Isabella Tribal Reservation of Michigan. MDEQ had previously issued a permit to Summit Petroleum for the sweetening plant and adjoining wells. The permit issued by EPA was for the natural gas sweetening plant and two adjacent oil wells. The Summit Petroleum court decision stated that only the closest two wells to the sweetening plant, and not any other

[4] The Michigan Upper Peninsula border is within 100 kilometers of the FCP Class I area. EPA guidance recommends that any PSD source within 100 kilometers of a Class I area provide the permit application to the appropriate Class I area land manager for review.

wells which supplied gas to the plant, were to be considered "adjacent" and part of the facility. MDEQ will use the Summit Petroleum decision as part of its stationary source determinations to consistently issue PTI permits.

EPA Review and Permit Comments

EPA staff hold monthly calls with MDEQ permit section managers to discuss pending and/or expected Michigan PTI applications. Each month, MDEQ provides an updated list containing information on each application, including the company name, permit number, date received, application type, county, description of changes, status, permit engineer, when information was submitted to EPA, and remarks. The monthly list contains PSD/NSR, netting out, 112(g), permits with synthetic minor limits greater than 90% of the major source threshold, and potential public interest permitting actions. This PTI application list is also shared with the Tribes located in Region 5 to keep them informed and aware in advance of any permitting actions which may impact their reservations. During the monthly calls, EPA and MDEQ also discuss any programmatic issues such as air permit rulemakings, permitting guidance, and applicability issues. MDEQ staff also email EPA and interested parties, the public participation documents of PTI actions that will be entering the public comment period. MDEQ also provides EPA with the hardcopy applications for PSD/NSR permitting actions.

EPA reviews all PSD and nonattainment NSR permits issued by MDEQ. EPA reviews other non-PSD/NSR permitting actions as resources allow, using various selection criteria such as the likelihood of public interest. As part of our oversight role, EPA has provided comments to MDEQ during the public comment period on draft permits. EPA's comments on MDEQ's permits can be found at EPA Region 5 permit correspondence website.[5] EPA staff expeditiously work with MDEQ staff in resolving the comments raised by EPA during the comment period in a timely manner. EPA staff will inform MDEQ when no comments are expected to be raised during a permit's public comment period. MDEQ accepts comments electronically via its internet site which contains a link for each permitting action, allowing a commenter to provide comments or to attach a letter. MDEQ has worked closely with EPA to address our concerns and to issue final permits that meet the requirements of the CAA and the Michigan SIP. When EPA has submitted comments on PTI draft permits during the public comment period, MDEQ staff will work to address EPA's comments either via a conference call or email with discussions, to ensure EPA's concerns are adequately addressed prior to finalizing the permit.

Response to comments

Once the public comment period closes, MDEQ responds to all relevant air quality-related comments on permit applications and draft permits that underwent public comment. MDEQ strives to provide responses to all comments received in a manner that is understandable to the general public. MDEQ understands that the general public does not fully understand the purpose of the PTI permitting process and what the underlying Michigan statutes can and cannot do to address the citizen's concerns. On a case-by-case basis, such as for communities of concern, MDEQ will implement an enhanced public participation process. MDEQ has cited a lack of

[5] http://yosemite.epa.gov/r5/r5ard.nsf/Permit+Correspondence!OpenView

legal authority and budget restrictions preventing it from implementing some additional monitoring in the interest of the communities. Typically, MDEQ provides additional outreach for public notice and information on public hearings in communities. MDEQ may increase the length of the public comment period beyond the minimum statutory 30-day period when requested by the public. Prior to the public hearing itself, MDEQ will conduct a question and answer session to provide the public technical information on its regulations and the scope of its authority on the permitting action. MDEQ also provides a mechanism for public comments to be submitted via the internet.

MDEQ will public notice minor PTI permits that have emission limits that are over 90% of the major source threshold, including "opt out" permits. EPA recommends that MDEQ provide public notice for all of its PTI permits. The PTI permitting rules require publication during the public comment period in a local newspaper, which costs approximately $400-500 per notice. The public comment period also adds a minimum of 30 days to the permit issuance timeframe.

Once it has taken final action on a permit application, MDEQ will post final permits and responses to comments documents online. Additionally, MDEQ will notify all individuals who commented during the public comment period or attended the public hearing, if one is held, of a final decision and where the relevant permit documents can be found. The final permit, the response to comments document, and other associated public notice documents, are available on MDEQ's PTI website for 3-4 months after the final action date. MDEQ will also post on its PTI website documents related to any appeals received on the final issued permit and will keep those documents on its website until the adjudication process is complete.

File Review

EPA requested that MDEQ provide hardcopy final permit files for our review. The purpose of the file review was to determine whether all documents that MDEQ used in reaching its final permitting decision were present and available so the public could understand the decision-making process. The MDEQ Lansing office retains all active issued permit files as well as some voided permits. MDEQ will archive voided permits to provide storage space at its offices, and will typically destroy voided permits after 25 years. MDEQ selected permit files which had public comment periods that resulted in comments being submitted and a response to comments document developed, as well as permit files that had been further adjudicated in the court.

The following permit files were provided by MDEQ for review: 1) Consumers Energy (permit number 191-12); 2) Kirtland Products (47-11C); 3) Eagle Mine Humbolt Mill (405-08A0; and 4) Gerdau Macsteel (102-12). The files were generally well organized, containing all the documents generated during the permitting process. MDEQ tracks 26 separate milestone events during the permitting process, and this information is reflected in the permit process flow timeline tracking form as part of the file. MDEQ management has electronic access to the milestone tracking database for active permit applications. If the milestone date passes without action being taken by the permit engineer, the entry is flagged on the tracking system. Supervisors have access to the system and review the application status on a weekly or more

frequent basis. To meet the Governor's 90-day average permit issuance benchmark, MDEQ has a goal to process permit applications within an average of 75 days.

The permit files may generally contain the permit application, permit evaluation form, Fact Sheet, staff permit engineer hand calculations, emissions calculations and modeling reports, interested party letters, the final permit, company letter, notice of hearing, public participation routing slip, permit process flow timeline tracking, PTI application summary final permit terms and conditions, response to comments, and public participation documents. Additionally, permits that are appealed to the State's circuit court will have the permit file indexed, and the permit file will have a corresponding index for the administrative record. These additional documents related to court appeals will include the following documents: court filings, administrative record index for hearing file from other parts of the MDEQ air division, and the hearing statements and materials.

RBLC PSD/NSR Permit Entries

As part of MDEQ's yearly commitments, they are required to provide data in a timely manner on PSD/NSR permits issued for new major sources and major modifications by entering data including the "application accepted date" and the "permit issuance date", along with the BACT/LAER determinations into the RBLC. MDEQ has committed to enter the appropriate information into the RBLC within 6 months of the issuance date of the PSD/NSR permit. MDEQ has a dedicated staff person charged with the responsibility of entering data into the RBLC. Since January 1, 2014, MDEQ has RBLC entries for EES Coke Battery LLC (51-08C, issued 11/21/14), Severstal Dearborn LLC (AK Steel Corp.)(20-14, issued 9/10/14), AK Steel Corp (182-05C, issued 5/12/14), and General Motors Lansing Delta Township LLC (209-00E, issued 5/9/14).

Over the past year, MDEQ has made EPA aware of technical problems with their attempts to input information into the RBLC. EPA staff have been working to resolve these technical issues. We will continue to work closely with MDEQ to resolve any technical issues delaying RBLC database entries.

As part of the program evaluation, EPA reviewed the RBLC database for Michigan PSD/NSR permit data for any permits issued between January 1, 2014, and October 22, 2015. This search criteria included all permits issued by MDEQ in 2014 as well as permits through the date of preparation of this report in MONTH 2015. The results of the search produced records for four PSD permits; EES Coke Battery LLC, Severstal Dearborn Corp., AK Steel Corp., and General Motors Lansing Delta Township LLC. After contacting MDEQ about the status of the RBLC, they provided an update explaining the status of those PSD/NSR permits issued in that timeframe that were not listed in the RBLC database. MDEQ has already uploaded the technical information for two of the recent PSD permitting actions that were not listed in the RBLC database. Once MDEQ inputs its data into the RBLC database, EPA will review it and then will respond with a "Passed QA" confirmation if the information was entered correctly. Since the review, MDEQ has received affirmative responses for both of the PSD permits it uploaded. MDEQ has uploaded the BACT data for a third PSD permit issued during the relevant

timeframe. The final source did not undergo a physical change or change in the method of operation, so there was no BACT entry information available.[6]

Permit Appeals

As MDEQ's major source PTI PSD permits are issued pursuant to Michigan's SIP-approved Part 18 rules, they are no longer subject to review by EPA's Environmental Appeals Board. Michigan's PTI permits, if appealed, are adjudicated in the Michigan County Circuit Courts.[7] Since 2010, eight MDEQ PTI air permits have been adjudicated in the Michigan courts. The MDEQ has successfully defended seven of those eight permit, while the eighth permit is still an active case. The following eight permits issued by MDEQ, since our last program review, have been adjudicated:

- Consumers Energy Company Karn Weadock- permit number 341-07
- Detroit Edison Monroe- permit no. 93-09A
- Detroit Edison Monroe- permit no. 93-09B
- Eagle Mine, LLC- permit no. 50-06B
- Holland Board of Public Works- permit no. 25-07
- Eagle Mine, Humboldt Mill- permit no. 405-08A
- Wolverine Power Supply Cooperative, Inc.- permit number 317-07
- AK Steel (formerly Severstal Steel)- permit number 182-05C (currently still active)

As part of this report, please see the document titled "Permit Appeals September 29, 2015" for a complete discussion of each permit appeal, the issues raised, the court decision on the appeal, and final status of the permit. Some PTI permits have been appealed by environmental groups which raised their general concerns with the continued use of coal and alleged that the permit process did not demonstrate a need for the project. The groups have also raised concerns with the permit technical review. Of the eight permits appealed, the court has yet not reached a decision on the AK Steel permit.

V. Recommendations

MDEQ has made substantial efforts through its LEAN program to reduce the permitting processing time from application receipt to final permit. EPA supports such efforts as well as MDEQ's stated commitment that, "...the same level of detail, depth, and quality in our reviews" is maintained for all permits. EPA recommends MDEQ continue its trial of the LEAN permitting process program and looks forward to seeing MDEQ's final determination of its effectiveness and benefit.

EPA recommends that MDEQ continue to work with EPA in developing enhanced monitoring methods and compliance assurance permit conditions in its PTI permits. MDEQ has worked closely with EPA in addressing EPA's concerns for additional compliance measures and

[6] Please see attachment, October 30, 2015, email from Cindy Smith, MDEQ to Constantine Blathras, EPA Region 5, subject: RE: RBLC entries.

[7] For new sources, the appeal goes directly to the Circuit Court. For existing sources, the first appeal is through a contested case hearing with the MDEQ. The plaintiff may then appeal the case to the Circuit Court.

emissions limitations to address citizen's concerns for air emissions in their communities. We ask that MDEQ continue to work with us to promote transparency and provide enhanced opportunities for public participation in disproportionately impacted communities. In addition, we invite MDEQ to engage with us to explore opportunities to incorporate proven advanced monitoring into permitting actions.[8] Some advanced opportunities include, but are not limited to, usage of advanced emission and pollutant detection technology; a shift to electronic reporting and information sharing; and expanding transparency by making information more accessible to the public.

EPA will continue to review the "synthetic minor" PTIs issued by MDEQ. Particularly, EPA will closely review the draft synthetic minor permits that are above the 90% significance threshold for major source permitting and are very close to major source permitting thresholds for PSD/NSR and NESHAPs. In 2014, EPA provided MDEQ, as well as the other Region 5 states, a compilation of existing EPA guidance highlighting the relevant EPA petition response orders and EPA guidance documents which outlined the important aspects of creating practically enforceable potential to emit (PTE) limit in permits. EPA relies upon this guidance when reviewing these types of PTE limits in permits. MDEQ issues PTIs that incorporate limits below 90% of the significance threshold without a public comment period, followed by issuance of a Title V ROP. During our review of the draft ROPs, EPA had found and commented on some limits that were not practically enforceable and did not follow the permitting guidance. MDEQ has worked with EPA to revise the draft permit limits to better follow the permitting guidance. EPA will continue to work with MDEQ to provide guidance and technical support for its permit engineers in developing practically enforceable PTE limits in its permits. EPA has provided comments regarding practical enforceability to all Region 5 states for both the PTI permits and the ROP permits programs. EPA recommends that MDEQ should continue to ensure that, when a source accepts a source-wide PTE limit (such as staying below 10 tons per year (tpy) and 25 tpy combined for hazardous air pollutants to avoid applicable NESHAPs), all actual emissions of that pollutant from the source be considered in determining compliance, and have the permit demonstrate how the facility's emissions will be determined and fully measured for assessing compliance with the PTE limits.

[8] http://www.epa.gov/compliance/next-generation-compliance

VII. Attachments

The following items are attached to this evaluation report:

1) Questionnaire for New Source Review Program Evaluations- MDEQ's responses to EPA's questionnaire provided on January 12, 2015.

2) Additional questions supplementing the Questionnaire submitted to MDEQ- MDEQ's response to the additional questions.

3) Graphs from MDEQ's website showing metrics on PTI activity since 1993.

4) Permit Appeals September 29, 2015

5) October 30, 2015, email from Cindy Smith, MDEQ, to Constantine Blathras, EPA Region 5, subject: RE: RBLC entries.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

Questionnaire for New Source Review (NSR) Program Evaluations

Standard Questionnaire

I. FOLLOW-UP ITEMS FROM PREVIOUS PROGRAM REVIEW REPORTS

This section is intended for EPA and the permitting authority to revisit issues that were previously identified as concerns, in the last round of program evaluations. Questions should be drafted by the EPA state team to discern if these issues have been adequately addressed so that they are no longer recurring.

II. PERMIT PROGRAM OVERSIGHT QUESTIONS

This section is intended for EPA to identify good practices implemented by the permitting authority, areas needing improvement, and ways in which EPA can improve its own oversight role. This set of questions should serve as a menu for the state team to choose which questions are applicable for their state.. Additional questions for the permitting authority should be developed, if necessary, for any areas of concern and for follow-up questions which cannot be addressed in-house. The EPA state team should identify any recurring comments that EPA has made on permits, permit process, and/or permit support documents, and request the permitting authority to describe any actions taken by the permitting authority to address those comments.

A. Permit Process and Comments

1. Application forms

a. List the types of NSR permits that have standard application forms.
   i. Please indicate whether the application form is available online.
   ii. If forms are not currently available online, discuss whether permitting authority is planning to do so in the future.

b. Has the permitting authority made any changes to their NSR application forms since the last program evaluation?
   i. If so, what changes?
   ii. How have those changes impacted the application review process?
   iii. Did interested parties have the opportunity to review the changes?

c. What additional changes, if any, is the permitting authority planning to make to the application forms or the application submittal process in the near future?

2. ***Permit and Technical Support Document (TSD)***

a. Has the permitting authority made any changes or updates to the permit or TSD template since the last program evaluation? Describe the changes.
   i. How does the permitting authority ensure that permit writers are using the most up-to-date templates?
   ii. How often are changes made to the permit and TSD templates?
   iii. When changes occur, how are they implemented?

b. What procedures does the permitting authority have in place to ensure that there is consistency in permit conditions and documentation of permit decisions?
   i. Does the permitting authority have guidelines for the minimum level of detail that needs to be included in the permit record (i.e., TSD, staff report, project summary, response to comments, etc)?
   ii. Describe the permitting authority's guidelines for the amount of detail that needs to be included in the permit record.

c. Consider selecting 3 or more random permits, TSDs, and/or response to comments to review.
   i. Describe any previously noted concerns that appear in the permit.
   ii. List and describe any new concerns you have identified.

3. ***Response to public comments***

a. What is the permitting authority's procedure for public noticing NSR permits?
   i. In what instances would an NSR (major and minor) permit not be public noticed?
   ii. Provide the state rule citation(s) which provides the criteria for public noticing NSR permits.

b. What is the permitting authority's procedure for responding to comments? (Public, EPA, other state, industry, etc.)
   i. Which comments or categories of comments does the permitting authority typically respond to?
   ii. Which comments or categories of comments does the permitting authority typically not respond to?
   iii. At what point in the permit review process does the permitting authority respond to comments? (e.g., before the proposed permit, before the final permit, etc.)
   iv. How are the comments responded to? (Summary document, response letter, etc.)
   v. Who gets a copy of the response to comments? (Only the commenter, all commenters, etc.)

vi. Are all responses included in the file or posted on-line?
vii. How is the response to comments distributed to interested parties?
viii. Does EPA receive a copy of all comments received and responses? If so, when and how?

c. Describe how the permitting authority ensures comments are responded to, the time-frame for responding, how the permitting authority will respond, to whom, etc.?

d. What recurring comments have been made on recent permits? Are there any trends in permit comments?

e. Has the permitting authority observed any trends in the public comments (for example, GHG-related comments)?

4. ***Permit Process***

a. Combined Title I and Title V permits
   i. Provide a description of how, and under what circumstances, the permitting authority combines the Title I and Title V permit process, if applicable.
   ii. What benefits and challenges has the permitting authority faced with the combined permitting approach?
   iii. How does the permitting authority identify PSD/NSR permits which are combined with a Title V permit?

b. PSD application tracking
   i. How does the permitting authority track PSD/NSR applications received by the agency?
   ii. What is the permitting authority's process for ensuring that information on all pending PSD applications is communicated to EPA?
   iii. Does the permitting authority have procedures for alerting EPA of controversial or precedent setting permit actions, and actions with citizen interest? Describe those procedures.

c. BACT analyses & determinations
   i. What process does the permitting authority follow when conducting BACT analyses?
   ii. Does the permitting authority have guidelines on BACT cost thresholds?

d. RACT/BACT/LAER Clearinghouse (RBLC)
   i. Have all BACT determinations for PSD projects been submitted to the RBLC?
   ii. If not, why?

iii. On average, how soon after permit issuance is the project's BACT information submitted to the RBLC?
iv. Does the permitting authority have a process for submitting BACT information to the RBLC?
v. What obstacles (if any) does the permitting authority face that prevent entering of data into the RBLC in a timely manner?

e. Test methods
i. What criteria does the permitting authority follow when establishing test methods and testing frequency to be used to determine compliance with permit requirements?
ii. Are test methods specified in the permit?
iii. What opportunities are available to the public to comment on proposed test methods?

f. Emissions inventory and ambient impacts analysis
i. Does the permitting authority maintain an allowable emissions inventory for existing sources located within the permitting authority's jurisdiction?
ii. If so, describe the type of information included in the inventory.
iii. What is the permitting authority's process/procedure for updating the emissions inventory?
iv. Does the permitting authority use actual emissions or allowable (potential) emissions when conducting cumulative impacts analyses under PSD?
v. How does the permitting authority determine which proposed projects need a Class I impacts analysis?
vi. Under what circumstances, if any, would the permitting authority conduct a Class I impacts analysis for a Class I area that is located more than 100 km from the proposed source?
vii. How does the permitting authority satisfy the visibility impacts analysis requirement of the PSD rules?
viii. What procedures does the permitting authority have for ambient impacts analysis for minor NSR sources? How is the permitting authority ensuring that their minor NSR program is in compliance with ambient air quality standards?

g. Implementation of $PM_{2.5}$, nitrogen dioxide (NO_2), sulfur dioxide (SO_2) and ozone (O_3) requirements
i. What issues has the permitting authority encountered in implementing $PM_{2.5}$ requirements under PSD/NSR?
ii. What issues has the permitting authority encountered in implementing NO_2 requirements under PSD/NSR?
iii. What issues has the permitting authority encountered in implementing SO_2 requirements under PSD/NSR??
iv. Is the permitting authority ensuring that construction projects are modeled to demonstrate that they will not adversely impact the 1-hour NO_2 and SO_2 standards?

v. Has the permitting authority faced difficulty in modeling compliance with the 1-hr NO_2 or SO_2 NAAQS? Specify.
vi. What issues has the permitting authority encountered in implementing ozone requirements under PSD/NSR?
vii. Does the permitting authority conduct an ozone impacts analysis for each project with significant emissions of VOC or NOx?
viii. How does the permitting authority address secondary $PM_{2.5}$ formation when modeling $PM_{2.5}$ impacts?
ix. Has the permitting authority issued NSR permits that required offsets of $PM_{2.5}$ emissions (either from direct $PM_{2.5}$ or precursors)? How were the offsets achieved? Is there/will there be an offset bank?
x. What is the status of adoption of the state's $PM_{2.5}$ PSD/NSR rules?

h. Waivers, exemptions and general permits
   i. Specify any regulation or policy the permitting authority has which exempts certain emission sources or activities from the requirement to obtain a construction permit.
      A. If this regulation was approved into the SIP, when was it approved? When did this regulation/policy become effective?
      B. If there is a general cutoff based on emissions or is the exemption based on source category and/or size, what criteria must be met to use the exemption? Are de minimis emission levels specified? What are they?
      C. How does the permitting authority track sources that qualify for a permit exemption (i.e., does the source submit a registration, submit records, maintain records, etc.)?
   ii. Specify the regulation or policy the permitting authority has which allows certain pre-construction activities to occur at a non-exempt source prior to the source obtaining a permit.
      A. What types of construction activities are exempt under this regulation or policy?
      B. If this regulation was approved into the SIP, when was it approved? When did this regulation/policy become effective?
   iii. Which sources does the regulation or policy apply to? (minor and/or synthetic minor)Does the permitting authority have general permits or permits by rule for some source categories? If so, list the source categories.
   iv. What is the process for obtaining coverage under a general permit?
      A. Is the source required to apply for coverage under the general permit, or are they automatically covered if they meet the general permit's criteria?
      B. What types of analyses must the source conduct prior to obtaining coverage under a specific general permit?
      C. Is the granting of coverage under a general permit to a specific source public noticed?
   v. How many sources are covered by general permits, if applicable?

vi. Approximately how many sources are covered by permits by rule, if applicable?

i. Permit process changes
   i. What permit process changes has the permitting authority made since the last program evaluation?
   ii. What has been the effect of these changes on the permitting authority's permit quality and permit issuance rates?
   iii. Has the permitting authority made any changes to its public participation procedures since the last program evaluation? If so, what changes were made? What prompted the changes?
   iv. Has the permitting authority implemented any permit process streamlining efforts since the last program evaluation? If so, describe those efforts and how they have impacted the permit process.
   v. What permit-related outreach activities has the permitting authority conducted in the last 3 years? What outreach is planned for the near future?
   vi. Has the permitting authority received any comments from the public or EPA in regards to any part of the permitting process? (Examples include, but may not be limited to, public participation process, issuance efficiency issues, availability of information, etc). If yes, what has the permitting authority done in response to these comments?

j. Industry trends
   i. Has the permitting authority noticed any industry trends that are currently affecting the PSD/NSR permit programs and/or permit issuance?
   ii. Does the permitting authority anticipate any industry trends that may affect the PSD/NSR programs, permit issuance, and/or the permitting authority's workload?

k. Training needs
   i. What is the permitting authority's process for providing training to staff on permit requirements, policy, guidance, etc.?
   ii. Does the permitting authority have any training requests for EPA?

B. Overarching Issues Resulting from Permit Review and Program Oversight

1. PSD/NSR program implementation (questions for the EPA state team)

a. What, if any, permitting program implementation issues are you aware of? (For example, data tracking, staffing, permit timeliness, etc.)
b. Is the permitting authority aware of these issues?
c. Have any been elevated or formalized in a signed letter?
d. What has the permitting authority done to address these?

e. Do we have an updated SIP submittal in-house?
   i. Is it being processed?
   ii. If not, is there a reason it hasn't been or can't be?

2. ***Environmental Justice (EJ) considerations***

   a. How is the permitting authority considering and addressing EJ issues in permitting actions?
   b. List any specific examples where the permit decision or permit process was substantively altered in order to address EJ concerns. For each example, please specify how the permit decision was altered to address EJ concerns. (Examples might include extending the length of the public comment period, a decision to hold a public hearing, or enhancements to permit terms and conditions.)

3. ***Implementation of greenhouse gas (GHG) requirements***

   a. How many PSD permit applications has the permitting authority received that trigger GHG requirements?
   b. How many PSD permit applications has the permitting authority received that trigger GHG BACT requirements?
   c. How many permit applications has the permitting authority received from sources that trigger PSD permitting solely by virtue of their GHG emissions?
   d. What challenges has the permitting authority experienced in implementing GHG PSD requirements? What new challenges does the permitting authority anticipate within the next year?

4. ***Synthetic minor permits***

   a. What is the permitting authority's practice for identifying and tracking synthetic minor sources?
   b. Does the permitting authority maintain a list of synthetic minor construction permits and sources?
   c. What process does the permitting authority follow when revising synthetic minor limits in construction permits?
   d. Are proposed revisions to synthetic minor limits public noticed?

5. ***Startup, shutdown and malfunction (SSM) provisions***

   a. How does the permitting authority address SSM in PSD/NSR permits?
   b. Does the permitting authority make separate BACT determinations for SSM emissions?
   c. Do the ambient impacts analyses include SSM emissions?

6. Sources in Indian country

Has the permitting authority issued construction permits to sources located in Indian country? If so, has the permitting authority taken action toward revoking the permits?

III. SIP APPROVAL STATUS

This section is intended to provide an overview of the status of PSD and Nonattainment NSR SIPs.

A. Describe the status of the state's PSD/NSR program.

B. Has the state submitted to EPA all of the required SIP revisions?

C. Does the permitting authority have any guidance on the NSR reform rule or NSR permitting in general?

IV. STATE FEEDBACK

Opportunity for the permitting authority to raise any issues and concerns.

A. What concerns does the permitting authority have with the national PSD/NSR program that are not addressed elsewhere in the program evaluation?

B. What issues, if any, are affecting the PSD/NSR program in your state right now that you consider particularly important?

C. What recommendations does the permitting authority have for EPA regarding the implementation or oversight of the national PSD/NSR program?

D. What are the permitting authority's PSD/NSR program priorities?

E. What can EPA do to help foster a successful PSD/NSR program in your state?

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

Questionnaire for New Source Review (NSR) Program Evaluations

Standard Questionnaire

I. FOLLOW-UP ITEMS FROM PREVIOUS PROGRAM REVIEW REPORTS

This section is intended for EPA and the permitting authority to revisit issues that were previously identified as concerns, in the last round of program evaluations. Questions should be drafted by EPA state team to discern if these issues have been adequately addressed so that they are no longer recurring.

II. PERMIT PROGRAM OVERSIGHT QUESTIONS

This section is intended for EPA to identify good practices implemented by the permitting authority, areas needing improvement, and ways in which EPA can improve its own oversight role. This set of questions should serve as a menu for the state team to choose which questions are applicable for their state. Additional questions for the permitting authority should be developed, if necessary, for any areas of concern and for follow-up questions which cannot be addressed in-house. The EPA state team should identify any recurring comments that EPA has made on permits, permit process, and/or permit support documents, and request the permitting authority to describe any actions taken by the permitting authority to address those comments.

A. Permit Process and Comments

1. Application forms

a. List the types of NSR permits that have standard application forms.

AQD Response: The Air Quality Division (AQD) has a Permit to Install (PTI) application form and different application forms for the various different types of general permits. The general permit source categories include anhydrous ammonia, coating lines up to 10 tons per year (tpy) of volatile organic compounds (VOCs), Ethylene Oxide (EtO) sterilizers, natural gas fired burnoff ovens, propane or natural gas fired boilers with a max rated heat input of 100 million BTU/hr, remediation processes, and nonmetallic mineral crushing operations.

i. Please indicate whether the application form is available online.

AQD Response: Yes, the applications are all available online at the following website:
http://www.deq.state.mi.us/aps/nsr_information.shtml#AUP.

ii. If forms are not currently available online, discuss whether permitting authority is planning to do so in the future.

AQD Response: NA

b. Has the permitting authority made any changes to their NSR application forms since the last program evaluation?

AQD Response: The AQD has made no changes to the PTI application form since 2006. See attachment.
General PTIs: Except for the non-metallic mineral crushing operations, each General PTI was updated in December 2010.

i. If so, what changes?

AQD Response: The changes included:

- Anhydrous Ammonia Storage and Handling—updates to the General Information form (EQP5727) and the Process Information form (EQP5731) were made in December 2010.
- Coating Line Emitting up to 10 tpy of VOCs—format of the special conditions revised; conditions for operating and monitoring control equipment were revised; and updates to the General Information form (EQP5727) and the Process Information form (EQP5759) were made in December 2010.
- Ethylene Oxide Sterilizers—updates to the General Information form (EQP5727) and the Process Information form (EQP5730) were made in December 2010.
- Natural Gas-Fired Burnoff Oven—clarification to the stack height requirement was made (from ground level to point of discharge); revised the format of the Special Conditions; and updated the General Information form (EQP5727) and the Process Information form (EQP5784) were made in December 2010.
- Propane or Natural Gas-Fired Boilers with a Maximum Rated Heat Input of 100 million BTU per Hour—format of the special conditions was revised and the General Information Form (EQP5727) and the Process Information form (EQP5783) were also updated in December 2010.
- Remediation Processes—Gasoline and Petroleum Based Contaminants—the General Information form (EQP5727) and the Process Information form (EQP5758) were updated in December 2010.
- Diesel Fuel-Fired Engine Generators—the availability to use this General Permit was suspended on July 6, 2010, due to the "new" 1-hour NO^2 standard. It is still not available for use as a General Permit at this time.

ii. How have those changes impacted the application review process?

AQD Response: The changes that have been made to the General Permits indicated in the response above, were made to clarify either language and/or the intent of the requirements and also to modify the format of the permit conditions so that the General Permits are consistent with the PTI's.

iii. Did interested parties have the opportunity to review the changes?

AQD Response: If a change would affect the applicability criteria or special conditions of a General Permit, the AQD would hold a public comment period to receive comments on the proposed changes. If the revision or change is administrative (change in address, contact personnel, etc.), clarified the instructions or permit language, or corrected an underlying applicable requirement, a public comment period was not held. Given the nature of the recent changes made, no public comment period was deemed necessary.

c. What additional changes, if any, is the permitting authority planning to make to the application forms or the application submittal process in the near future?

AQD Response: The AQD is researching the ability to have PTI applications submitted electronically. Currently, the AQD staff is gathering information as to the feasibility of allowing applicants to submit their PTI applications electronically; including all supporting information and attachments. We are not yet sure when this will be implemented on a wide-spread basis.

2. ***Permit and Technical Support Document (TSD)***

a. Has the permitting authority made any changes or updates to the permit or TSD template since the last program evaluation? Describe the changes.

AQD Response: Minor changes/updates to several of the permit templates were made. Also, a new permit template for 55 gallon drum-top fluorescent light bulb crushers has been developed. Approximately a year ago, a new permit database was developed to gather permit review related information regarding technical details such as stack data, source information, emissions, etc. The new database is referred to as PTI Evaluator and is used in conjunction with a Word-based technical support document (Evalform) to document the details of the permit engineer's review. A hard copy of the completed Evaluator and Evalform is maintained in the file for each permit issued. Also electronic copies of each are kept.

b. How does the permitting authority ensure that permit writers are using the most up-to-date templates?

AQD Response: As changes are made, they are posted to a centralized location where all of the templates are housed (i.e. Sharepoint). The AQD staff is updated regarding the changes and directed to use the templates as a starting point. On most applications a peer reviewer is assigned to help the permit engineer with their review. One of the responsibilities of the peer reviewer is to ensure that the proper template is being used by the permit engineer.

i. How often are changes made to the permit and TSD templates?

AQD Response: Changes are made as needed/warranted depending on new rules, regulations and/or updates to regulations are made. Also, at times changes are made to improve/modify the wording the conditions.

ii. When changes occur, how are they implemented?

AQD Response: See item (i) above.

c. What procedures does the permitting authority have in place to ensure that there is consistency in permit conditions and documentation of permit decisions?

AQD Response: In addition to templates, we maintain a master list of permit conditions that all the AQD staff has access to and are advised to use when drafting permit conditions or documenting their permit review. There is also a peer review process to ensure consistency and accuracy. In addition, the unit supervisors perform a final review on some applications. For example, a permit application that requires public comment will be reviewed by the unit supervisor as well as the section supervisor.

i. Does the permitting authority have guidelines for the minimum level of detail that needs to be included in the permit record (i.e., TSD, staff report, project summary, response to comments, etc)?

AQD Response: The AQD has templates for both the fact sheet (staff report) and response to comment (RTC) document. A template for the TSD (Evalform) is also available for the AQD staff to use to guide them through the documentation of their reviews. The AQD is currently evaluating the level of detail contained in the TSD (Evalform) template and considering increasing it.

ii. Describe the permitting authority's guidelines for the amount of detail that needs to be included in the permit record.

AQD Response: An internal procedure outlines the information that should be included within a permit file. Also, instructions are available to the AQD staff on completing entries into our application tracker and evaluator programs. Also, the peer review process is in place to help ensure that these guidelines are followed.

d. Consider selecting 3 or more random permits, TSDs, and/or response to comments to review.

AQD Response: AQD provided the EPA with the following four permit files to evaluate: 102-12 – Gerdau Macsteel Monroe – Issued January 4, 2013,
191-12 – Consumers Energy Company – Issued July 25, 2013,
405-08A – Eagle Mine LLC – Issued January 27, 2014,
47-11C – Kirtland Products – Issued September 22, 2014.

i. Describe any previously noted concerns that appear in the permit.

AQD Response: Prior to the EPA's review, the AQD had no concerns with each of the permit files evaluated.

ii. List and describe any new concerns you have identified.

AQD Response: After the EPA's review, the AQD continues to have no concerns with each of the permit files evaluated.

3. ***Response to public comments***

a. What is the permitting authority's procedure for public noticing NSR permits?

AQD Response: The AQD requires public notice on all Prevention of Significant Deterioration (PSD) applications, all major source non-attainment applications, all netting (PSD and/or major source non-attainment) applications, all opt outs with emissions greater than 90% of significance, all minor modifications greater than 90% of significance, and all controversial applications.

i. In what instances would an NSR (major and minor) permit not be public noticed?

AQD Response: Any permit application that does not fall under the criteria in (a) above is not subject to public comment.

ii. Provide the state rule citation(s) which provides the criteria for public noticing NSR permits.

AQD Response: Section 5511 of Act 451, Rule 336.1205 (Rule 205), and Rule 336.2817 (Rule 1817).

b. What is the permitting authority's procedure for responding to comments? (Public, EPA, other state, industry, etc.)

AQD Response: See Below

i. Which comments or categories of comments does the permitting authority typically respond to?

AQD Response: The AQD is required to provide a formal response to comments document for all relevant air quality-related comments on PSD applications. Routinely, the AQD will also respond to all relevant air quality-related comments received on non-PSD applications. This response can take the form of a formal response to comments document or a letter depending upon the number and complexity of the comments received.

ii. Which comments or categories of comments does the permitting authority typically not respond to?

AQD Response: The AQD does not typically respond to non-air quality related comments such as those simply expressing support or objection to a facility or those concerning the affects a proposed facility may have on property values.

iii. At what point in the permit review process does the permitting authority respond to comments? (e.g., before the proposed permit, before the final permit, etc.)

AQD Response: The AQD responds to the air quality-related comments concurrently with the decision on the proposed application.

iv. How are the comments responded to? (Summary document, response letter, etc.)

AQD Response: See item (i) above.

v. Who gets a copy of the response to comments? (Only the commenter, all commenters, etc.)

AQD Response: All of the individuals, who commented and attended the public hearing, if one was held, are notified of the decision (via email or letter). Additionally, the individuals who were copied by letter announcing the public comment period also receive a notice announcing the final decision. This notice also includes a link to the response to comments document.

vi. Are all responses included in the file or posted on-line?

AQD Response: The responses are included within the permit file and are also provided on-line. The response to comments document is typically posted for 3-4 months after the final decision has been made. After that, the posting is normally removed.

vii. How is the response to comments distributed to interested parties?

AQD Response: See item (v) above.

viii. Does EPA receive a copy of all comments received and responses? If so, when and how?

AQD Response: The EPA is one of the parties that receive the notice of the final decision and the location of the response to comments document.

c. Describe how the permitting authority ensures comments are responded to, the time-frame for responding, how the permitting authority will respond, to whom, etc.?

AQD Response: First, final action on the permit application is not taken until the response to comments document has been completed. It is the goal of the AQD to complete all response to comments documents within 21 days. The number and complexity of the comments received, affects our ability to meet that goal.

d. What recurring comments have been made on recent permits? Are there any trends in permit comments?

AQD Response: The majority of repeated concerns that have been expressed through public comment periods are non-air quality related. These have included effects on property values, requests for community-wide cumulative impact studies, and requests for renewable power in place of fossil fuel sources.

e. Has the permitting authority observed any trends in the public comments (for example, GHG-related comments)?

AQD Response: The AQD has received comments regarding renewable power in place of fossil fuel sources and questions about deforestation.

4. Permit Process

a. Combined Title I and Title V permits

i. Provide a description of how, and under what circumstances, the permitting authority combines the Title I and Title V permit process, if applicable.

AQD Response: Not applicable (NA) – The AQD has separate Title I and Title V permit programs.

ii. What benefits and challenges has the permitting authority faced with the combined permitting approach?

AQD Response: NA – The AQD has separate Title I and Title V permit programs.

iii. How does the permitting authority identify PSD/NSR permits which are combined with a Title V permit?

AQD Response: NA – The AQD has separate Title I and Title V permit programs.

b. PSD application tracking

i. How does the permitting authority track PSD/NSR applications received by the agency?

AQD Response: The AQD uses several methods for tracking PSD/NSR applications. Each month, the AQD prepares and submits to the EPA a list of the PSD applications, as well as other applications of interest, that have been submitted and are under review. Also, two of the database programs mentioned previously (Evalform and Evaluator) have "flags" which identify the application/permit as being subject to PSD review.

ii. What is the permitting authority's process for ensuring that information on all pending PSD applications is communicated to EPA?

AQD Response: The AQD provides a copy of the complete PSD permit application to the EPA soon after its receipt. Also, the AQD uses the monthly application list and monthly conference call with the EPA to ensure that information is/has been submitted.

iii. Does the permitting authority have procedures for alerting EPA of controversial or precedent setting permit actions, and actions with citizen interest? Describe those procedures.

AQD Response: Yes, the AQD uses the monthly application list and conference call to ensure that that information is shared with the EPA.

c. BACT analyses & determinations

i. What process does the permitting authority follow when conducting BACT analyses?

AQD Response: The draft 1990 New Source Review Workshop Manual which provides guidance on PSD and outlines the five step top-down approach is used. The AQD incorporated the same five-step procedure into our own PSD guidance document which was published in September 2013. The AQD also uses the OAQPS Cost Air manual and electronic spreadsheets when performing a BACT analysis. In addition, the AQD staff use the EPA guidance memos for information on completing a BACT analysis.

ii. Does the permitting authority have guidelines on BACT cost thresholds?

AQD Response: The AQD does not have an official threshold regarding BACT costs for any pollutant.

d. RACT/BACT/LAER Clearinghouse (RBLC)

i. Have all BACT determinations for PSD projects been submitted to the RBLC?

AQD Response: The AQD has entered all PSD BACT determinations into the RBLC except for two recent actions. These will be submitted within the next few months.

ii. If not, why?

AQD Response: Both of the determinations have been recent within the last few months. The RBLC forms are being drafted by the permit engineer.

iii. On average, how soon after permit issuance is the project's BACT information submitted to the RBLC?

AQD Response: Since 2011, the AQD's average time for entering information into the RBLC has been approximately 11 months from permit issuance. Going forward it is the AQD's goal to cut that time to a maximum of 6 months.

iv. Does the permitting authority have a process for submitting BACT information to the RBLC?

AQD Response: Yes, the AQD has a process for submitting BACT determinations to the database. The AQD permit engineers complete a RBLC form with all of the information required from the RBLC part of this form. Once this has been completed, the engineers forward the form onto the RBLC Coordinator for entry into the database. These entries are typically made within two weeks of receipt.

v. What obstacles (if any) does the permitting authority face that prevent entering of data into the RBLC in a timely manner?

AQD Response: The AQD has been experiencing computer issues when information has been attempted to be input into the system. This issue seems to have resolved within the last month or two. Prior to that, the RBLC coordinator entered information into the database incorrectly and it had to be re-entered.

e. Test methods

i. What criteria does the permitting authority follow when establishing test methods and testing frequency to be used to determine compliance with permit requirements?

AQD Response: The AQD normally requires testing for source categories for which there is not sufficient established data. Also, testing is often required on sources that avoid an applicability determination (i.e. PSD, Title V, etc.) by accepting conservative emission factors. Testing is often included on controversial sources. In addition, it is normally included in facilities that have or will be getting a Title V permit.

ii. Are test methods specified in the permit?

AQD Response: The test methods are not routinely specified in the permit because if the method changes, a new or modified permit is required. The AQD permits generically indicate where applicable, testing must be done according to an approved EPA method.

iii. What opportunities are available to the public to comment on proposed test methods?

AQD Response: The ability to comment on proposed testing is part of all applications that are subject to public comment. For those applications that are not subject to public comment, the public normally does not have an avenue of providing comments on proposed test methods.

f. Emissions inventory and ambient impacts analysis

i. Does the permitting authority maintain an allowable emissions inventory for existing sources located within the permitting authority's jurisdiction?

AQD Response: Yes, the AQD maintains both the Michigan Air Emissions Reporting System (MAERS) database and the Permit Cards database.

ii. If so, describe the type of information included in the inventory.

AQD Response: The MAERS database tracks actual emissions from facilities, while the Permit Cards database lists allowable emissions. Both databases have information on the location of the facility, stack parameters, and stack locations.

iii. What is the permitting authority's process/procedure for updating the emissions inventory?

AQD Response: When new permits are issued, data concerning them is entered into the Permit Cards database. Also, all sources within the MAERS database must submit an annual report to it, indicating their actual emissions.

iv. Does the permitting authority use actual emissions or allowable (potential) emissions when conducting cumulative impacts analyses under PSD?

AQD Response: The AQD always uses allowable emissions for modeling to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS). The AQD normally uses allowable emissions for modeling to demonstrate compliance with the PSD Increments. However, at times there are situations when the AQD will use actual emissions for modeling to demonstrate compliance with the PSD Increments.

v. How does the permitting authority determine which proposed projects need a Class I impacts analysis?

AQD Response: Per the EPA guidance, the AQD evaluates the affects that all proposed PSD projects may have on Class I areas located with 100 kilometers of the proposed project. For large and/or potential controversial projects, the AQD increases the distance to evaluate the effects of proposed PSD projects on Class I areas located within 300 kilometers of the proposed project.

vi. Under what circumstances, if any, would the permitting authority conduct a Class I impacts analysis for a Class I area that is located more than 100 km from the proposed source?

AQD Response: For large and/or potential controversial projects, the AQD increases the distance to evaluate the effects of proposed PSD projects on Class I areas located with 300 kilometers of the proposed project.

vii. How does the permitting authority satisfy the visibility impacts analysis requirement of the PSD rules?

AQD Response: Depending on the particular PSD application, the AQD evaluates visible emissions in several manners. First, visible emissions may be subject to topdown BACT under PSD. Second, visible emissions are evaluated as a part of the additional impact analysis required under PSD.. Third, visible emissions are a component of the Air Quality Related Values analysis done to evaluate potential effects on a Class I area.

viii. What procedures does the permitting authority have for ambient impacts analysis for minor NSR sources? How is the permitting authority ensuring that their minor NSR program is in compliance with ambient air quality standards?

AQD Response: Michigan Air Pollution Control Rule R 336.1207 (Rule 207) states that "The department shall deny an application for a permit to install if, in the judgment of the department, any of the following conditions exist:
(b) Operation of the equipment for which the permit is sought will interfere with the attainment or maintenance of the air quality standard for any air contaminant.

To assure compliance with Rule 207 (b), the AQD often requires modeling of minor sources to demonstrate compliance with both the applicable NAAQS and the PSD increments.

g. Implementation of $PM_{2.5}$, nitrogen dioxide (NO_2), sulfur dioxide (SO_2) and ozone (O_3) requirements

i. What issues has the permitting authority encountered in implementing $PM_{2.5}$ requirements under PSD/NSR?

AQD Response: The AQD finds the lack of available emission factors for PM2.5 to be very frustrating. This often leads applicants to assume that their PM2.5 emissions are equal to their PM10 emissions (which in many cases is an over estimate) which in turn makes passing modeling for PM2.5 more challenging. In addition, the AQD sees a fair amount of comments questioning the PM2.5 emission factors used by applicants.

ii. What issues has the permitting authority encountered in implementing NO_2 requirements under PSD/NSR?

AQD Response: When the 1-hour NO_2 standard first came out, the AQD saw a lot of sources that had trouble demonstrating compliance with it via dispersion modeling, especially intermittent sources such as emergency generators. Upon receipt of guidance from the EPA concerning the modeling of intermittent sources, these problems have been greatly reduced.

iii. What issues has the permitting authority encountered in implementing SO_2 requirements under PSD/NSR?

AQD Response: When the 1-hour SO_2 standard first came out, the AQD saw some sources that had trouble demonstrating compliance with it via dispersion modeling. Upon receipt of guidance from the EPA, these problems have been greatly reduced.

iv. Is the permitting authority ensuring that construction projects are modeled to demonstrate that they will not adversely impact the 1-hour NO_2 and SO_2 standards?

AQD Response: Yes, when applicable for PSD applications, the AQD requires dispersion modeling to demonstrate compliance with the 1-hour NO_2 and/or SO_2 standards. Often times, depending upon the situation, the AQD requires minor sources to perform modeling to demonstrate compliance with the 1-hour NO_2 and/or SO_2 standards.

v. Has the permitting authority faced difficulty in modeling compliance with the 1-hr NO_2 or SO_2 NAAQS? Specify.

AQD Response: Yes, please see items g. (ii) and g. (iii) above.

vi. What issues has the permitting authority encountered in implementing ozone requirements under PSD/NSR?

AQD Response: Lack of clear and complete guidance from the EPA on how to perform an ozone analysis makes it quite difficult for the AQD to preform one and to provide guidance to both applicants and their consultants on how to perform one. It makes it difficult to respond to comments received concerning an ozone analysis performed as part of a PSD permit application.

vii. Does the permitting authority conduct an ozone impacts analysis for each project with significant emissions of VOC or NOx?

AQD Response: The EPA has provided no formal guidance on this issue. However, the EPA has indicated that states may follow a similar approach in determining if an ozone impacts analysis is needed as they do in determining if a secondary analysis for PM2.5 is needed. Michigan has been using that approach.

viii. How does the permitting authority address secondary $PM_{2.5}$ formation when modeling $PM_{2.5}$ impacts?

AQD Response: To determine if a secondary analysis for PM2.5 should be performed, the AQD follows the EPA's May 2014 guidance which lays out four different cases. In addition to the PM2.5 emissions, the different cases also take into account the NOx and SO2 emissions. The following table lays out the four cases in detail.

Table ES-1. EPA Recommended Approaches for Assessing Primary and Secondary $PM_{2.5}$ Impacts by Assessment Case

Assessment Case	Description of Assessment Case	Primary Impacts Approach	Secondary Impacts Approach
Case 1: No Air Quality Analysis	Direct PM2.5 emissions < 10 tpy SER NOx and SO2 emissions < 40 tpy SER	N/A	N/A
Case 2: Primary Air Quality Impacts Only	Direct PM2.5 emissions ≥ 10 tpy SER NOx and SO2 emissions < 40 tpy SER	Appendix W preferred or approved alternative dispersion model	N/A
Case 3: Primary and Secondary Air Quality Impacts	Direct PM2.5 emissions ≥ 10 tpy SER NOx and/or SO2 emissions ≥ 40 tpy SER	Appendix W preferred or approved alternative dispersion model	• Qualitative • Hybrid qualitative / quantitative • Full quantitative photochemical grid modeling
Case 4: Secondary Air Quality Impacts Only	Direct PM2.5 emissions < 10 tpy SER NOx and/or SO2 emissions ≥ 40 tpy SER	N/A	• Qualitative • Hybrid qualitative / quantitative • Full quantitative photochemical grid modeling

ix. Has the permitting authority issued NSR permits that required offsets of $PM_{2.5}$ emissions (either from direct $PM_{2.5}$ or precursors)? How were the offsets achieved? Is there/will there be an offset bank?

AQD Response: No. The State of Michigan currently has no PM2.5 nonattainment areas and as such, offsets are not currently required as part of a major source permit application for PM2.5. Also, during the time period that Michigan did have a PM2.5 nonattainment area, no major source permits for PM2.5 were issued.

x. What is the status of adoption of the state's $PM_{2.5}$ PSD/NSR rules?

AQD Response: Michigan's PSN/NSR Rules for PM2.5 have been completed and approved by the EPA.

h. Waivers, exemptions and general permits

i. Specify any regulation or policy the permitting authority has which exempts certain emission sources or activities from the requirement to obtain a construction permit.

AQD Response: Michigan's PTI exemptions are contained in Rules R 336.1278 through R 336.1290 (Rules 278 through 290).

A. If this regulation was approved into the SIP, when was it approved? When did this regulation/policy become effective?

AQD Response:

Exemption Rules:

1. R 336.1278

Effective Date	11/18/93-3/31/94	3/31/94-7/26/95	7/26/95-12/12/96	12/12/96-6/13/97	6/13/97-7/2/98	7/2/98-7/1/03	7/1/03-6/20/08	6/20/08-current
Submitted to SIP	11/13/93		5/16/96		8/20/98	9/26/03		
EPA Action	None; No reason given		Proposed Disapproval 11/9/99; No final action		None; No reason given	None; No reason given		

2. R 336.1278a

Effective Date	7/1/03-current
Submitted to SIP	9/26/03
EPA Action	None; No reason given

3. R 336.1280

Effective Date	1/18/80-11/18/93	11/18/93-7/26/95	7/26/95-current
Submitted to SIP	5/6/80	11/13/93	5/16/96
EPA Action	Approved	None; No reason given	Proposed Disapproval 11/9/99; No final action

4. R 336.1281

Effective Date	1/18/80-4/17/92	4/17/92-11/18/93	11/18/93-7/26/95	7/26/95-7/1/03	7/1/03-6/20/08	6/20/08-current
Submitted to SIP	5/6/80	11/13/93	11/13/93	5/16/96	9/26/03	3/19/09
EPA Action	Approved	None; No reason given	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given	None; No reason given

5. R 336.1282

Effective Date	1/18/80-4/17/92	4/17/92-11/18/93	11/18/93-7/26/95	7/26/95-7/1/03	7/1/03-current
Submitted to SIP	5/6/80	11/13/93	11/13/93	5/16/96	
EPA Action	Approved	None; No reason given	None; No reason given	Proposed Disapproval 11/9/99; No final action	

6. R 336.1283

Effective Date	7/17/80-4/17/92	4/17/92-7/26/95	7/26/95-6/13/97	6/13/97-current
Submitted to SIP	8/28/81	11/13/93	5/16/96	8/20/98
EPA Action	Approved	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given

7. R 336.1284

Effective Date	1/18/80-4/17/92	4/17/92-11/18/93	11/18/93-7/26/95	7/26/95-6/13/97	6/13/97-7/1/03	7/1/03-6/20/08	6/20/08-current
Submitted to SIP	5/6/80	11/13/93	11/13/93	5/16/96	8/20/98	9/26/03	3/19/09
EPA Action	Approved	None; No reason given	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given	None; No reason given	None; No reason given

8. R 336.1285

Effective Date	1/18/80-4/17/92	4/17/92-7/26/95	7/26/95-6/13/97	6/13/97-7/1/03	7/1/03-6/20/08	6/20/08-current
Submitted to SIP	5/6/80	11/13/93	5/16/95	8/20/98	9/26/03	3/19/09
EPA Action	Approved	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given	None; No reason given	None; No reason given

9. R 336.1286

Effective Date	11/18/93-7/26/95	7/26/95-6/13/97	6/13/97-current
Submitted to SIP	11/13/93	5/16/96	8/20/98
EPA Action	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given

10. R 336.1287

Effective Date	11/18/93-7/26/95	7/26/95-6/13/97	6/13/97-7/1/03	7/1/03-current
Submitted to SIP	11/13/93	5/16/96	8/20/98	9/26/03
EPA Action	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given	None; No reason given

11. R 336.1288

Effective Date	11/18/93-7/26/95	7/26/95-6/20/08	6/20/08-current
Submitted to SIP	11/13/93	5/16/96	3/19/09
EPA Action	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given

12. R 336.1289

Effective Date	11/18/93-7/26/95	7/26/95-7/1/03	7/1/03-current
Submitted to SIP	11/13/93	5/16/96	9/26/03
EPA Action	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given

13. R 336.1290

Effective Date	11/18/93-7/26/95	7/26/95-6/13/97	6/13/97-current
Submitted to SIP	11/13/93	5/16/96	8/20/98
EPA Action	None; No reason given	Proposed Disapproval 11/9/99; No final action	None; No reason given

B. If there is a general cutoff based on emissions or is the exemption based on source category and/or size, what criteria must be met to use the exemption? Are de minimis emission levels specified? What are they?

AQD Response: Only Rule R 336.1290 (Rule 290) includes specific de minimis emission level exemptions. All of the other exemptions in Rules R 336.1280 through R 336.1289 (Rules 280 through 289) are process specific type exemptions. Rule 290 allows up to 1000 pounds per month of uncontrolled VOC emissions or up to 500 pounds per month of controlled VOC emissions. It also allows up to 5.9 tons per year of particulate emissions provided that certain design criteria are met.

C. How does the permitting authority track sources that qualify for a permit exemption (i.e., does the source submit a registration, submit records, maintain records, etc.)?

AQD Response: For sources that have a Title V renewable operating permit (ROP), the exempt emission units are listed in it. For sources that do not have an ROP, it is the responsibility of the source itself to keep track of its exempt equipment.

ii. Specify the regulation or policy the permitting authority has which allows certain pre-construction activities to occur at a non-exempt source prior to the source obtaining a permit.

AQD Response: Under Rule R 336.1202 (Rule 202), the AQD has the authority to grant construction waivers for an activity not subject to PSD, not subject to major source non-attainment review, or not a major source of HAPs. In order to qualify for a waiver, the applicant must demonstrate an undue hardship.

A. What types of construction activities are exempt under this regulation or policy?

AQD Response: Under a construction waiver, an applicant is allowed to construct the specific items listed in the waiver, but they are not allowed to begin operation of those items until a permit has been issued.

B. If this regulation was approved into the SIP, when was it approved? When did this regulation/policy become effective?

AQD Response: Rule R 336.1022 (Rule 202) was approved into Michigan's SIP in 1980.

iii. Which sources does the regulation or policy apply to? (minor and/or synthetic minor) Does the permitting authority have general permits or permits by rule for some source categories? If so, list the source categories.

AQD Response: The AQD has general permits for Anhydrous Ammonia Storage and Handling, Coating lines that emit up to 10 TPY of VOCs, EtO Sterilizers, Natural Gas-Fired Burn-Off Ovens, Propane or Natural Gas-Fired Boilers, Remediation Processes for Gasoline and Petroleum-Based Contaminants, and Non-Metallic Mineral Crushing Plants. Michigan basically has one "permit by rule". This is for concrete batch plants. This is included in Rule R 336.1289 (Rule289).

iv. What is the process for obtaining coverage under a general permit?

AQD Response: A permit application is required for each general permit issued by the Department. The AQD staff review each application received to ensure that all applicable requirements and parameters are met.

A. Is the source required to apply for coverage under the general permit, or are they automatically covered if they meet the general permit's criteria?

AQD Response: A source must apply and the general permit is issued, provided that the specific requirements and parameters are met.

B. What types of analyses must the source conduct prior to obtaining coverage under a specific general permit?

AQD Response: The application for each type of general permit contains specific requirements and parameters that the source must meet in order to qualify for a general permit. In reviewing each general permit application, the AQD ensures that all of the specific requirements and parameters are met. Example parameters include throughput limits, operating parameters, set back distances, and control equipment requirements, etc.

C. Is the granting of coverage under a general permit to a specific source public noticed?

AQD Response: Each general permit issued does not undergo public comment. Each new general permit created does undergo public comment before it is ever used.

v. How many sources are covered by general permits, if applicable?

AQD Response: AQD currently (As of October 22, 2014) has a total of 722 active general permits. The 722 breaks down as follows:
Anhydrous Ammonia Storage & Handling Processes = 53
Coating Lines (Up to 10 TPY of VOCs) = 116
Diesel Fuel-Fired Engine Generators = 55
EtO Sterilizer Processes = 14
Natural Gas-Fired Burnoff Ovens = 32
Non-Metallic Mineral Crushers = 251
Propane or Natural Gas-Fired Boilers = 5
Soil or Groundwater Remediation Processes = 196

vi. Approximately how many sources are covered by permits by rule, if applicable?

AQD Response: As the AQD's one "permit by rule" is included as a permit exemption within Rule R 336.1289 (Rule 289), we have no record of how many sources are covered by it.

i. Permit process changes

i. What permit process changes has the permitting authority made since the last program evaluation?

AQD Response: In October, 2014, the AQD, as a result of a LEAN process review, began a trial program which increases the level of detail we look for in the initial screening of PTI applications and attempts to make additional information requests sooner in the review process. The intent of this is to shorten the time necessary to get complete applications and thus shorten processing times. In addition, the AQD is also implementing on a trial basis more frequent communications with each applicant. Every 21-days an application is in-house is considered to be a "reflection point." At each "reflection point" the permit engineer is at a minimum to communicate the current status of the application to all affected internal and external parties. This communication can be either a telephone call or an e-mail. The goal is to speed up information exchanges and eliminate long delays in the review process.

ii. What has been the effect of these changes on the permitting authority's permit quality and permit issuance rates?

AQD Response: Given that the trial began in October 2014, the AQD does not have much data concerning the affect it has had on our permit processing times. The hope is that it will result in somewhat shorter processing times.

iii. Has the permitting authority made any changes to its public participation procedures since the last program evaluation? If so, what changes were made? What prompted the changes?

AQD Response: Approximately four to five years ago, the AQD began accepting public comments via e-mail on all applications which were public noticed. This change was made to increase the ease and convenience to submit comments. Also, having comments submitted electronically makes it easier and more efficient for the AQD staff to consolidate them.

iv. Has the permitting authority implemented any permit process streamlining efforts since the last program evaluation? If so, describe those efforts and how they have impacted the permit process.

AQD Response: Yes, please see the responses above to items i (i) and i (iii).

v. What permit-related outreach activities has the permitting authority conducted in the last 3 years? What outreach is planned for the near future?

AQD Response: In February 2014, the AQD held a public outreach meeting in southwest Detroit on pet coke storage piles. The meeting was in relation to two permit applications that the AQD had in house at the time. Local citizens, community groups, and environmental groups were invited to the meeting and many attended.

In April 2014, the AQD representatives participated in an EPA sponsored two day Environmental Justice meeting in southwest Detroit. Local citizens, community groups, and environmental groups were invited to this meeting and many attended. While this was not directly held in relation to a specific active permit application, the meeting provided the AQD an opportunity to share information about air quality rules and regulations, the permit review process, and our public notice requirements and process.

The AQD does not currently have any special permit-related outreach activities planned in the near future. We will hold or be involved in them as opportunities present themselves.

vi. Has the permitting authority received any comments from the public or EPA in regards to any part of the permitting process? (Examples include, but may not be limited to, public participation process, issuance efficiency issues, availability of information, etc.). If yes, what has the permitting authority done in response to these comments?

AQD Response: The AQD's standard public comment period is 30 days in length. We often receive requests for longer public comment periods on various applications. When the AQD believes that a longer comment period is warranted on a specific application, it will either schedule a longer comment period upfront or extend the original comment period.

Frequently the AQD receives complaints that it does not do enough to ensure that all affected citizens are properly notified of public comment periods. The AQD publishes each public comment period in a local newspaper of general circulation. It is also posted on the AQD's website. In addition, local government officials are notified about the comment period. Whenever possible; local citizens, community groups, and/or environmental groups are also notified about the comment period. Lastly, the Department in some cases will issue a press release concerning the start of a public comment period. The AQD is unaware of any additional methods to efficiently and economically notify potential affected citizens of public comment periods.

j. Industry trends

i. Has the permitting authority noticed any industry trends that are currently affecting the PSD/NSR permit programs and/or permit issuance?

AQD Response: Over the last couple of years, the AQD is seeing more applications for foundries, engine test cells, coating/painting operations, biomass combustion, oil & gas drilling operations, and RICE units.

ii. Does the permitting authority anticipate any industry trends that may affect the PSD/NSR programs, permit issuance, and/or the permitting authority's workload?

AQD Response: Many of the foundry and biomass combustion applications have the possibility of being subject to PSD.

k. Training needs

i. What is the permitting authority's process for providing training to staff on permit requirements, policy, guidance, etc.?

AQD Response: Both the AQD and the Permit Section have a prescribed training schedule for staff. The Permit Section training usually begins within 4 to 8 months of an employee's start date and addresses both state and federal air quality rules and regulations; procedures for evaluating and documenting an application review; procedures for writing construction permits; emissions calculations; use of the AQD's and the Permit Section's databases; and procedures to assure effective communication amongst staff. All of these trainings are put on by more experienced AQD staff. The AQD training starts soon after an employee's start date and continues on for several years. Items included are the AQD Tuesday school (which presents what each of the different Units and Sections in the Division do and how they interact with each other), the AQD Rules school (which goes through all of Michigan Air Pollution Control Rules); smoke school (which teaches what visible emissions are and how to measure them); and various different EPA Air Pollution classes. In addition to the prescribed trainings, the Permit Section staff is also provided with various other types of trainings as the opportunities arise. Over the last couple of years these trainings have involved communications, PSD regulations, and the federal NESHAP standards for boilers.

ii. Does the permitting authority have any training requests for EPA?

AQD Response: The AQD would like to see additional information/trainings on how to complete a PSD BACT cost analysis for GHGs; on PM2.5 emission factors; and on conducting a secondary impacts analysis.

B. Overarching Issues Resulting from Permit Review and Program Oversight

1. PSD/NSR program implementation (questions for the EPA state team)

a. What, if any, permitting program implementation issues are you aware of? (For example, data tracking, staffing, permit timeliness, etc.)

AQD Response: In January 2014, the AQD was directed by the Governor's Office to attempt to decrease our average permit processing time to 90 days from the date of receipt. To help meet this standard, the AQD set an internal average permit processing time goal of 75 days.

b. Is the permitting authority aware of these issues?

AQD Response: The AQD has discussed our permit processing timeline goals with representatives from the EPA Region V during regularly scheduled monthly conference calls.

c. Have any been elevated or formalized in a signed letter?

AQD Response: As the processing timelines are unique to the AQD and do not directly involve the EPA, there is no need to elevate them or notify the EPA of them via letter.

d. What has the permitting authority done to address these?

AQD Response: In an effort to meet the decreased permit processing times, the AQD has and continues to take steps to improve efficiencies and communications. Recently as the result of a LEAN process review, the AQD has implemented a trial process to request additional information from applicants sooner after application receipt. The AQD staff is also being more proactive in their communications with all parties (both internal and external) related to the applications. This includes more interaction amongst them to seek guidance and/or help sooner. Another method of improved efficiency is better use of templates and databases. While attempting to decrease processing times, the AQD has continued to maintain the same level of detail, depth and quality in our reviews.

e. Do we have an updated SIP submittal in-house?

AQD Response:

Part 1 submitted:

- 4/25/03 (no reason given for inaction)
  - Included R 336.1122
- 9/26/03 (no reason given for inaction)
  - Included R 336.1101; R 336.1103; R 336.1106; R 336.1114; R 336.1116; R 336.1118; R 336.1119
- 3/19/09 (Approved)
  - Included R 336.1103-1105; R 336.1109; R 336.1112; R 336.1114; R 336.1122
- 1/29/13 (no reason given for inaction)
  - Included R 336.1116; R 336.1119; R 336.1112

Part 2 submitted:

- 11/13/93 (no reason given for inaction)
  - Included R 336.1201a; R 336.1278; R 336.1280-1290
- 5/16/96 (proposed disapproved but no final action taken)
  - Included R 336.1278; R 336.1280-1290
- 8/20/98 (no reason given for inaction)
  - Included R 336.1278; R 336.1283-1287; R 336.1290
- 9/26/03 (no reason given for inaction)
  - Included R 336.1201a; R 336.1202; R 336.1278; R 336.1278a; R 336.1281; R 336.1284; R 336.1285; R 336.1287; R 336.1289
- 3/19/08 (no reason given for inaction)
  - Included R 336.1202; R 336.1281; R 336.1284; R 336.1285; R 336.1288
- 3/18/14 (no reason given for inaction)
  - Included R 336.1201; R 336.1206

Part 18 submitted:

- 12/15/06 (Approved)
  - Included R 336.2801-2819; R 336.2823(1)-(14)
- 9/30/08 (Approved)
  - Included R 336.2801; R 336.2816; R 336.2818
- 6/10/12 (no reason given for inaction)
  - Included R 336.2801; R 336.2803; R 336.2809; R 336.2816
- 8/9/13 (approved?)
  - Included R 336.2801; R 336.2816

Part 19 submitted:

- 3/19/09 (Approved)
  - Included R 336.2901-2903; R 336.2907; R 336.2908
- 9/2/11 (no reason given for inaction)
  - Included R 336.2901
- 8/9/13 (no reason given for inaction)
  - Included R 336.2901; R 336.2908

i. Is it being processed?

AQD Response: The AQD has been working with the EPA over the last several years to get the outstanding portions of our Part 2 rules approved into our SIP. This has included many correspondences (both letters and telephone calls) between the parties.

ii. If not, is there a reason it hasn't been or can't be?

AQD Response: By early to mid-2015, the AQD hopes to begin moving an updated Part 2 Rules package through our rule making process. After that process is completed, it will be sent to the EPA for evaluation and hopefully eventual inclusion in our SIP. One of the holdups in developing this updated rules package has been the lack of guidance from the EPA on acceptable public noticing requirements.

2. ***Environmental Justice (EJ) considerations***

a. How is the permitting authority considering and addressing EJ issues in permitting actions?

AQD Response: There is no statutory requirement in Michigan to implement an EJ plan and/or to take EJ into account in the review of any permit application. The AQD does consider, as a part of the permit review process, if a particular project is a candidate for enhanced public outreach. This is based upon known public interest in either the type of the facility and/or its proposed location. Enhanced public outreach may involve hosting public information meetings, extended public comment periods, the AQD participation in local meetings or workshops, and encouraging facilities to host community meetings to develop positive relationships with the surrounding citizens.

b. List any specific examples where the permit decision or permit process was substantively altered in order to address EJ concerns. For each example, please specify how the permit decision was altered to address EJ concerns. (Examples might include extending the length of the public comment period, a decision to hold a public hearing, or enhancements to permit terms and conditions.)

AQD Response: In February 2014, the AQD held a public outreach meeting in southwest Detroit regarding pet coke storage piles. The meeting was related to two permit applications that the AQD had in house at the time. Local citizens, community groups, and environmental groups were invited to the meeting and many attended.

3. ***Implementation of greenhouse gas (GHG) requirements***

a. How many PSD permit applications has the permitting authority received that trigger GHG requirements?

AQD Response: Per Dino, the AQD is not required to respond to this question.

b. How many PSD permit applications has the permitting authority received that trigger GHG BACT requirements?

AQD Response: Per Dino, the AQD is not required to respond to this question.

c. How many permit applications has the permitting authority received from sources that trigger PSD permitting solely by virtue of their GHG emissions?

AQD Response: Per Dino, the AQD is not required to respond to this question.

d. What challenges has the permitting authority experienced in implementing GHG PSD requirements? What new challenges does the permitting authority anticipate within the next year?

AQD Response: Per Dino, the AQD is not required to respond to this question.

4. ***Synthetic minor permits***

a. What is the permitting authority's practice for identifying and tracking synthetic minor sources?

AQD Response: In January 2012, the AQD began using a new database called PTI Evaluator. One of the items tracked by that database is synthetic minor sources and permits.

b. Does the permitting authority maintain a list of synthetic minor construction permits and sources?

AQD Response: No, the AQD does not keep an individual list of synthetic minor permits or sources. The AQD can, however, from our PTI Evaluator database generate a list of synthetic minor permits issued since January 2012.

c. What process does the permitting authority follow when revising synthetic minor limits in construction permits?

AQD Response: When the AQD receives an application to modify an existing permit that contains synthetic minor limits or includes restrictions that make a source a synthetic minor, we ensure that the source will remain a synthetic minor and that it is appropriate to continue to include those limits and/or restrictions in the modified permit. This includes a reevaluation of the sources potential to emit both with and without the limits and/or restrictions. The AQD permit staff also checks with our field staff to ensure that the facility has complied with all of the limits and/or restrictions in the original permit.

d. Are proposed revisions to synthetic minor limits public noticed?

AQD Response: Per our rules, the AQD is only required to public notice draft permits containing synthetic minor limits that are greater than 90% of the significant value for the pollutant in question.

5. ***Startup, shutdown and malfunction (SSM) provisions***

a. How does the permitting authority address SSM in PSD/NSR permits?

AQD Response: The AQD addresses SSM as follows:

- Incorporates a mass emission limit (lb/hr) in the permit for each regulated pollutant for which BACT applies. The limit applies at all times.
- Defines periods of startup in terms of duration (hours) and production capacity or load. Defining startup and shutdown allows the AQD to know when the source is operating in startup/shutdown modes.
- Require permittees to use fuels or raw materials which minimize emissions during startup and shutdowns. For example, an electric utility steam generating unit (EUSGU) will be required to utilize natural gas or distillate oil to comply with this work practice during startup.

- Develop and maintain malfunction abatement plans (MAPs). The MAP addresses the specific procedures to be followed to minimize malfunctions, such as periodic maintenance and maintaining an inventory of spare parts, etc. The intent of the MAP is to minimize the time that the facility is operating under a malfunction.
- All permits require compliance with rule R 336.1912 (Rule 912). Rule 912 addresses abnormal conditions during start-up, shutdown, and malfunctions, and the notification and reporting requirements when SSMs occur.

b. Does the permitting authority make separate BACT determinations for SSM emissions?

AQD Response: BACT is an emission limit which is applicable at all times including startup, shutdowns, and malfunctions. The limit may be based on a parameter such as a material throughput rate (lb/ton) or heat input to a boiler (lb/MMBtu). These limits lose meaning during startup and shutdown when, for example, the heat input rate reaches zero. Other than requiring the use fuels or raw materials which minimize emissions, the AQD does not make separate BACT determinations for SSM emissions. However, a mass emission limit (lb/hr) equivalent to the lb/MMBtu limit is included in the permit for each regulated pollutant for which BACT applies. The mass emission limit applies at all times.

c. Do the ambient impacts analyses include SSM emissions?

AQD Response: Ambient impact analyses are completed in accordance with the EPA's latest modeling guidance. Short term impacts can be evaluated using annualized data. The ambient impact analyses are based upon the emissions from a source when the source is operating at maximum rated capacity. Normally during startup and shutdowns, the capacity is either being increased or decreased to/from the maximum rated capacity. Thus mass emissions during startup and shutdown will typically be less than emissions occurring at the maximum rated capacity.

Ambient impact analyses do not specifically include emissions during malfunctions because emissions during malfunctions are difficult to quantify and it is basically impossible to predict the duration of future malfunctions.

6. Sources in Indian country

Has the permitting authority issued construction permits to sources located in Indian country? If so, has the permitting authority taken action toward revoking the permits?

AQD Response: Due to inconsistencies in information and data, this is a difficult question to answer.

The EPA sent a series of letters to sources in Michigan that have a potential to be subject to the Tribal minor source rule. Michigan compared the EPA's list against our permit database to see if any of the EPA listed sources were also issued a PTI from Michigan. The databases do not match up well, so cross referencing is difficult. However, of the 235 sources on the EPA's list, Michigan found 8 in our Permit Cards database as having an active PTI. Note that this was a 'one way' search, meaning that we took the EPA's list and compared it against our database to obtain the 8 hits. Since the EPA did not provide the map of the tribal lands used in identifying the sources on their list, a true cross reference is not possible. For example, one could assume there are more sources in our database that are on these tribal lands but they cannot be identified without a map of the tribal lands.

Michigan, using a map we have for the Isabella Indian Reservation, cross referenced some of the sources. We narrowed the search in our Permit Cards database to only those sources that fell within Isabella County that were also within the town/range/section of the tribal lands identified by our map. There are 18 sources from this search; meaning that our database lists 18 sources on the tribal lands that have active permits, where the EPA's check only shows 6 potentially subject sources. It is clear that our list and the EPA's list do not match.

Given the inconsistencies in the lists and the lack of a true definitive map of tribal lands, Michigan, to date, has not revoked any permits, nor do we plan to do so until this information is provided.

III. SIP APPROVAL STATUS

This section is intended to provide an overview of the status of PSD and Nonattainment NSR SIPs.

A. Describe the status of the state's PSD/NSR program.

AQD Response: The AQD has a fully approved PSD program.

B. Has the state submitted to EPA all of the required SIP revisions?

AQD Response: Given the AQD's fully approved PSD program, there are currently no outstanding SIP revisions related to it. In addition, the AQD does not anticipate submitting any SIP revisions related to our PSD program in the foreseeable future.

C. Does the permitting authority have any guidance on the NSR reform rule or NSR permitting in general?

AQD Response: In 2013, the AQD updated its PSD workbook and provided three training sessions on the current PSD regulations. One of the sessions was specifically for the AQD staff only. The updated workbook addresses the elements in the PSD program as outlined out in the federal regulations and in Michigan's air pollution control rules.

IV. STATE FEEDBACK

Opportunity for the permitting authority to raise any issues and concerns.

A. What concerns does the permitting authority have with the national PSD/NSR program that are not addressed elsewhere in the program evaluation?

AQD Response: One of the AQD's biggest concerns is the lack of consistency (or perceived lack of consistency) across the various different EPA regions. A second concern is the length of time it takes to get a determination or an applicability determination from the EPA. Most times these requests are made regarding an active permit application and warrant a fast response. The AQD is also concerned about the lack of available information on how to complete a PSD BACT cost analysis for GHGs; on PM2.5 emission factors; and on conducting a secondary impacts analysis.

B. What issues, if any, are affecting the PSD/NSR program in your state right now that you consider particularly important?

AQD Response: Please see the response to IV. A above.

C. What recommendations does the permitting authority have for EPA regarding the implementation or oversight of the national PSD/NSR program?

AQD Response: Improve the consistency (or perceived consistency) across the various different EPA regions. Decrease the length of time it takes to get a determination or an applicability determination from the EPA. Provide more information on how to complete a PSD BACT cost analysis for GHGs; on PM2.5 emission factors; and on conducting a secondary impacts analysis.

D. What are the permitting authority's PSD/NSR program priorities?

AQD Response: Maintaining compliance with all NAAQS and PSD increments. Also, helping to foster a clean environment while aiding business growth and providing excellent customer service. This includes, whenever possible, meeting the permit processing metrics developed by the Governor's Office and the AQD.

E. What can EPA do to help foster a successful PSD/NSR program in your state?

AQD Response: Provide timely responses to questions and applicability determination requests submitted to both the Region and RTP. Often these requests relate to an active construction permit application that the AQD is reviewing and the applicant needs as soon as possible. Also, the RTP staff is often very poor at returning telephone calls and/or e-mails. It would be greatly appreciated if they would respond to messages in a timely matter. Finally, the AQD would like to see greater consistency across the different EPA regions – especially on BACT analysis and applicability determinations.

Michigan Department of Environmental Quality New Source Review Program Evaluation Questionnaire Additional Questions

1) What training/continuing education do you provide permit writing staff to keep them abreast of updates to EPA regulations and standards (also to changes to Michigan SIP rules)?

   AQD Response: Both the AQD and the Permit Section have a prescribed training schedule for staff. The Permit Section training usually begins within 4 to 8 months of an employee's start date and addresses both state and federal air quality rules and regulations; procedures for evaluating and documenting an application review; procedures for writing construction permits; emissions calculations; use of the AQD's and the Permit Section's databases; and procedures to assure effective communication amongst staff. All of these trainings are put on by more experienced AQD staff. The AQD training starts soon after an employee's start date and continues on for several years. Items included are the AQD Tuesday school (which presents what each of the different Units and Sections in the AQD do and how they interact with each other), the AQD Rules school (which in detail goes through all of Michigan Air Pollution Control Rules); smoke school (which teaches what visible emissions are and how to measure them); and various different EPA Air Pollution classes. In addition to the prescribed trainings, the Permit Section staff is also provided with various other types of trainings as the opportunities arise. Over the last couple of years these trainings have involved communications, PSD regulations, and the federal NESHAP standards for boilers.

2) What is the state process for conducting applicability determinations for sources, such as routine maintenance, repair and replacement? How many RMRR determinations has the state done since the last evaluation?

   AQD Response: The AQD does not routinely review and comment on RMRR determinations. In most cases facilities will perform them on their own as a method of determining if a modified permit is required. If the determination is that a modified permit is not required, some facilities may submit them to us as part of a notification about the change, while others may not. There is no requirement that a facility provide to us a formal notice outlining any exempt change they make. Given that the AQD is not always aware of a RMRR determination having been made, we have no record how many have been completed since our last evaluation.

3) Does MDEQ have general guidance for permit writers on BACT top down analysis regarding average annual $/ton removed and incremental $/ton removed costs for control devices? Does MDEQ utilize EPA's "Cost Control Manual" in assessing the $/ton removed cost figures provided for in a top down BACT analysis? Is MDEQ interested in reviewing the revisions to the "Cost Control Manual" as it is being developed over the next several years?

   AQD Response: Like the EPA, the MDEQ does not have an official average or incremental cost values which are considered to be economically feasible and thus required as BACT. It is our experience that if we tell an applicant that cost effectiveness is X dollars per ton, that their BACT analysis will show X + $1.00 dollars per ton.

The AQD does use both the EPA's control cost spreadsheets and the EPA's "Cost Control Manual" fairly often. This is especially true for coating-type operations. Updated spreadsheets would be helpful and Michigan looks forward to the revised edition of the manual from the EPA in 2017. We would be interested in reviewing and commenting on drafts of the manual as they are developed.

4) How often have permits contained elements including "demand growth" allowances and/or "increased utilization" in the PSD analysis, and what are the permit writer's procedures in reviewing those items?

   AQD Response: Both "demand growth" and "increased utilization" are components of the A2A PSD applicability test. Over the past several years, the AQD has seen about 10 to 15 applications per year involving A2A analyses. In reviewing these applications, the AQD staff follows both the EPA and State of Michigan guidance. As a part of their application, the applicant must submit a business plan projecting their "demand growth" and "increased utilization".

5) How is the MDEQ addressing the recent court decision on Summit Petroleum regarding the distance factor for considering a facility a single source with another?

   AQD Response: Since the issuance of the Summit Petroleum decision by the court, the AQD has not had any issues related to source determinations. The AQD plans to follow the decision made by the court.

6) Does the MDEQ receive notices from sources who have made a modification and based on an A2A analysis stated that they do not believe that the project would trigger PSD/NSR? Does the state keep those demonstrations as part of the permitting file for those sources for future permitting reference?

   AQD Response: It is the responsibility of a facility to determine if a change or modification they wish to make requires a modified permit or if it can be done under a permit exemption. An A2A analysis may be used in either case. In those cases where the facility determines that a modified permit is warranted, the AQD will have a formal record of the A2A analysis and will keep it as a part of the permit file. In those cases where the facility determines that the change can be made under an exemption, the AQD will have a formal record of the A2A analysis if the facility decides to send it in to us as part of a notification that a change has been made. There is, however, no formal requirement that such a submittal be made. Some facilities will do it, while others will not.

7) Does every PTI applicant have a Permit Scoping Meeting with MDEQ staff?

   AQD Response: No. Permit scoping meetings were developed in 2004 as a part of a redesign that Michigan did to its PTI review process. The 2004 redesign resulted from a LEAR process review of our permitting program. The concept behind a permit scoping meeting was to attempt to frontload the review in an effort to shorten the processing time. In 2004 and 2005, the AQD held quite a few of them. In reality they have proven to be much more cumbersome than they are on paper. Because of the large number of people involved, they are often difficult to schedule and many times end up getting rescheduled. As a result, in most cases they do not result in shorter processing times. Therefore, the AQD holds very few permit scoping meetings.

The AQD does however hold several pre-application meetings per year. These meeting are intended to discuss a proposed project and to advise an applicant of the specific information and analyses they should submit along with the permit application. The hope is that a better and more complete initial application will result in shorter processing times.

8) Please describe Michigan's enhanced public outreach efforts, especially for communities in EJ impacted areas?

AQD Response: Michigan incorporates enhanced public outreach whenever there is a large known public interest in either the type and/or location of a facility. We perform this throughout the entire state, not just in environmental justice areas. Enhanced public outreach may include holding public information meetings, extending public comment periods, participating in local meetings and/or workshops, and encouraging the facility to reach out to and provide information to the local community.

9) How has PSD permitting with respect to the Forest County Potawatomi non-Federal Class I area impacted the permitting process?

AQD Response: To date, it has not caused any permitting issues. The AQD notifies Forest County as a federal land manager (FLM). Simultaneously, the AQD also notifies the EPA as the FLM for Forest County. Forest County requested and was granted treatment as a state, so we notify them that way as well.

10) How many permits that AQD has issued since 2010 have been adjudicated?

AQD Response: Since 2010, the following eight permits issued by the AQD have been adjudicated:

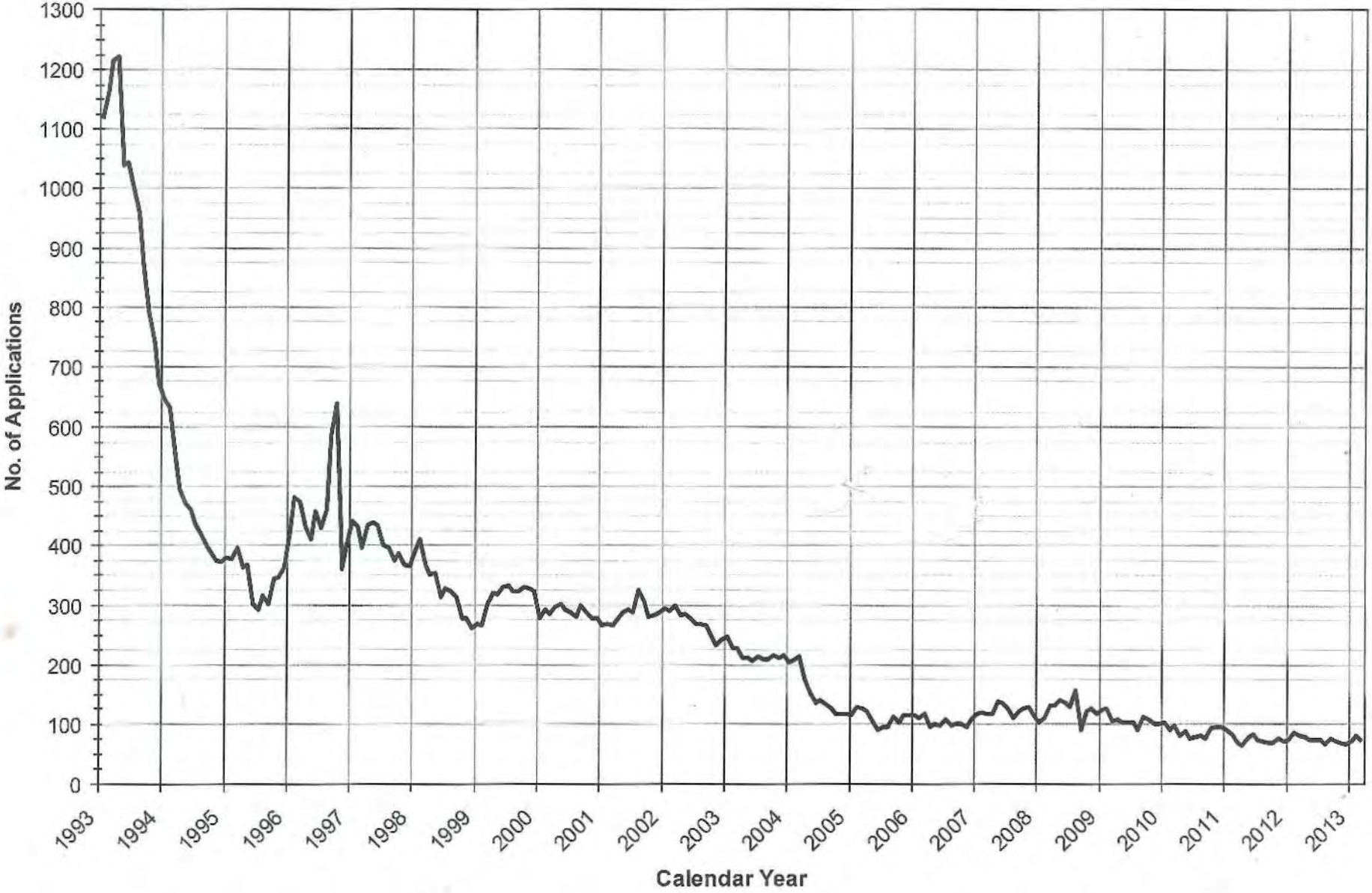
- Consumers Energy Company (Karn-Weadock) – Permit No. 341-07
- Detroit Edison Company (Monroe) – Permit No. 93-09A
- Detroit Edison Company (Monroe) – Permit No. 93-09B
- Eagle Mine, LLC – Permit No. 50-06B
- Holland Board of Public Works – Permit No. 25-07
- Eagle Mine, LLC (Humboldt Mill) – Permit No. 405-08A
- AK Steel (Severstal) – Permit No. 182-05C – Note, this is still an active case.
- Wolverine Power Supply Cooperative, Inc. – Permit No. 317-07

Michigan Department of Natural Resources New Source Review Program Evaluation Questionnaire

Additional Questions

1) What training/continuing education do you provide permit writing staff to keep them abreast of updates to EPA regulations and standards (also to changes to Michigan SIP rules)?
2) What is the state process for conducting applicability determinations for sources, such as routine maintenance, repair and replacement? How many RMRR determinations has the state done since the last evaluation?
3) Does MDEQ have general guidance for permit writers on BACT top down analysis regarding average annual $/ton removed and incremental $/ton removed costs for control devices? Does MDEQ utilize EPA's "Cost Control Manual" in assessing the $/ton removed cost figures provided for in a top down BACT analysis? Is MDEQ interested in reviewing the revisions to the "Cost Control Manual" as it is being developed over the next several years?
4) How often have permits contained elements including "demand growth" allowances and/or "increased utilization" in the PSD analysis, and what are the permit writer's procedures in reviewing those items?
5) How is the MDEQ addressing the recent court decision on Summit Petroleum regarding the distance factor for considering a facility a single source with another?
6) Does the MDEQ receive notices from sources who have made a modification and based on an A2A analysis stated that they do not believe that the project would trigger PSD/NSR? Does the state keep those demonstrations as part of the permitting file for those sources for future permitting reference?
7) Does every PTI applicant have a Permit Scoping Meeting with MDEQ staff?
8) Please describe Michigan's enhanced public outreach efforts, especially for communities in EJ impacted areas?
9) How has PSD permitting with respect to the Forest County Potawatomi non-Federal Class I area impacted the permitting process?

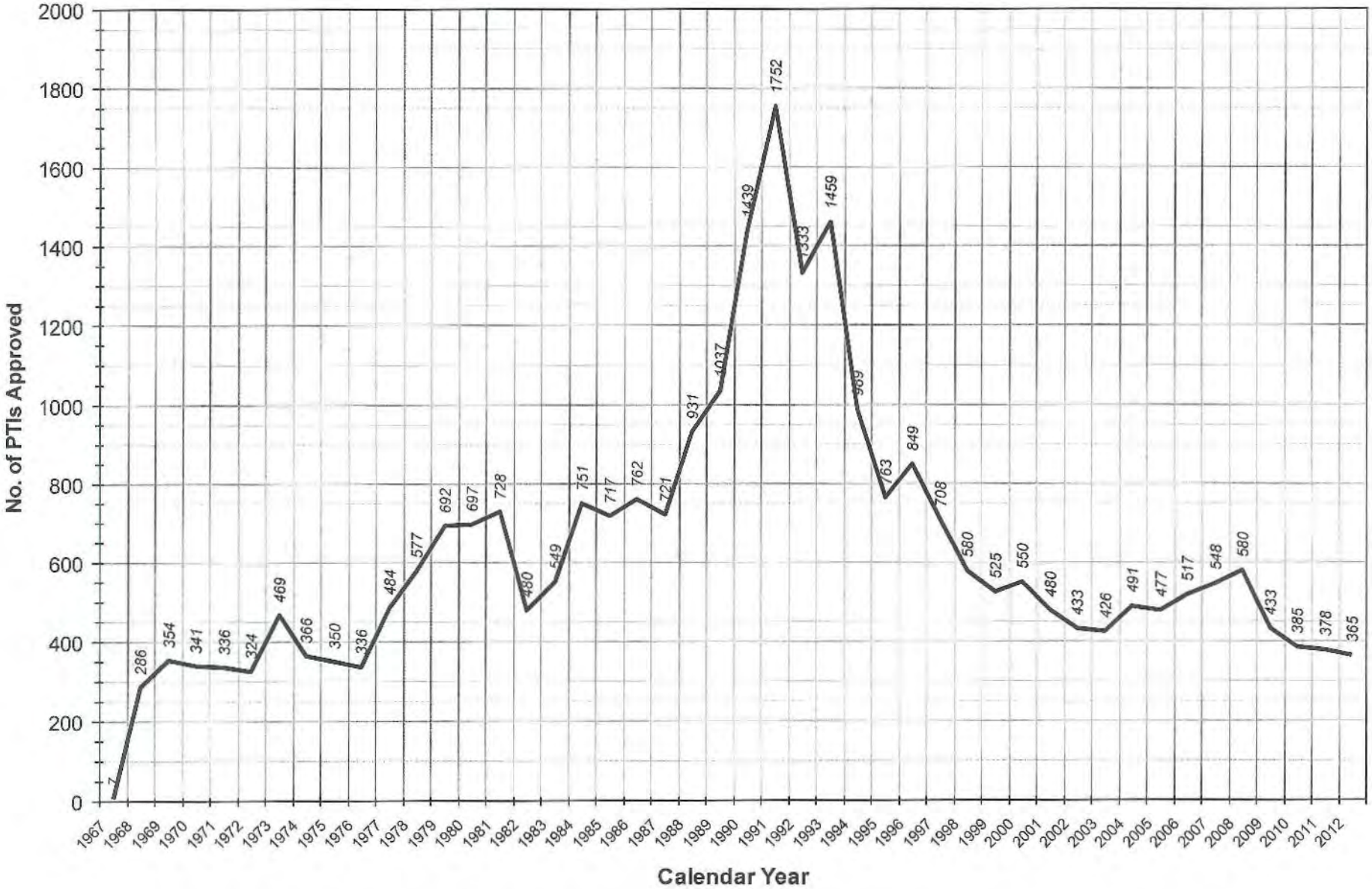
In-House Pending Permit to Install Applications



MDEQ Air Quality Division Permit Section

As of Wednesday, May 01, 2013

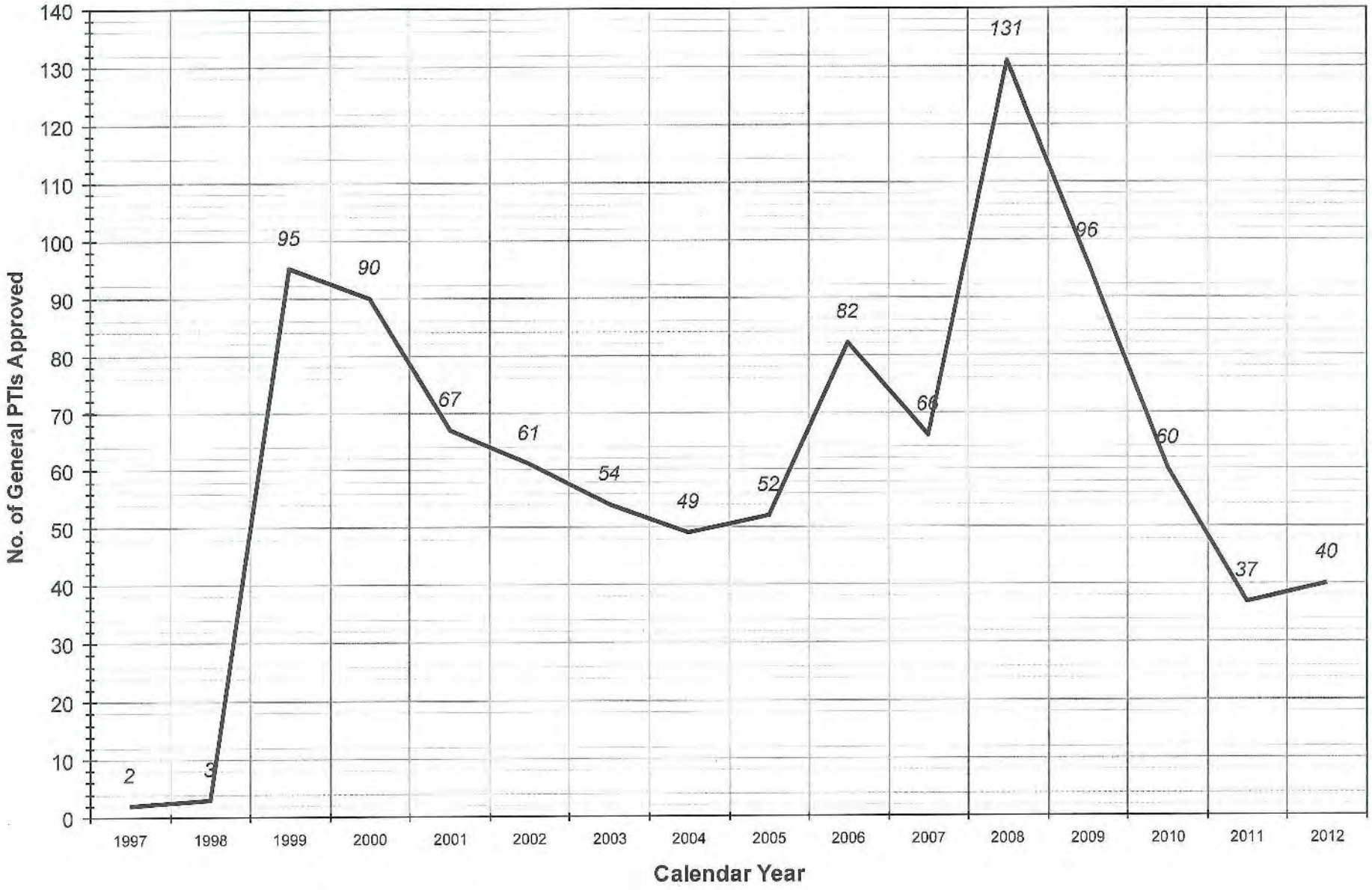
Permits to Install Approved



MDEQ Air Quality Division Permit Section

As of Wednesday, May 01, 2013

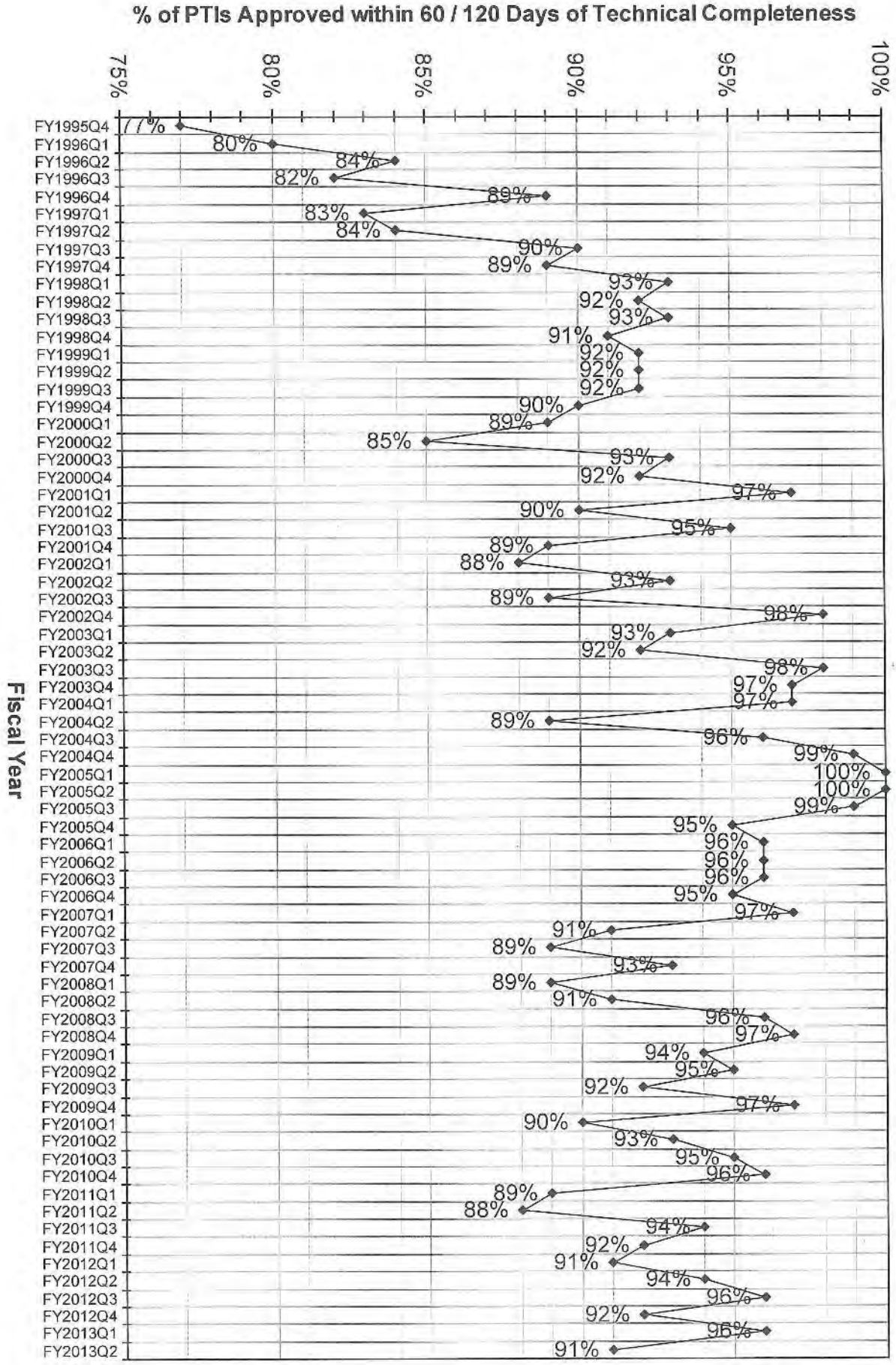
General Permits to Install Approved



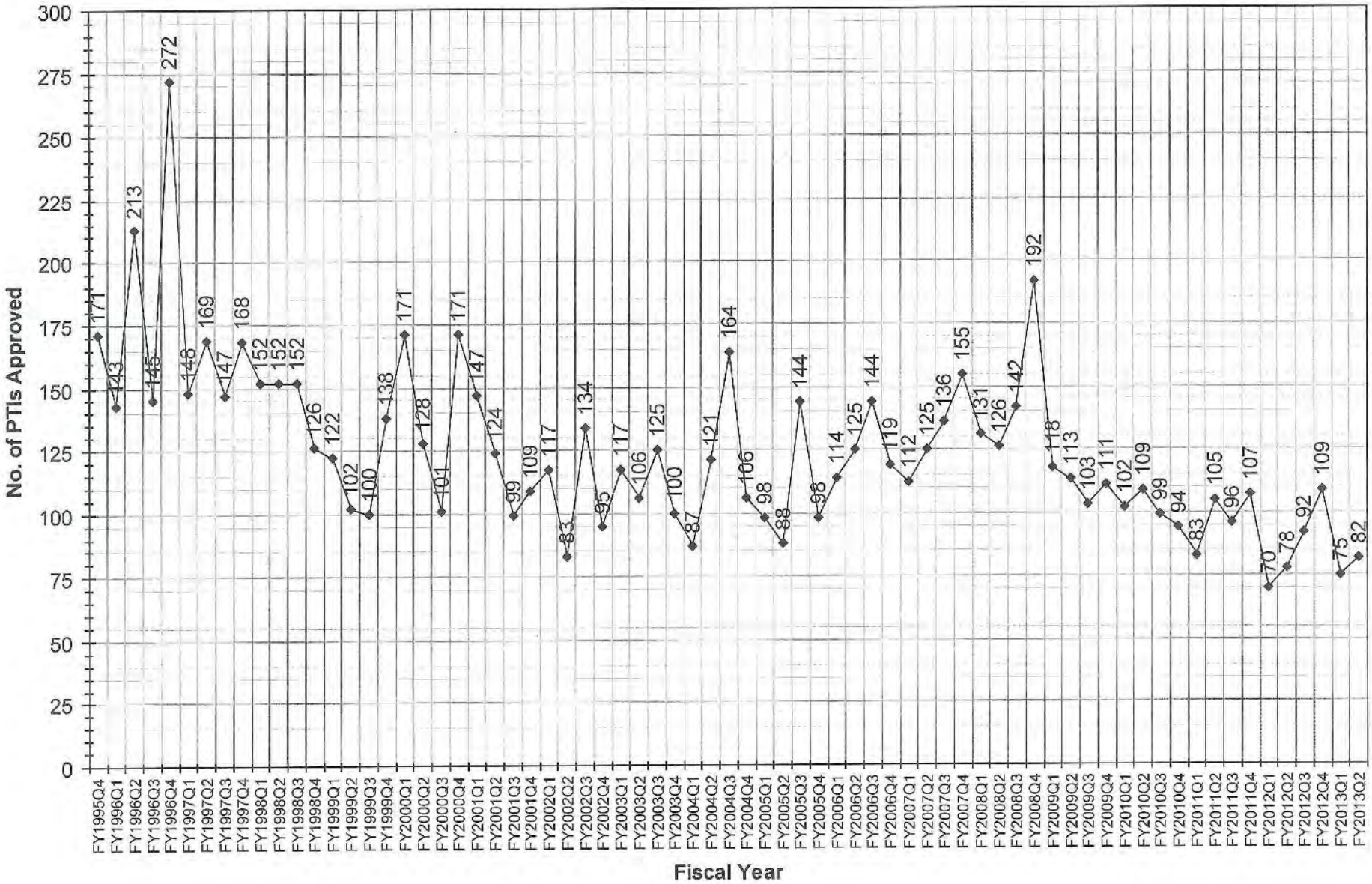
MDEQ Air Quality Division Permit Section

As of Wednesday, May 01, 2013

Permits to Install Approved



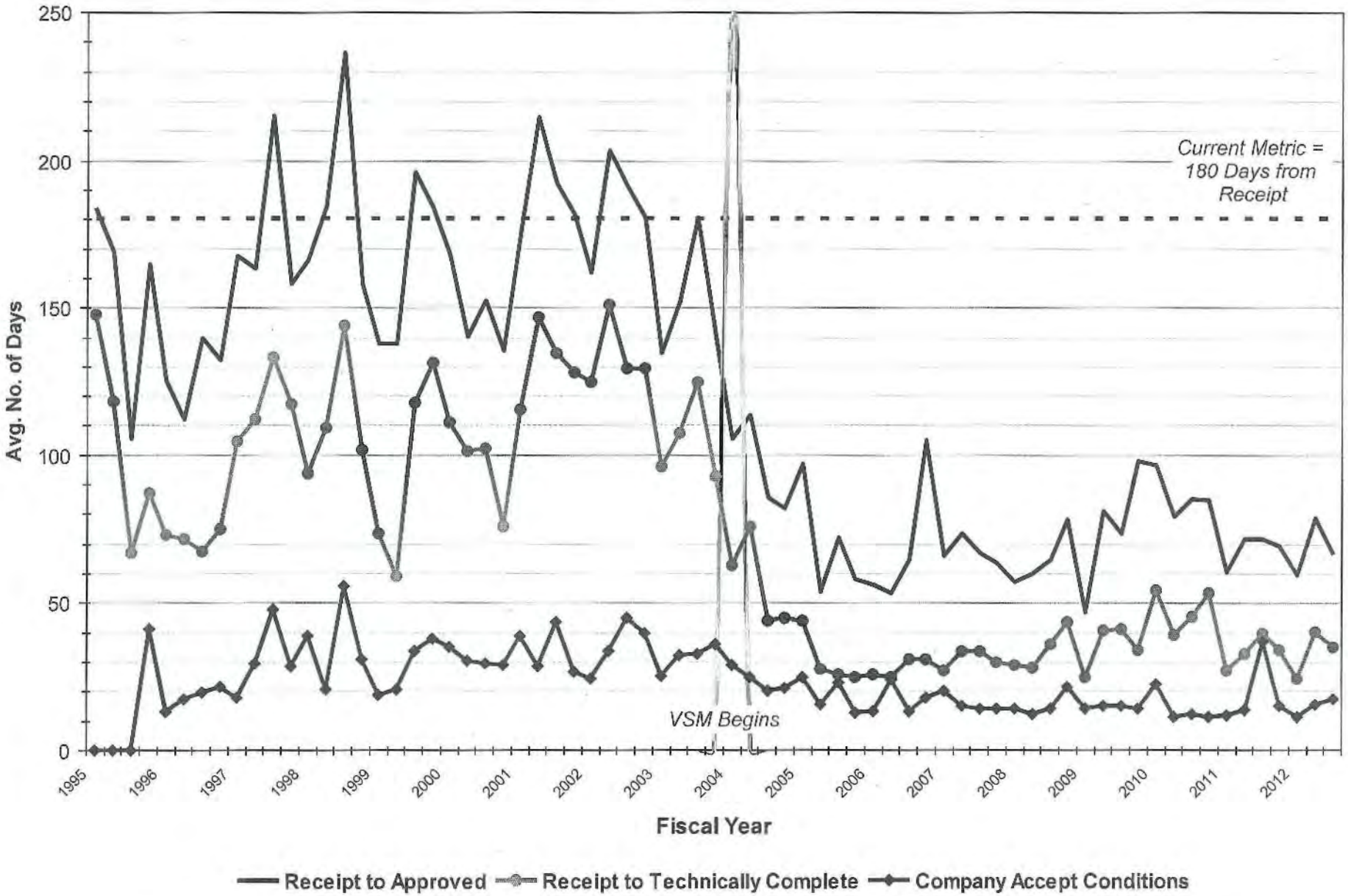
Permits to Install Approved



MDEQ Air Quality Division Permit Section

As of Wednesday, May 01, 2013

Permits to Install Approved



MDEQ Air Quality Division Permit Section

As of Wednesday, May 01, 2013

Blathras, Constantine

From: Nagler, Lewis
Sent: Thursday, February 05, 2015 12:15 PM
To: Blathras, Constantine
Subject: RE: List of PSD permits

Ignore what I just sent. Received this from Greg Serrano. Just what I needed.

From: Serrano, Greg (DEQ) [mailto:SERRANOG@michigan.gov]
Sent: Thursday, February 05, 2015 9:10 AM
To: Nagler, Lewis
Cc: Hartman, Amie (DEQ); Smith, Cindy (DEQ)
Subject: RE: List of PSD permits

Good morning, Lew.

I used to work in the Permit Section and currently provide statistics for them because I am very familiar with their databases.

That I know of, the Permit Section has never posted completed PSD PTIs on-line. They do post all permit conditions for currently active PTIs (PSD and others, but not flagged as such) approved since 2002 on-line at:

http://www.deq.state.mi.us/aps/FinalConditions.shtml

For those flagged PSD, I can give you an **estimate** on their numbers based on a flag set by engineers in the old and new databases. Here is the list based on calendar year of the date issued. Note that some of them could have been voided at a later date and some, of course, are still active permits.

Now these are PSD **permit actions**. If you want a list of purely the number of **PSD sources** (irrespective of how many permits per source there are), that's *another* query.

CY	PSD PTIs Issued
1991	2
1992	2
1993	1
1994	3
1995	4
1996	7
1997	14
1998	12
1999	13
2000	15

2001	16
2002	9
2003	19
2004	14
2005	8
2006	13
2007	12
2008	12
2009	11
2010	17
2011	6
2012	4
2013	9
2014	6

Please let me know if you have questions. If I cannot answer them, perhaps **Cindy Smith** (Acting Permit Section Supervisor), can help you.

Greg

Gregory Serrano
MDEQ Air Quality Division
Emissions Reporting & Assessment Unit
P.O. Box 30260
Lansing, MI 48909-7760

517-284-6760

SerranoG@michigan.gov

From: Nagler, Lewis [mailto:Nagler.Lewis@epa.gov]
Sent: Tuesday, February 03, 2015 9:15 AM
To: Hartman, Amie (DEQ)
Subject: RE: List of PSD permits

Thanks. The link you provided was the link I had used and on that link I could not find a list of permitted PSD permits by year. I opened most of what looked like applicable links, but none had a list of permitted PSD sources. Am I missing something in my search?

From: Hartman, Amie (DEQ) [mailto:HartmanA4@michigan.gov]
Sent: Tuesday, February 03, 2015 8:14 AM

Blathras, Constantine

From: Blathras, Constantine
Sent: Wednesday, September 09, 2015 10:20 AM
To: Mary Ann Dolehanty; Mitchell, Mark (DNRE); Smith, Cindy (DEQ)
Subject: Monthly PTI construction permits call

Hello,
For our call next Tuesday, I would like to discuss an item following up from our program review visit from last year. ORC finally got around to providing me comments and questions now on the draft report. What I would like to discuss is the PTI permits that were appealed, what were the issues that were raised in the permit at appeal, and how was it resolved by the court. And are the permits listed all resolved and effective now?
Thanks.
Dino Blathras
EPA Region 5

- Consumers Energy Company Karn Weadock- permit number 341-07
- Detroit Edison Monroe- permit no. 93-09A
- Detroit Edison Monroe- permit no. 93-09B
- Eagle Mine, LLC- permit no. 50-06B
- Holland Board of Public Works- permit no. 25-07
- Eagle Mine, Humboldt Mill- permit no. 405-08A
- Wolverine Power Supply Cooperative, Inc.- permit number 317-07
- AK Steel (formerly Severstal Steel)- permit number 182-05C (currently still active)

Consumers Energy Company Karn Weadock- Permit No. 341-07

Appealed by: Sierra Club and Natural Resources Defense Council
Issue being appealed: New supercritical pulverized coal boiler
Court Decision: Affirmed MDEQ's decision to issue the permit. The court decision was appealed and the appeals court affirmed previous court decision, upholding MDEQ's decision to issue the permit.
Status of permit: Consumers never constructed the project, permit was voided 12/5/2011.

Detroit Edison Monroe- Permit No. 93-09A and 93-09B

Appealed by: Sierra Club
Issue being appealed: PTI No 93-09 authorized combustion of petroleum coke and increasing the utilization capacity of subbituminous coal in Units 3 and 4, along with modifications to the material handling systems for coal and coke. PTI 93-09A requested similar changes for Units 1 and 2, to complete the project. PTI 93-09B was to modify (lower) the stack height on the five (5) existing diesel generators, based on new EPA guidance regarding the 1-hr NOx and SO_2 NAAQS. Sierra Club claimed that the permits violated the NAAQS and Michigan Rule 901.
Court Decision: The court affirmed the MDEQ final decision approving Permit No. 93-09B. Sierra Club appealed the decision, and the Court of Appeals again upheld the permit.
Status of permit: Voided, but conditions are still in effect, now covered by active PTI 27-13A

Eagle Mine, LLC- Permit No. 50-06B

Appealed by: Huron Mountain Club, Inc.
Issue being appealed: Multiple issues including failure to accurately calculate potential to emit, improper soil impact analysis, inappropriate T-BACT analysis, inadequate MACT determination, fugitive emission calculation deficiencies, improper modeling data and analysis, insufficient and unenforceable permit analysis and conditions, failure to comply with Rule 219, failure to comply with Rule 901, failure to require an environmental impact analysis (EIS), failure to establish criteria for when to require an EIS, failure to require a fabric filter on the main ventilation air raise, and the fact that the Part 632 mining permit is on appeal.
Court Decision: The court upheld issuance of the permit.
Status of permit: Currently active.

Holland Board of Public Works- Permit No. 25-07

Appealed by: Natural Resources Defense Council
Issue being appealed: MDEQ denied the permit application for failure to demonstrate a need for the project. Then Ottawa County Circuit Court ordered reconsideration. MDEQ issued a permit authorizing new coal-fired circulating fluidized bed (CFB) boiler. The permit was later

extended. Complaints brought to the court were regarding BACT for CO2e, PM 2.5, PM, and SO2, and PM 2.5 NAAQS.
Court Decision: First Ottawa County Circuit Court ordered that MDEQ could not deny the permit based on electric generation needs. The permit was issued, and an extension was granted. The permit was appealed, and the Ingham County Court of Appeals upheld the permit and dismissed the appeal.
Status of permit: The equipment was not constructed and the permit was voided.

Eagle Mine, Humboldt Mill- Permit No. 405-08A

Appealed by: Huron Mountain Club, Inc.
Issue being appealed: Multiple issues including failure to accurately calculate potential to emit, failure to properly evaluate coarse ore storage area emissions, inappropriate T-BACT analysis, improper modeling data and analysis, failure to comply with Rule 219, failure to comply with Rule 901, failure to require an environmental impact analysis (EIS), failure to establish criteria for when to require an EIS, and MDEQ's air permitting rules contravene enabling authority.
Court Decision: Petitioner withdrew the appeal prior to the court making a decision.
Status of permit: Currently active.

Wolverine Power Supply Cooperative, Inc.- Permit No. 317-07

Appealed by: Natural Resources Defense Council and Sierra Club
Issue being appealed: MDEQ denied the permit application for failure to demonstrate a need for the project. The court ordered reconsideration. MDEQ issued a permit authorizing two 300 MW net circulating fluidized bed boilers, an auxiliary boiler; a black start turbine generator; an emergency generator; fuel, and associated material handling and storage equipment; and other ancillary equipment. The permit was later extended.
Court Decision: First the court ordered that MDEQ could not deny the permit based on electric generation needs. The permit was issued, and an extension was granted. The permit was appealed, and the court of appeals upheld the permit and dismissed the appeal.
Status of permit: The equipment was not constructed and the permit was voided.

AK Steel (formerly Severstal Steel)- Permit No. 182-05C

Appealed by: South Dearborn Environmental Improvement Association (SDEIA), Detroiters Working for Envtl Justice, Original United Citizens of Soutwest Detroit, Sierra Club
Issue being appealed: The permit revised several emission limits based on stack testing results. The claims allege that MDEQ improperly applied PSD review and BACT, and that the project should have gone through new PSD analysis rather than revise the previous analysis.
Court Decision: Case is ongoing. Court decision has not been made yet.
Status of permit: Active

Blathras, Constantine

From: Blathras, Constantine
Sent: Monday, September 14, 2015 11:44 AM
To: Mitchell, Mark (DNRE); Mary Ann Dolehanty; Smith, Cindy (DEQ)
Subject: NSR program review follow up questions

Hello,
Last week I sent you folks an email with a follow up question from the NSR program evaluation report we are working on. While going over the draft report with our peer reviewers here, we have some additional questions. I have a few additional questions I would like to go over with you (not necessarily to be fully discussed tomorrow, but I want to go over these if you have any questions on our questions):

1) MDEQ has the governor's mandated 90 day window to issue permits. How does MDEQ report on and work with permits that get extended comment periods due to issues such as 48217 EJ or sources of significant public interest getting extensive comments?
2) What were the (6 ?) PSD permits issued by MDEQ in 2014, and what PSD permits were issued in 2015?
3) On page 8 of the standard questionnaire MI states that it has a separate PTI and ROP processes. However, in practice, MDEQ "voids" PTIs when the terms are transferred to the ROP. What is the process MDEQ uses to ensure that it isn't dropping any permanent terms when switching to a single document that represents both the PTI and ROP.

4) On page 1 of the additional questions document you state that you don't review source RMRR determinations. How does MDEQ assure that sources are getting all necessary permits?

5) MDEQ says on page 2 of the additional questions document that it plans to follow the 6th Circuit's decision in Summit. How specifically does MDEQ interpret and plan to follow the Summit decision, given that there isn't a rulemaking out on this decision yet?

6) MDEQ says on page 19 of the standard questions that sources are responsible for keeping track of exempted equipment. Does MDEQ ever check whether sources are treating subject sources as exempt? See also page 21 of the standard questions re permits by rule.

7) Re SSM, page 29-30 of the standard questions, does MDEQ provide in its permits for affirmative defenses for periods of SSM?

8) What are MDEQ's plans for any permits in may have issued to sources on tribal lands where the permit lacks jurisdiction?

102-12A	Gerdau Macsteel Monroe	Monroe	October 27, 2014
51-08C	EES Coke Battery, LLC	Detroit	November 21, 2014

To date, in calendar year 2015, AQD issued the following three PSD permits –

Permit No.	Company	Location	Date Issued
160-11B	General Motors Corporation Technical Center	Warren	January 14, 2015
160-14	Waste Management, Inc.	Lenox	February 13, 2015
1-15	Merit Energy Company	Kalkaska	June 19, 2015

Question 3) On page 8 of the standard questionnaire MI states that it has a separate PTI and ROP processes. However, in practice, MDEQ "voids" PTIs when the terms are transferred to the ROP. What is the process MDEQ uses to ensure that it isn't dropping any permanent terms when switching to a single document that represents both the PTI and ROP.

AQD Response: When issuing either a new or renewed ROP, AQD ensures that all applicable PTIs are properly and completely rolled in. This involves communication between AQD District staff who work on the ROPs and AQD Permit staff who write the PTIs. Also, District staff consult applicable AQD databases to ensure that all necessary PTIs are incorporated into an ROP. In addition, the facility is questioned to see if any PTIs have been missed. Inclusion of the PTIs in a ROP is documented in two different ways. Appendix 6 of each ROP lists all PTIs that have been incorporated into the ROP since its last renewal. The staff report for each ROP lists all PTIs that have been incorporated into the ROP from its initial issuance.

In addition to incorporating all applicable PTIs into a new or renewed ROP, AQD also adds all applicable additional requirements which have become effective. This includes NESHAPs, NSPSs, and acid rain requirements. Again this involves communication between AQD District staff, AQD Permit staff, and the facility.

The final check to ensure that all appropriate items are included in an ROP is both the public comment period and the EPA 45 day comment period that each new or renewed ROP undergoes.

Question 4) On page 1 of the additional questions document you state that you don't review source RMRR determinations. How does MDEQ assure that sources are getting all necessary permits?

AQD Response: As part of compliance inspections, AQD staff check to ensure that facilities have all of the proper permits. Also, many facilities consult with the Division prior to making a change, including RMRR related activities, to determine if a new or modified permit is warranted. Some facilities will even submit to the AQD RMRR determinations including actual to projected actual (A to A) applicability determinations to document that a new or modified permit is not required. In addition, facilities are required by Michigan Air Pollution Control

Blathras, Constantine

From: Mitchell, Mark (DEQ) <MITCHELLM7@michigan.gov>
Sent: Tuesday, October 06, 2015 1:12 PM
To: Blathras, Constantine
Cc: Dolehanty, Mary Ann (DEQ); Smith, Cindy (DEQ)
Subject: RE: NSR program review follow up questions
Attachments: Permit Appeals September 2015.docx

Dino,

Thank you for your e-mails of September 9, 2015 and September 14, 2015, with additional questions related to Michigan's air use permit to install program.

In your September 9th e-mail you requested additional information concerning eight permits issued by the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD) that ended up in court challenges. Attached is AQD's response to those questions.

Your September 14th e-mail included eight additional questions. AQD's response to them is below –

Question 1) MDEQ has the governor's mandated 90 day window to issue permits. How does MDEQ report on and work with permits that get extended comment periods due to issues such as 48217 EJ or sources of significant public interest getting extensive comments?

AQD Response: The 90 days is not mandated, rather it is a metric established by the governor. It is an average processing time for all permits issued over a calendar quarter. By being an average, it accounts for large and complex applications such as those subject to PSD and/or significant public interest.

Our legal permit processing times are contained within Michigan Air Pollution Control Rule R 336.1206 (Rule 206) which requires final action on an application within 180 days of receipt if public comment is not required and within 240 of receipt if public comment is required. For the third quarter of FY 2015, our average processing time for all applications was 53 days, which meets both Rule 206 as well as the governor's metric.

Question 2) What were the (6 ?) PSD permits issued by MDEQ in 2014, and what PSD permits were issued in 2015?

AQD Response: In calendar year 2014, AQD issued the following five PSD permits –

Permit No.	Company	Location	Date Issued
209-00E	General Motors, LLC	Lansing Delta Township Plant	May 9, 2014
182-05C	Severstal Dearborn, LLC	Dearborn	May 12, 2014
20-14	Severstal Dearborn, LLC	Dearborn	September 10, 2014

Rule R 336.1278(a) (Rule 278(a)) to keep records documenting use of Michigan's Part 2 permit exemptions and this information is available to AQD during compliance inspections or upon request.

Question 5) MDEQ says on page 2 of the additional questions document that it plans to follow the 6th Circuit's decision in Summit. How specifically does MDEQ interpret and plan to follow the Summit decision, given that there isn't a rulemaking out on this decision yet?

AQD Response: The Summit decision is a stationary source determination. MDEQ AQD will make stationary source determinations that are consistent with that decision.

Question 6) MDEQ says on page 19 of the standard questions that sources are responsible for keeping track of exempted equipment. Does MDEQ ever check whether sources are treating subject sources as exempt? See also page 21 of the standard questions re permits by rule.

AQD Response: If a facility is covered by a renewable operating permit (ROP), such equipment is included in the ROP. In addition, as part of compliance inspections, AQD staff check to ensure that facilities have all of the proper permits. Also, many facilities consult with the Division prior to making a change, including installing potentially exempt equipment, to determine if a permit is warranted. Finally, Michigan Air Pollution Control Rule R 336.1278a (Rule 278a) requires facilities owning or operating an exempt process or process equipment to be able to provide information demonstrating the applicability of the exemption.

Question 7) Re SSM, page 29-30 of the standard questions, does MDEQ provide in its permits for affirmative defenses for periods of SSM?

AQD Response: Provisions for affirmative defense for periods of SSM are not included in Michigan's permits to install. Provisions for affirmative defense for periods of SSM are currently addressed by Michigan's Air Pollution Control Rule R 336.1916 (Rule 216). However, in response to concerns raised by EPA, MDEQ AQD has begun discussions with our stakeholders concerning potential changes to Rule 216.

Question 8) What are MDEQ's plans for any permits in may have issued to sources on tribal lands where the permit lacks jurisdiction?

AQD Response: MDEQ acknowledges that EPA administers the Clean Air Act for facilities located within the exterior boundaries of a tribal reservation. MDEQ makes a case-by-case determination as to whether an individual facility is subject to Michigan's air pollution statute and rules based on, among other things, whether the facility is located within a reservation, its purpose, and whether it is owned by a tribe. When Michigan's air pollution statute and rules do apply to facilities within a reservation, MDEQ will continue to require state-law permits and to enforce the state-law requirements contained in existing permits for those facilities.

Please let us know if you have any questions concerning these items and/or need any other additional information from us. I can be reached at 517-284-6795.

Thank You,

Mark C. Mitchell, P.E.
TPU/CPU Supervisor
MDEQ/AQD
517-284-6795

October 6, 2015

From: Blathras, Constantine [mailto:blathras.constantine@epa.gov]
Sent: Monday, September 14, 2015 12:44 PM
To: Mitchell, Mark (DEQ); Dolehanty, Mary Ann (DEQ); Smith, Cindy (DEQ)
Subject: NSR program review follow up questions

Hello,
Last week I sent you folks an email with a follow up question from the NSR program evaluation report we are working on. While going over the draft report with our peer reviewers here, we have some additional questions. I have a few additional questions I would like to go over with you (not necessarily to be fully discussed tomorrow, but I want to go over these if you have any questions on our questions):

1) MDEQ has the governor's mandated 90 day window to issue permits. How does MDEQ report on and work with permits that get extended comment periods due to issues such as 48217 EJ or sources of significant public interest getting extensive comments?
2) What were the (6 ?) PSD permits issued by MDEQ in 2014, and what PSD permits were issued in 2015?
3) On page 8 of the standard questionnaire MI states that it has a separate PTI and ROP processes. However, in practice, MDEQ "voids" PTIs when the terms are transferred to the ROP. What is the process MDEQ uses to ensure that it isn't dropping any permanent terms when switching to a single document that represents both the PTI and ROP.

4) On page 1 of the additional questions document you state that you don't review source RMRR determinations. How does MDEQ assure that sources are getting all necessary permits?

5) MDEQ says on page 2 of the additional questions document that it plans to follow the 6th Circuit's decision in Summit. How specifically does MDEQ interpret and plan to follow the Summit decision, given that there isn't a rulemaking out on this decision yet?

6) MDEQ says on page 19 of the standard questions that sources are responsible for keeping track of exempted equipment. Does MDEQ ever check whether sources are treating subject sources as exempt? See also page 21 of the standard questions re permits by rule.

7) Re SSM, page 29-30 of the standard questions, does MDEQ provide in its permits for affirmative defenses for periods of SSM?

8) What are MDEQ's plans for any permits in may have issued to sources on tribal lands where the permit lacks jurisdiction?

f. Emissions inventory and ambient impacts analysis

i. Does the permitting authority maintain an allowable emissions inventory for existing sources located within the permitting authority's jurisdiction?

A. Yes, the Permit Cards database lists allowable emissions and our MAERS database tracks actual emissions.

ii. If so, describe the type of information included in the inventory.

A. Stack parameters, stack locations, emissions.

iii. What is the permitting authority's process/procedure for updating the emissions inventory?

A. For new permits the permit engineer inputs data into the Permit Cards database. Yearly, facilities are required to submit actual emissions for the MAERS database.

iv. Does the permitting authority use actual emissions or allowable (potential) emissions when conducting cumulative impacts analyses under PSD?

A. If actual emissions data is available then it is used for an increment analysis; however, when it is not available, then allowable emissions are used. Allowable emissions are always used in an NAAQS analysis.

v. How does the permitting authority determine which proposed projects need a Class I impacts analysis?

A. Appendix W 40 CFR Part 51 is followed. An evaluation is determined based on size of the facility (emissions) and distance from the Class I area.

vi. Under what circumstances, if any, would the permitting authority conduct a Class I impacts analysis for a Class I area that is located more than 100 km from the proposed source?

A. This is on a case-by-case basis. If it's a large facility (ex. Power Plant) then it would likely be evaluated; however, a small source likely would not be.

vii. How does the permitting authority satisfy the visibility impacts analysis requirement of the PSD rules?

A. Appendix W 40 CFR Part 51 is followed. This is part of the Additional Impact Analysis and can be done with CALPUFF or the VisScreen programs.

viii. What procedures does the permitting authority have for ambient impacts analysis for minor NSR sources? How is the permitting authority ensuring that their minor NSR program is in compliance with ambient air quality standards?

A. Appendix W 40 CFR Part 51 is followed. Minor source ambient impacts are evaluated in the same manner as major sources. The only exception is only one year of modeling is required as long as the maximum impacts for all pollutants meets the ambient air quality standards. If the maximum impacts do not meet the short term averaging times, then a five year analysis can be performed.

g. Implementation of $PM_{2.5}$, nitrogen dioxide (NO_2), sulfur dioxide (SO_2) and ozone (O_3) requirements

i. What issues has the permitting authority encountered in implementing $PM_{2.5}$ requirements under PSD/NSR?

A. Issues include having valid PM2.5 emissions data for additional sources in a cumulative NAAQS analysis and getting impacts below standards with them being more stringent.

...

vi. What issues has the permitting authority encountered in implementing ozone requirements under PSD/NSR?

A. Explaining to consultants/companies how to include an ozone analysis without having formal guidance explaining how the analysis should be performed.

SSM from John & Dave

5. Startup, shutdown and malfunction (SSM) provisions

a. How does the permitting authority address SSM in PSD/NSR permits.

AQD addresses SSM as follows:

- Incorporates a mass emission limit (lb/hr) in the permit for each criteria pollutant for which BACT applies. The limit applies at all times.
- Defines periods of startup up in terms of duration (hours) and production capacity or load. Defining startup and shutdown allows AQD to know when the source is operating in startup/shutdown modes.
- Require permittees to use fuels or raw materials which minimize emissions during startup and shutdowns. For example, an electric utility steam generating unit (EUSGU) will be required to utilize natural gas or distillate oil to comply with this work practice during startup.
- Develop and maintain malfunction abatement plans (MAPs). The MAP addresses the specific procedures to be followed to minimize malfunctions, such as periodic maintenance and maintaining an inventory of spare parts, etc. The intent of the MAP is to minimize the time that the facility is operating under a malfunction.
- All permits require compliance with rule R 336.1912. Rule 912 addresses abnormal conditions during start-up, shutdown, and malfunctions, and the notification and reporting requirements when SSMs occur.

b. Does the permitting authority make separate BACT determinations for SSM emissions?

BACT is an emission limit which is applicable at all times including startup, shutdowns, and malfunctions. A limit may be based on a parameter such as a material throughput rate (lb/ton) or heat input to a boiler (lb/MMBtu). Such a limit loses meaning during startup and shutdown when, for example, the heat input rate reaches zero. Other than requiring the use fuels or raw materials which minimize emissions, AQD does not make separate BACT determinations for SSM emissions. However, a mass emission limit (lb/hr) equivalent to the lb/MMBtu limit is included in the permit for each criteria pollutant for which BACT applies. The mass emission limit applies at all times.

c. Do the ambient impacts analyses include SSM emissions.

Ambient impact analyses are completed in accordance with the latest modeling guidance. Short term impacts can be evaluated using annualized data. The ambient impact analyses are based upon the emissions from a source when the source is operating at maximum rated capacity. During startup and shutdowns, the capacity is either being increased or decreased to/from the maximum rated capacity. Mass emissions during startup and shutdown will be less than emissions occurring at the maximum rated capacity.

Ambient impact analyses do not specifically include emissions during malfunctions because emissions during malfunctions are difficult to quantify.

Additional Questions

4) How often have permits contained elements including "demand growth" allowances and/or "increased utilization" in the PSD analysis, and what are the permit writer's procedures in reviewing those items.

Demand growth has been addressed specifically in the past five years in permits for major modifications to existing public utility power plants where AQD requested an analysis of the "needs and alternatives" when an increase in generating capacity has been proposed. This parallels the Michigan Public Service Commission determination of a "Certificate of Need" for public utility power plant construction.

All permits for major changes of an emission unit at an existing PSD source are required to perform a PSD applicability test as required by rule R 336.1802(4). In making the determination whether a modification is significant, baseline emissions are compared to projected actual emissions. Projected actual emissions are defined in rule R 336.1802(ll) and require the consideration of:

> "all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity, the company's filings with the state or federal regulatory authorizes, and compliance plans under the state implementation plan."

All permits which are required to perform an applicability analysis, therefore, provide projections of demand growth and increased utilization as an integral part of the permit review. This information is reviewed by the permit writer, but is also peer reviewed by a committee of other permit writers to assure that the projections were done properly and in compliance with our rules.

Blathras, Constantine

From: Smith, Cindy (DEQ) <SMITHC17@michigan.gov>
Sent: Friday, October 30, 2015 3:28 PM
To: Blathras, Constantine; Mitchell, Mark (DEQ); Switzer, Annette (DEQ)
Cc: Rolfes, Sarah
Subject: RE: RBLC entries

Good Morning,

Thank you for your note regarding our RBLC entries. It is quite timely as I was actually reviewing all of our information last week to ensure that we were up to date on our RBLC entries. I went through each of the monthly PSD lists that we send to you for calendar year 2015 (to date), and all applicable determinations had been entered into the database. With respect to your specific questions below, I can provide the following information.

Gerdau MacSteel Monroe (PTI No. 102-12A): I completed this entry on September 25, 2015 and it is identified as MI-0417. For this entry, I did have some computer/technical issues that I believe I spoke with you about previously and with Mr. Joe Steigerwald as well. Due to those technical difficulties, it took several attempts to input the information, but it was completed, and I received a 'Passed QA' report that is now generated for successful entries.

GM Tech Center, Warren (PTI No. 160-11B): This determination was entered on October 23, 2015 and it is identified as MI-0418. I also received a 'Passed QA' report for this entry as well.

Waste Management (PTI No. 160-14): The permit engineer will be providing the necessary information for entry into the RBLC database within the next few days. The reason it had not been included in the database was because the SO2 limit that was in the permit was more stringent than what would have constituted BACT, so an RBLC entry was not made for this permit. However, after receiving your email today and looking further into the files, we realized that an SO2 BACT limit was included in the final permit in response to a comment made during the public comment period. Therefore, we will be putting the information together and entering that into the database within the next week or so. I will send you an email when I have completed the data entry.

Merit Energy (PTI No. 1-15): I spoke with the permit engineer last week regarding this permit, and I also looked into the permit file for the technical review notes; specifically regarding PSD BACT. The facility is an existing major stationary source, and the project was determined to be a major modification. However, the two turbines (that have the increase in emissions) are not subject to PSD BACT because although they will experience an increase in the hours of operation due to the proposed project, an increase in the hours of operation is not a "change in the method of operation" per R1801(aa)(iii)(F). Therefore, since PSD BACT is not applicable, an RBLC entry is not necessary.

I hope I have been able to answer your questions, but if you have any further questions, please don't hesitate to contact me.

Thank you,
Cindy Smith

Cindy Smith, Supervisor
General Manufacturing/Chemical Process Unit
Permit Section, Air Quality Division
Michigan Department of Environmental Quality
Phone: 517-284-6802

Email: smithc17@michigan.gov

From: Blathras, Constantine [mailto:blathras.constantine@epa.gov]
Sent: Thursday, October 29, 2015 5:18 PM
To: Mitchell, Mark (DEQ); Smith, Cindy (DEQ)
Cc: Rolfes, Sarah
Subject: RBLC entries

Hello,
I was reviewing the RBLC entries in EPA's Clearinghouse on our website. I did a search for any entry from MI from permit issuance dates 1/1/2014 to 10/22/2015. The search produced 4 records, for EES Coke 51-08C, Severstal dearborn 20-14, AK Steel 182-05C, and GM Lansing 209-00E.

The search did not have anything for the PSD permits for Gerdau MacSteel Monroe, or the PSD permits issued in 2015, GM Tech Center, Waste Management, and Merit Energy.

What is the status of the ones not in the RBLC currently?
Thanks.
Dino Blathras
EPA Region 5

http://cfpub.epa.gov/rblc/index.cfm?action=Results.PermitSearchResults
Last updated on Thursday, October 22, 2015

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

You are here: EPA Home Air & Radiation TTNWeb - Technology Transfer Network Clean Air Technology Center RACT/BACT/LAER Clearinghouse RBLC Basic Search RBLC Search Results

RBLC Search Results

List of Reports | Help

Your search has found **4** facilities and **9** processes that match your search criteria. You can view details for one or more facilities by clicking on the highlighted RBLC identifier or the process description in the list below. To create a report, select one of the standard output formats from the list of reports at the bottom of this page. Only facilities that are checked in the table below will be included in your report. Click on the check box next to any facility to switch between checked and unchecked or use the "Check" or "Un-Check" all facilities buttons at the top of the list to check or uncheck all records in the list.

Please note that the use of your browser's BACK button to change the search conditions may result in inaccurate results.

Matching Facilities for Search Criteria : Tips

Permit Date Between 1/1/2014 And 10/22/2015
And State = 'MI'

These results are for USA only.

Check | Un-Check | **ALL Facilities** | New Search

NOTE: Draft determinations are marked with a " * " beside the RBLC ID.

RBLC ID	CORPORATE/COMPANY & FACILITY NAME	PROCESS CODE	PROCESS DESCRIPTION	PERMIT NUMBER & PERMIT DATE
Sort By	Sort By			Sort By
☑ *MI-0415	EES COKE BATTERY, LLC EES COKE BATTERY, LLC	81.190	EUCOKE-BATTERY	51-08C 11/21/2014
☑ *MI-0416	SEVERSTAL DEARBORN, INC./AK STEEL CORP. SEVERSTAL DEARBORN, INC./AK STEEL CORPORATION	81.290	EUMACHSCARF	20-14 09/10/2014
		81.290	EUMANUALSCARF	
		81.290	EUCUTSLICE	
		19.600	EUBLDGHEAT	
☑ *MI-0413	AK STEEL CORPORATION AK STEEL	81.290	EUCFURNACE - C Blast Furnace which includes the blast furnace casthouse and stoves.	182-05C 05/12/2014
		17.130	FG-ENG2007>500 – Two natural gas fired SI engines greater than 500 hp	
		17.230	FG-ENG2007<500 – Four natural gas fired SI engines less than 500 hp	
☑ *MI-0409	GENERAL MOTORS LLC, LANSING DELTA TOWNSHIP GENERAL MOTORS LLC,	41.002	EU-SEALERSANDADHESIVES	209-00E 05/09/2014

LANSING DELTA TOWNSHIP

Check Un-Check **ALL Facilities**

Back to Top of Page

○ Show All Records ◉ Show Only Selected Records On This Page

Formatting your report may take a while, especially if your facility has a large number of processes and pollutants. The detail reports take the longest amount of time because they include the most information. Please be patient after you select "Create report"

Help

○ Process Index Report	◉ TXT	○ pdf
○ Process Type Summary(with Agency Contact Info)	◉ TXT	○ pdf
○ Comprehensive Report	◉ TXT	○ pdf
○ Free Form Report(Customizable Fields Selection)		
○ Free Form Report	◉ TXT	○ pdf
○ Export/Import Report(ASCII Delineated Text)		

Create report

Title V and New Source Review – Permitting			
EPA Contact(s): Richard Angelbeck (Technical) or Genevieve Damico (Section Chief) State/Local Air Agency Contact(s): Mary Ann Dolehanty			
Outputs/Measures (identified from EPA National Program Guidance, Regulations, or Policy)	State Specific Commitments/Activities	Progress Target Dates	Progress Made on Commitments (Annual or Final Performance Report)
(All commitments are funded with EPA Clean Air Act funding.)			
Issue major PSD/NSR permits within one year of receiving a complete permit application.	Major PSD/NSR permits are required by Michigan rule (Rule 336.1206) to be acted upon within 240 days of receipt. For FY14, major PSD/NSR permits were issued within one year of receipt with the average being 350 days. For the 1st and 2nd quarters of FY15, major PSD/NSR permits have been acted upon within one year of receipt with the average being 165 days for each quarter.	Ongoing—A core function of the AQD Permit Section	
Issue major NSR permits consistent with CAA requirements and enter BACT/LAER determinations in the RACT/BACT/LAER Clearinghouse (RBLC).	All permits are issued consistent with CAA requirements. MDEQ has a dedicated staff person charged with the responsibility of entering data into the RACT/BACT/LAER Clearinghouse (RBLC). The goal is to have all data entered within 6 months of the permit issuance date.	Ongoing—A core function of the AQD Permit Section.	
Provide data in a timely manner on PSD issued for new major sources and major modifications by entering data including "the application accepted date" and "the permit issuance date" in to the RBLC national database.	As stated above, MDEQ will enter the appropriate information into the RBLC within 6 months of the issuance date and will include the date the application was received and the date of permit issuance.	Ongoing—A core function of the AQD Permit Section.	
PSD-delegated States (IL and MN) coordinate with EPA to ensure that Endangered Species Act consultations are handled in a timely manner.	Not applicable. Michigan is SIP approved to implement the PSD program.	NA	
Provide PSD/NSR permit applications to EPA prior to the start of the public comment period.	Monthly statistics are provided to EPA Region 5 permit contact regarding projects of interest. The information provided includes the date a copy of the initial permit application was forwarded to EPA as well as the date for the commencement of the public comment period. At the commencement of the public comment period, a copy of all relevant information, including the final staff evaluation, the Fact Sheet, draft permit conditions, and the Notice of Public Comment and Hearing, is provided to EPA.	Ongoing—A core function of the AQD Permit Section.	
State/Local Air Agency Specific Commitments			

Permitting			
EPA Contact(s): Constantine Blathras (Technical) or Genevieve Damico (Section Chief) State/Local Air Agency Contact(s): MaryAnn Dolehanty			
Commitments/Activities	State Specific Commitments/Activities	Progress Target Dates	Progress Made on Commitments (Annual or Final Performance Report)
(The following measures are funded with EPA Clean Air Act funding.)			
Issue 78 % of major PSD/NSR permits within one year of receiving a complete permit application.	Continue to provide monthly updates to EPA Region 5 permit contact on projects of interest, including PSD, nonattainment, controversial, and net out applications. Identify projects which are subject to GHG BACT. Also, identify those projects located in SW Detroit. All permits are issued within one year of receiving a complete application.	Ongoing – A core function of the AQD Permit Section.	
Issue NSR permits consistent with CAA requirements and enter BACT/LAER determinations in the RACT/BACT/LAER Clearinghouse (RBLC).	All permits are issued consistent with CAA requirements. AQD has a dedicated staff person charged with the responsibility of entering data into the RACT/BACT/LAER Clearinghouse (RBLC). The goal is to have all data entered within 6 months of the permit issuance date.	Ongoing – A core function of the AQD Permit Section.	
Provide data in a timely manner on NSR permits issued for new major sources and major modifications by entering data including "the application accepted date" and "the permit issuance date" in to the RBLC national database.	As stated above, AQD will enter the appropriate information into the RBLC within 6 months of the issuance date and will include the date the application was received and the date of permit issuance.	Ongoing – A core function of the AQD Permit Section.	
PSD-delegated States (IL and MN) coordinate with EPA to ensure that Endangered Species Act consultations are handled in a timely manner.	Not applicable. Michigan is SIP approved to implement the PSD program.	Ongoing – A core function of the AQD Permit Section.	
Provide PSD/NSR permit applications to EPA prior to the start of the public comment period.	Monthly statistics provided to EPA Region 5 permit contact regarding projects of interest. The information provided includes the date a copy of the initial permit application was forwarded to EPA as well as the date for commencement of public comment. At the commencement of the public comment period, a copy of all relevant information, including the final staff evaluation, the FACT Sheet, draft permit conditions, and the Notice of Public Comment and Hearing, is provided to EPA.	Ongoing – A core function of the AQD Permit Section.	

Blathras, Constantine

From: Smith, Cindy (DEQ) <SMITHC17@michigan.gov>
Sent: Friday, November 06, 2015 11:17 AM
To: Blathras, Constantine; Mitchell, Mark (DEQ); Switzer, Annette (DEQ)
Cc: Rolfes, Sarah
Subject: RE: RBLC entries

Good Afternoon,

I just wanted to let you know that I have completed entering the data into the RBLC for Waste Management, PTI No. 160-14. It is identified as MI-0419 and a 'Passed QA' report was received. Please let me know if you have any questions regarding this entry, or any of the other entries as well.

Thank you,
Cindy Smith

Cindy Smith, Supervisor
General Manufacturing/Chemical Process Unit
Permit Section, Air Quality Division
Michigan Department of Environmental Quality
Phone: 517-284-6802
Email: smithc17@michigan.gov

From: Blathras, Constantine [mailto:blathras.constantine@epa.gov]
Sent: Friday, October 30, 2015 4:53 PM
To: Smith, Cindy (DEQ); Mitchell, Mark (DEQ); Switzer, Annette (DEQ)
Cc: Rolfes, Sarah
Subject: RE: RBLC entries

Thanks for the quick reply.
Dino Blathras
EPA Region 5

From: Smith, Cindy (DEQ) [mailto:SMITHC17@michigan.gov]
Sent: Friday, October 30, 2015 3:28 PM
To: Blathras, Constantine <blathras.constantine@epa.gov>; Mitchell, Mark (DEQ) <MITCHELLM7@michigan.gov>; Switzer, Annette (DEQ) <SWITZERA2@michigan.gov>
Cc: Rolfes, Sarah <Rolfes.Sarah@epa.gov>
Subject: RE: RBLC entries

Good Morning,

Thank you for your note regarding our RBLC entries. It is quite timely as I was actually reviewing all of our information last week to ensure that we were up to date on our RBLC entries. I went through each of the monthly PSD lists that we send to you for calendar year 2015 (to date), and all applicable determinations had been entered into the database. With respect to your specific questions below, I can provide the following information.

Gerdau MacSteel Monroe (PTI No. 102-12A): I completed this entry on September 25, 2015 and it is identified as MI-0417. For this entry, I did have some computer/technical issues that I believe I spoke with you about previously and with Mr. Joe Steigerwald as well. Due to those technical difficulties, it took several attempts to

input the information, but it was completed, and I received a 'Passed QA' report that is now generated for successful entries.

GM Tech Center, Warren (PTI No. 160-11B): This determination was entered on October 23, 2015 and it is identified as MI-0418. I also received a 'Passed QA' report for this entry as well.

Waste Management (PTI No. 160-14): The permit engineer will be providing the necessary information for entry into the RBLC database within the next few days. The reason it had not been included in the database was because the SO2 limit that was in the permit was more stringent than what would have constituted BACT, so an RBLC entry was not made for this permit. However, after receiving your email today and looking further into the files, we realized that an SO2 BACT limit was included in the final permit in response to a comment made during the public comment period. Therefore, we will be putting the information together and entering that into the database within the next week or so. I will send you an email when I have completed the data entry.

Merit Energy (PTI No. 1-15): I spoke with the permit engineer last week regarding this permit, and I also looked into the permit file for the technical review notes; specifically regarding PSD BACT. The facility is an existing major stationary source, and the project was determined to be a major modification. However, the two turbines (that have the increase in emissions) are not subject to PSD BACT because although they will experience an increase in the hours of operation due to the proposed project, an increase in the hours of operation is not a "change in the method of operation" per R1801(aa)(iii)(F). Therefore, since PSD BACT is not applicable, an RBLC entry is not necessary.

I hope I have been able to answer your questions, but if you have any further questions, please don't hesitate to contact me.

Thank you,
Cindy Smith

Cindy Smith, Supervisor
General Manufacturing/Chemical Process Unit
Permit Section, Air Quality Division
Michigan Department of Environmental Quality
Phone: 517-284-6802
Email: smithc17@michigan.gov

From: Blathras, Constantine [mailto:blathras.constantine@epa.gov]
Sent: Thursday, October 29, 2015 5:18 PM
To: Mitchell, Mark (DEQ); Smith, Cindy (DEQ)
Cc: Rolfes, Sarah
Subject: RBLC entries

Hello,
I was reviewing the RBLC entries in EPA's Clearinghouse on our website. I did a search for any entry from MI from permit issuance dates 1/1/2014 to 10/22/2015. The search produced 4 records, for EES Coke 51-08C, Severstal dearborn 20-14, AK Steel 182-05C, and GM Lansing 209-00E.

The search did not have anything for the PSD permits for Gerdau MacSteel Monroe, or the PSD permits issued in 2015, GM Tech Center, Waste Management, and Merit Energy.

What is the status of the ones not in the RBLC currently?
Thanks.
Dino Blathras
EPA Region 5

standard bcc's: official file copy w/attachment(s)
originator's file copy w/attachment(s)
originating organization reading file w/attachment(s)

other bcc's:

ARD:APB:APS:C.Blathras:2/26/15 FILE:C:\SERVER\NSR Evaluation