

	<b>Air Quality Division RESCISSION OF POLICY AND PROCEDURE</b>		DEPARTMENT OF ENVIRONMENTAL QUALITY
Rescinded Date: January 29, 2014	Subject: Operational Memorandum No. 17		Category: <input type="checkbox"/> Internal/Administrative <input checked="" type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive
	Title: Clean Corporate Citizen		
	Number: AQD-017	Page: 1 of 1	

Air Quality Division Operational Memorandum No. 17, Clean Corporate Citizen, dated April 14, 2003, is rescinded. This Op Memo provides guidance to a Clean Corporate Citizen on completing Permit to Install applications qualifying for expedited processing under R 336.2414 and to AQD staff on application evaluation. Since R 336.2414 is in the process of being rescinded as it has been superseded by changes to the Natural Resources and Environmental Protection Act through 2012 PA 554, the Op Memo is obsolete.

DIVISION CHIEF APPROVAL:

  
\_\_\_\_\_  
G. Vinson Hellwig, Chief  
Air Quality Division



**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

**OPERATIONAL MEMORANDUM  
NO. 17**

**SUBJECT: PROCEDURE FOR PROCESSING CLEAN CORPORATE CITIZEN PERMIT APPLICATIONS**

**EFFECTIVE DATE: March 8, 1999**

**REVISED: April 14, 2003**

**PREAMBLE**

R 336.2214 (Rule 1414), promulgated pursuant to Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), provides that a stationary source with a Clean Corporate Citizen designation may request expedited processing of an application for a permit to install. This operational memorandum is designed to provide guidance to a Clean Corporate Citizen on the information requirements for a complete application qualifying for expedited processing, and to Air Quality Division (AQD) staff on how to evaluate such applications.

**POLICY**

The Michigan Department of Environmental Quality (Department), AQD, will evaluate and act upon a request from a Clean Corporate Citizen for expedited processing consistent with the provisions of Rule 1414.

A permit to install application for a qualified stationary source will be given expedited processing based on all of the following criteria:

1. The stationary source holds a current Clean Corporate Citizen designation from the Department.
2. A written request for expedited processing is submitted by the owner/operator at the time the application is submitted.
3. The application is for a permit to install required pursuant to R 336.1201 (Rule 201) and covers only those actions listed under Rule 201: construction, reconstruction, relocation, alteration and modification. The following types of permit applications do not qualify for expedited review due to the nature and/or complexity of the review:
  - a. Permits to limit the potential to emit below the thresholds for applicability of the renewable operating permit program (Opt-Out permits), pursuant to Operational Memorandums No. 3 and 4.
  - b. Renewable operating permits pursuant to R 336.1211 (Rule 211), or a modification of a renewable operating permit.
  - c. Plantwide applicability permits, pursuant to R 336.2415 (Rule 1415), or a modification of a Permit to Install containing a plantwide applicability limit.

- d. Permits for a case-by-case maximum achievable control technology (MACT) determination pursuant to Section 112(g) or Section 112(j) of the federal Clean Air Act, as codified in 40 CFR §§63.40 through 63.44 and §§63.50 through 63.56, and R 336.1299, or a modification of a Permit to Install containing a MACT determination pursuant to Section 112(g) or Section 112(j).
4. The application is submitted using all forms, and with all information and certifications, as detailed below.

A complete application qualifying for expedited processing must include all of following information:

1. A completed air use permit application form (EQP 5615) with the signature of a responsible official, as defined in R 336.1118(j) [Rule 118(j)].
2. A cover letter clearly stating that the stationary source is a Clean Corporate Citizen and that the application is being submitted with a request for expedited processing pursuant to Rule 1414.
3. All of the information required by Rule 1414(2):
  - a. The information required by R 336.1203 (Rule 203) and other applicable rules. The document entitled "Information Required for an Administratively Complete Permit to Install Application: Assembly Instructions and General Information Requirements" [see Attachment A] should be used to determine all of the *general* information necessary for the application. Any applicable process or process equipment specific sheet(s) should be consulted to determine if additional specific information is required. A list of these sheets is on Page A-7 of Attachment A.
  - b. The identification, by citation and title, of all state rules and federal regulations applicable to the proposed process or process equipment.

All rule citations and reasons for applicability should be clear. The applicant should also list any state rules and federal regulations that were considered for applicability to the process or process equipment, but were determined not to be applicable, and the basis for this conclusion. A tabular format is recommended.

- c. An analysis that demonstrates that the process or process equipment covered by the application will comply with the applicable requirements.

This analysis shall include a complete description of the process and all calculations completed, including any assumptions made and the basis for the assumptions. A summary of the analysis shall be provided on the forms provided in Attachment B. This data will be entered by the Department into the Permit to Install database.

- d. An analysis of the applicable control technology requirements, such as lowest achievable emission rate (LAER) technology, best available control technology (BACT), best available control technology for toxics (T-BACT), and/or maximum achievable control technology (MACT). Process or control technologies that have been considered and rejected as part of the control technology assessment shall be identified.

The format of the analysis should follow the general format specified in Attachment C. A tabular summary of the results shall be provided. Copies of any vendor quotes, and efficiency or emission limitation guarantees shall be included.

- e. A draft permit.

Use of the standard general conditions in Attachment D is mandatory; any proposal suggesting modifications to these general conditions will automatically disqualify the permit application from expedited processing. The special conditions proposed should follow the standard format used by the AQD. An example of the standard format is also provided in Attachment D. **Please contact the AQD for examples of permit conditions for your source type.** The size of the document containing all of the special conditions used by AQD precludes it from being an attachment to this document.

A source that has an existing Renewable Operating Permit (ROP) and that is proposing to modify an existing emission unit and/or flexible group should provide the applicable revised table(s) and/or appendices from the ROP. These revised documents become the Special Conditions.

- f. A certification as to the completeness and adequacy of the control technology analysis. This certification shall be provided by the person responsible for the control technology analysis.
- g. Certification by a responsible official of the completeness and accuracy of the application.
- h. For draft permits that are subject to public notification, a draft fact sheet and draft public notice that are in writing and on a computer diskette in a format specified by the Department. Public Notice requirements are found in Section 5511 of Act 451.

The preferred word processing format for all permit documents is Microsoft Word. Users of WordPerfect or other word processing programs should convert the documents to Microsoft Word if possible. For examples of a draft fact sheet and draft notice, see Attachments E and F, respectively.

## PROCEDURE

### RESPONSIBILITIES OF THE CLEAN CORPORATE CITIZEN

1. Submittal of a complete permit application.
2. Submittal of a complete permit evaluation, draft conditions, and, if necessary, a fact sheet and public notification form.
3. Timely response to all information requests from the Department.
4. Assistance with and payment for publication of required public notices.

## RESPONSIBILITIES OF AQD PERMIT SECTION STAFF

1. Receive the permit application and screen for administrative and basic technical information requirements. Assign the application directly to the appropriate Unit Supervisor or her/his designee (permit reviewer) for review.
2. The permit reviewer will review the application for approvability within 10 business days (20 business days for permits subject to major new source review) after assignment. If the application is incomplete, the permit reviewer will provide written notification to the applicant, based on the following scenarios:
  - a. If the permit reviewer determines the application is substantially incomplete, the notification will be in the form of a denial of the application, pursuant to R 335.1207(1)(a) [Rule 207(1)(a)], under the authority delegated to the Unit Supervisor by the Department. The notification should detail, to the extent possible, the deficiencies in the application.
  - b. If the permit reviewer determines that the application is incomplete, but the applicant should be able to provide the amount of information needed within the 30-day period provided for in Rule 1414(3), the notification will be in the form of an information request, and will include a request for the extension allowed under Rule 1414(3). If the information cannot be provided and reviewed within the original 30-day period, the application will be denied unless the extension is granted.
3. If the permit reviewer determines that the application is complete, and:
  - a. The application is approvable, the permit reviewer will notify the applicant, either verbally or in writing, and negotiate with the applicant any changes that may be necessary to the draft permit.
    - i) If agreement on the draft permit is reached, the permit reviewer will proceed with final action on the application pursuant to Step 5 of this memorandum.
    - ii) If agreement cannot be reached on the draft permit, the application will be forwarded to the AQD Division Chief for denial action pursuant to Step 6 of this memorandum.
  - b. The application is not approvable, the permit reviewer shall notify the applicant in writing, specifying the reasons why the application is not approvable. The applicant will be given 30 calendar days to respond to the letter. The letter will also request the 30-day extension provided under Rule 1414(3). If the information cannot be provided and reviewed within the original 30-day period, the application will be denied unless the extension is granted.
4. If the applicant does not provide the information as requested under 3.b. or fails to provide information that results in a complete application within the required 30-day period, either:
  - a. The application will be denied by the Unit Supervisor pursuant to Rule 207(1)(a), under the authority delegated to the Unit Supervisor by the Department.
  - b. The applicant may request that the application be withdrawn from the expedited permit review process and placed into the regular permit processing program. Priority will be

assigned based upon the date the applicant requests that the application no longer be considered for expedited review.

#### 5. **Permit approval**

- a. *No public participation required.* If the application is approvable and does not require public participation as specified in Department guidance, the permit shall be approved and the applicant shall be notified using standard permit procedures.
- b. *Public participation required.* If the application is approvable and public participation is required, the Unit Supervisor shall review the draft fact sheet and draft hearing notice provided by the company, make changes as necessary, and forward the permit package to the Permit Section Supervisor. Upon approval of the fact sheet and notice by the Permit Section Supervisor, the application shall be announced for public comment following Department procedures and in accordance with Rule 205 and Section 5511 of Act 451. The remainder of the permitting process, including written notification of the applicant, will follow standard procedures.

#### 6. **Permit denial.**

The AQD Division Chief shall deny the application, without prejudice, if it is determined that the proposed process or process equipment will not comply with applicable rules and regulations. The denial action shall be announced for public comment following Department procedures and in accordance with Section 5510 of Act 451. The remainder of the permitting process, including written notification of the applicant, will follow standard procedures.

This memorandum is intended to provide guidance to AQD staff to foster consistent application of Part 55 of Act 451 and the administrative rules promulgated there under. This document is not intended to convey any rights to any parties nor create any duties or responsibilities under law. This document and matters addressed herein are subject to revision.

Questions regarding this memorandum should be directed to Mr. William Presson, General Manufacturing Unit Supervisor, Permit Section, at 517-373-7091.

List of Attachments:

<b>ATTACHMENT</b>	<b>DESCRIPTION</b>
<b>A</b>	<b>Information Requirements</b>
<b>B</b>	<b>Permit Evaluation Forms</b>
<b>C</b>	<b>Control Technology Analysis</b>
<b>D</b>	<b>Permit Conditions</b>
<b>E</b>	<b>Example Fact Sheet</b>
<b>F</b>	<b>Example Public Hearing Notice</b>

GME:SLB

## **ATTACHMENT A:** **INFORMATION REQUIREMENTS**

A permit to install is required to install, construct, reconstruct, relocate, or modify any process or process equipment, including control equipment pertaining thereto, which may emit an air contaminant (R 336.1201). A process is an action, operation, or a series of actions or operations at a source that emits or has the potential to emit an air contaminant. Process equipment is all equipment, devices, and auxiliary components, including air pollution control equipment, stacks, and other emission points, used in a process. An emission unit is any part of a stationary source that emits or has the potential to emit an air contaminant. Air pollution control equipment is any method, process, or equipment that removes, reduces, or renders less noxious air contaminants discharged into the atmosphere.

A permit to install application may be submitted for one or more interrelated processes at a source. Permit to install applications for large or complex sources, or substantial modifications to existing sources, should be discussed with the Permit Section well in advance of submitting an application.

All applications for permits to install, including applications to modify the terms and conditions of an existing permit to install, must include a completed application form. An administratively complete application for a permit to install must include reasonable responses to all requests for information on the front of the application form (EQP 5615) as well as the information requested in the application instructions on the back of the form. A template version of the application form (EQP 5615E) and separate application instructions are also available on the Internet. Please follow the instructions carefully. Failure to do so may result in your submittal being returned to you or a delay in processing your application. Any additional detailed information which will not fit in the spaces provided on the form should be enclosed and submitted with the application.

This document is designed to supplement and provide a detailed description of the information requested in the application instructions. The information described in this document should help to clarify the requirements for an administratively complete application; however, it is not intended to be all-inclusive. The requirements for an administratively complete application for a permit to install are designed to provide enough information for a permit reviewer to begin a technical review. Additional information beyond that identified may be required to complete the technical review of any individual application. The specific requirements of the federal Prevention of Significant Deterioration and Nonattainment New Source Review programs are not addressed in this document. A list of other documents that clarify the additional information requirements for specific processes, process equipment and air pollution control equipment is provided at the end of this document. In addition, a checklist is attached to assist in assembling the necessary information for each application.

Questions can be directed to the Permit Section at the address above or by calling (517) 373 7023. This information is also available on the Internet. The Air Quality Division (AQD) permit web page is located at [www.michigan.gov/deq](http://www.michigan.gov/deq) (select "Air," "Air Permits"). Questions and requests for pre-application meetings can also be directed to the DEQ, Environmental Science and Services Division, Clean Air Assistance Program at (800) 662-9278.

**INFORMATION REQUIRED FOR AN ADMINISTRATIVELY COMPLETE  
PERMIT TO INSTALL APPLICATION**

**ASSEMBLY INSTRUCTIONS AND GENERAL INFORMATION REQUIREMENTS**

You must provide three (3) signed copies of the application form (EQP 5615 or EQP 5615E) and two (2) copies of any additional information submitted with the application form. Applications cannot be accepted via facsimile. The application forms and the originals of all additional information must be sent to Lansing. You may choose to submit the second copy of the additional information directly to the appropriate District Office. Should you choose to do this, clearly indicate this on the application form or in a cover letter. A district map which shows district boundary lines and includes District Office addresses and telephone numbers is available on the Internet ([www.michigan.gov/deq](http://www.michigan.gov/deq), "About DEQ") or by contacting the Permit Section.

**CONFIDENTIAL INFORMATION:** Information included in a permit to install application cannot be claimed confidential, except for trade secrets or commercial or financial information pursuant to Section 13(1) of the Freedom of Information Act, 1976 PA 442, as amended. Section 5516 of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, states that any information regarding the quantity, composition or quality of the emissions from a source cannot be held confidential.

**PART 1 - INSTRUCTIONS FOR COMPLETING THE APPLICATION FORM**

Complete all numbered items (1 through 12) as described below.

Item 1 (Applicant Name) - The applicant should be the entity (e.g., corporation, partnership, individual owner, or government agency) that actually owns and/or is responsible for the operation of the process or process equipment.

Item 2 (Applicant Address) - This is the mailing address to receive correspondence regarding your application.

Item 3 (Equipment or Process Location) - This item need only be completed if the process location is different from the Applicant Address in Item 2 or if that address is a P.O. Box. For portable equipment, provide the site address where the equipment will be located.

Item 4 (Facility Codes) - The Standard Industrial Classification (SIC) Codes for various common source categories are listed in the Michigan Air Emissions Reporting System (MAERS) General Instructions. This booklet is available on the Internet or by contacting the AQD. The North American Industry Classification System (NAICS) has replaced the U.S. Standard Industrial Classification (SIC) system and is the preferred code. NAICS was developed jointly by the U.S., Canada, and Mexico to provide new comparability in statistics about business activity across North America. NAICS information can be found on the Internet ([www.census.gov/epcd/www/naics.html](http://www.census.gov/epcd/www/naics.html) or [www.epa.gov/ttnchie1/codes/naics.pdf](http://www.epa.gov/ttnchie1/codes/naics.pdf)). The State Registration Number (SRN) for your facility can be determined from the MAERS forms that you submit annually to the AQD. If your application is for a new facility or if you have not had previous business with the AQD you will not have an SRN. The AQD will assign an SRN during the review of your application.

Item 5 (General Nature of Business) - Briefly describe your business, consistent with the SIC or NAICS Code provided in Item 4.

Item 6 (Equipment or Process Description) - If the process description is lengthy, or specifics may be considered confidential, a brief, general description is acceptable under this item. A detailed description should be included as part of the application package. Include unique descriptive Emission Unit IDs for all processes and process equipment. Do not indicate "see attached" for this item. You must provide at least a brief description or your submittal will be returned to you.

Item 7 (Reason for Application) – Indicate if the application is for installation/construction, reconstruction, modification, or relocation of a process or process equipment.

Item 8 (Equipment New or Existing) – Check the appropriate box. New equipment is that which has not yet been installed. Existing equipment is any process or process equipment that has been previously installed and operated. If the equipment is existing, include the date of installation.

Item 9 (Existing Permit to Install) – Existing permits to install may contain information for the process or process equipment in the application. If one or more permits have been previously issued for any equipment identified in this application, check “yes” and list the permit number(s).

Item 10 (Renewable Operating Permit) – A facility which is a major source is subject to the Renewable Operating Permit (ROP) program. If an ROP exists for this source, check “yes” and provide the permit number. If an ROP has not been issued, but an application has been submitted, check “pending” and provide the application number. If this facility is not a major source and is not subject to the ROP Program, check “not applicable.”

Item 11 (Contact) – Provide the name, title and telephone number for the contact. A contact person who is not employed directly by the applicant, such as an attorney or a consultant, may file an application as an agent of the applicant pursuant to Rule 204 (R 336.1204). If the contact is an agent, include the name of the company the agent is employed by (e.g., consulting firm, law firm).

Item 12 (Authorization Question) – Rule 204 requires the applicant to provide written authorization for the filing of the application by an agent. The authorization should indicate if the applicant intends that the department contact the agent directly with questions regarding the application and whether the agent is authorized to negotiate the terms and conditions of the permit to install. If the application is being filed by an authorized agent, Items 11 – 13 must be completed and will serve as the required written authorization.

Item 13 (Authorized Employee, Name and Signature) - The application must be signed by an authorized employee of the applicant listed under Item 1. This signature certifies the truth of the information provided in the application. Provide the title and telephone number for the individual signing the application. Agents (see Item 11) cannot sign the application form.

## **PART 2 - INSTRUCTIONS FOR ADDITIONAL SUPPORTING INFORMATION**

The two (2) copies of additional information submitted as a part of a permit to install application package should be organized into sections and assembled in the following order. Each section of the package should be clearly identified.

### **A. Process Description**

In addition to the general process description which must be included in Item 6 on the application form, include a detailed description of each process or piece of process equipment included in the permit to install application. This detailed description should include all of the following information:

1. The size and type along with the make and model (if known) of each piece of proposed process equipment, including any air pollution control equipment. Manufacturer's literature for the process equipment may be helpful in providing this information.
2. Emission Unit IDs for all processes and process equipment. An emission unit is any part of a stationary source that emits or has the potential to emit an air contaminant. Examples of an emission unit include a fossil fuel-fired steam generating unit, a topcoat painting line, a solid waste incinerator, or a process unit at a chemical plant. An Emission Unit ID is a unique descriptive identifier for a given emission unit. Some examples include EU-FURNACE, EU-BOILER#2, EUGASBOILER, EULINE-001. The AQD Operational Memorandum No. 6, "Procedure for Determining Emission Units," which provides definitions and additional information to determine what constitutes an emission unit, is available on the Internet or by contacting the Permit Section.
3. The normal and maximum operating schedule for the process and/or each stack/vent, in hours per day, days per week, and weeks per year. For batch processes, provide the length of time per batch and the frequency of the batch operation in batches per day and batches per month. Note that if the emissions allowed by the permit to install are based on an operating schedule less than 24 hours per day, 7 days per week and 52 weeks per year, then that reduced operating schedule may be included as an enforceable condition of the permit to install.
4. Details of the type and feed rate of each material used in or produced by the process (including intermediate products if appropriate) in pounds per hour or similar measure.
5. For fuel burning processes provide the following information related to the fuel burning device(s): make, model, size, type, number of devices and capacity range (from minimum to maximum) of each device. For gaseous fuels, provide the type, maximum cubic feet per hour, and an ultimate analysis for gaseous fuels other than sweet natural gas or propane. For fuel oil, provide the fuel oil grade, maximum gallons per hour, sulfur content, and temperature to which oil is preheated, if applicable. Include characterization specifications for recycled used oil. For solid fuels, provide the type, ultimate analysis, and maximum pounds per hour.
6. A brief description of any waste generated by the process or the air pollution control equipment and the proposed method of reuse, treatment, or disposal of that waste.
7. If the application is for complex or multiple processes, include a block diagram that shows the flow of materials, including any intermediate and final products.

## **B. Regulatory Discussion**

Describe all federal, state, and local air pollution control regulations which you believe are applicable to the proposed process or process equipment. Include a discussion of how you believe the proposed process or process equipment complies with each of these regulations. Air pollution control requirements that are applicable to the proposed process may be contained in any of the following:

1. Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.
2. The Michigan Air Pollution Control Rules
3. The Federal Clean Air Act
4. The Code of Federal Regulations, especially:
  - 40 CFR, Part 52.21 - Prevention of Significant Deterioration

- 40 CFR, Part 60 - National Standards of Performance for New Stationary Sources (NSPS)
- 40 CFR, Part 63 - National Emissions Standards for Hazardous Air Pollutants for Source Categories (NESHAP). This includes Part 63.40 - 63.44 and Part 63.50 - 63.56, Sections 112(g) and 112(j).

In addition to the above regulatory references, a list of other AQD documents that clarify the additional information requirements for specific processes, including the requirements that might be applicable, is provided in Section G of this document. Information regarding applicable requirements, including all of the above regulatory references and various Operational Memorandums can also be found on the Internet. Sources for rule and regulation information include [www.michigan.gov/deq](http://www.michigan.gov/deq) (select "Air") and [www.epa.gov/ttn](http://www.epa.gov/ttn).

### **C. Control Technology Analysis**

Describe how the air contaminant emissions from the proposed process equipment will be controlled or otherwise minimized. Air pollution control equipment is any method, process, or equipment that removes, reduces, or renders less noxious air contaminants discharged into the atmosphere. This definition includes pollution prevention or other methods which result in reduced emissions from the process. Provide sufficient detail to determine the extent to which the air pollution control equipment will be used to control emissions from the other process equipment listed in this application and to determine the control efficiency of the air pollution control equipment. The information needed to show the control efficiency of the air pollution control equipment may include process-specific calculations (e.g., calculation of the particulate emission control efficiency may depend on the particle size distribution of the exhaust gas being controlled). If applicable, you must also include a description of any proposed air pollution control equipment bypass. Generally, inputs to the process must cease immediately in the event of a bypass of the air pollution control equipment, except as provided by Rules 913 and 914 (R 336.1913 and R 336.1914).

For applicable air pollution control regulations that require a control technology determination (e.g., Best Available Control Technology (BACT), BACT for toxics (T-BACT) or Lowest Achievable Emission Rate (LAER)), include a summary of all the air pollution control equipment you investigated in addition to the selected equipment described above. This discussion should also include the reasons for rejecting any air pollution control equipment with control efficiency greater than or equal to the selected control equipment.

Separate documents containing step-by-step instructions for completing BACT and T-BACT analyses are available on the Internet or by contacting the Permit Section.

### **D. Emissions Summary and Calculations**

Explain clearly and in appropriate detail the nature, quantity (both controlled and uncontrolled), concentration, particle size, pressure, temperature, and any other pertinent characteristics of all air contaminants, including all toxic air contaminants, that are reasonably anticipated to be discharged to the atmosphere due to the operation of the source. This explanation should include all of the following information:

1. A summary table of the proposed controlled and uncontrolled emissions of all air contaminants from all processes included in the application. For modifications to existing processes, this summary table should address the proposed changes in emissions which would result from the modification. The summary table should list the emissions of each pollutant in pounds per hour, tons per month, and any other units specified in any federal, state, or local air pollution control regulations which you identified as applicable to this

process in the Regulatory Discussion. Attach a copy of all calculations used to determine these emission rates and describe any assumptions that were made. For repetitive calculations, a sample calculation may be provided.

2. A summary table of the proposed controlled and uncontrolled emissions of all air contaminants from each stack/vent included in the application. List each toxic air contaminant individually, including the Chemical Abstract Service (CAS) number, and provide maximum pounds per hour, stack concentration in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), and predicted ambient impact in  $\mu\text{g}/\text{m}^3$ . Specify the method(s) used to determine the predicted ambient impact. For some applications, detailed emissions by stack/vent may be unnecessary or inappropriate. In that case, all information on toxic air contaminants specified in this item should be provided in Item D. 1.

NOTE: The maximum controlled emission rates for the process will be reflected in legally enforceable permit conditions. Therefore, all emission estimates should provide a reasonable margin of safety to ensure that the process can operate within those limits.

#### **E. Stack/Vent Parameters**

Exhaust gases should be discharged unobstructed vertically upwards to maximize dispersion of air contaminants. In addition, a stack height design of at least one and one half (1.5) times the building height above the ground will minimize the potential for emission downwash problems.

For each stack/vent, include all of the following information (including possible ranges if appropriate):

1. The minimum height above ground level at the discharge point (in feet).
2. The maximum internal diameter or dimensions at the discharge point (in inches).
3. The orientation of the discharge (i.e., vertical, horizontal, etc.).
4. The maximum volume flow rate of the exhaust gas in cubic feet per minute (cfm). Please note whether the flow rate is based on actual or standard cfm.
5. The maximum temperature of the exhaust gas at the discharge point (in degrees Fahrenheit).
6. A description of any rain protection device.
7. If the stack/vent is to be equipped with stack testing ports, a description of the size and location of such ports.

#### **F. Site Description and Process Equipment Location Drawings**

Provide legible scale drawings that show a plan view of the owner's property to the boundary lines. A scaled site plan does not necessarily mean construction drawings or blueprints. A site plan should include all of the following information:

1. The outline and dimensions (length, width, and height at roof peak and eaves) in feet, of all buildings and structures on the owner's property and any other buildings or structures within either of the following:

- Within 150 feet of any process stack/vent proposed or identified in the application, or
  - Within a distance of five (5) times the height of that building or structure to any stack/vent proposed or identified in the application (e.g., the dimensions of a building with a height of 50 feet would have to be included on the site plan if it is within 250 feet of a stack/vent proposed or identified in the application).
1. All property lines and any fence lines.
  2. The location and identification of the process equipment proposed to be installed or modified in the application.
  3. The location of all stacks/vents identified in Section E and the distance(s) to the nearest property line(s).
  4. The direction of North and sufficient detail to enable the permit reviewer to accurately orient the site to the surrounding area.
  5. The scale of the plan (e.g., 1 inch = 100 feet).

#### **G. Additional Supporting Information for Specific Processes and Equipment**

The following documents are available on the Internet or by contacting the Permit Section. These documents clarify the additional information requirements for specific processes, process equipment and control equipment and provide guidance on control technology review requirements

##### Processes/Process Equipment

Anhydrous Ammonia Storage  
 Asphalt Plants  
 Boilers  
 Chemical/Pharmaceutical Processes  
 Coating Operations  
 Concrete Plants  
 Crushers (Concrete, Asphalt, Rock)  
 Degreasers  
 Ethylene Oxide Sterilizers  
 Gas Turbines  
 Incinerators - General Refuse

Incinerators - Medical Waste  
 Material Handling Operations  
 Municipal Waste-to-Energy Facilities  
 Natural Gas Sweetening Facilities  
 Paper Machines  
 Remediation Operations - Groundwater  
 Remediation Operations - Soil  
 Sour Oil and Gas Well Equipment  
 Storage Tanks – General  
 Waste Oil Firing Equipment  
 Welding Operations

##### Air Pollution Control Equipment

Afterburners  
 Condensers  
 Electrostatic Precipitators

Fabric Filters (baghouse, cartridge)  
 Scrubbers

##### Control Technology Reviews

Best Available Control Technology (BACT)

Best Available Control Technology for Toxics  
 (T-BACT)



**Michigan Department of Environmental Quality  
Air Quality Division**

**CHECKLIST FOR SUBMITTING AN ADMINISTRATIVELY COMPLETE  
PERMIT TO INSTALL APPLICATION**

**The Application Form:**

- \_\_\_\_\_ The application form (EQP 5615 or EQP 5615E) is dated "Rev. 3/98" or later.
- \_\_\_\_\_ The application form includes the applicant's name, address and the complete location of the equipment in Items 1, 2, and 3.
- \_\_\_\_\_ The application form includes a brief description of the proposed process or process equipment in Item 6. The description includes why the application is being filed (e.g., install new equipment, modify existing permitted equipment, permit existing equipment not previously permitted, modify existing permit w/o change in equipment, limit potential to emit).
- \_\_\_\_\_ The application form is signed by an authorized employee of the applicant. (Agents cannot sign the application.)
- \_\_\_\_\_ 3 copies of the application form and 2 copies of all attachments are provided.

**Technical Attachments:**

**Process Description**

- \_\_\_\_\_ A complete written description of each piece of proposed process equipment is included.
- \_\_\_\_\_ A unique descriptive identifier (Emission Unit ID) is provided for each proposed emission unit.
- \_\_\_\_\_ The normal and maximum operating schedules of the proposed process are described.
- \_\_\_\_\_ The type and feed rates of materials to be used in the proposed process are described.
- \_\_\_\_\_ The fuels and firing devices (if any) to be used in the proposed process are described.
- \_\_\_\_\_ A description of any wastes generated and reuse, treatment or disposal methods is included.
- \_\_\_\_\_ A flow diagram is included for complex or multiple processes.

**Regulatory Discussion**

- \_\_\_\_\_ A description of the applicable requirements which apply to the proposed process is included.
- \_\_\_\_\_ How the proposed process will comply with those requirements is discussed.
- \_\_\_\_\_ If the equipment is a new or reconstructed major source of Hazardous Air Pollutants (HAPs), a Section 112(g) MACT Information Checklist form and all information requested on that form is included.

**Control Technology Analysis**

- \_\_\_\_\_ A description of the proposed control technology is included.
- \_\_\_\_\_ The efficiency of the proposed control equipment is described.
- \_\_\_\_\_ Available pollution prevention techniques were considered to reduce emissions from the proposed process or process equipment.

### **Emissions Summary & Calculations**

- \_\_\_\_\_ A table summarizing the total emissions of each air contaminant from the proposed process or process equipment, including any related emissions increases from existing equipment, is included.
- \_\_\_\_\_ A table summarizing the emissions by process equipment or stack/vent is included.
- \_\_\_\_\_ Calculations supporting the emissions summary tables are included.
- \_\_\_\_\_ The predicted ambient impacts and associated averaging times of all toxic air contaminants are included.

### **Stack/Vent Information**

The following stack parameters are provided for each stack:

- |   |                                       |
|---|---------------------------------------|
| _____ Minimum height above ground         | _____ Maximum exhaust gas temperature |
| _____ Maximum internal diameter           | _____ Discharge orientation           |
| _____ Maximum volumetric flow rate        | _____ Description of rain protection  |
| _____ Location of any stack testing ports |                                       |

### **Site Description and Process Equipment Location Drawings**

The site plan includes all of the following information:

- |  |                                    |
|--|------------------------------------|
| _____ Building dimensions                | _____ Property and fence lines     |
| _____ Adjacent properties and structures | _____ Proposed equipment locations |
| _____ Stack/emission point locations     | _____ Property line distances      |
| _____ North direction                    | _____ Scale                        |

### **Other Information:**

#### **Confidential Information**

- \_\_\_\_\_ If information claimed as confidential is included in the application, it has been clearly marked, separated, and summarized for the public file.

#### **Construction Waiver**

- \_\_\_\_\_ If a construction waiver is required as provided by Rule 202, a letter requesting the waiver, with a description of the undue hardship which would be caused by the delay, has been submitted to the appropriate District Office.

#### **Clean Corporate Citizen**

- \_\_\_\_\_ If you have received a Clean Corporate Citizen designation and you are requesting one of the benefits provided by Rules 1413, 1414, or 1415, that information is clearly indicated on the application form and the information required for that benefit is included.



GENERAL INFORMATION (cont.)

INSTALLATION DATES:

PROCESS EQUIPMENT \_\_/\_\_/\_\_

CONTROL EQUIPMENT \_\_/\_\_/\_\_

RELATED PERMIT(S): \_\_\_\_\_ VOIDS \_\_\_\_\_

POLLUTANTS NETTED OUT FROM PSD REVIEW \_\_\_\_\_

DESCRIPTION OF ANY REQUIRED MONITORING: (CEMS, PROCESS, CONTROL EQUIP.)

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CONTROL EQUIPMENT BYPASS, IF ANY, AND REASON WHEN BYPASS OCCURS:

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PROCESS/CONTROL WASTE AND DISPOSAL:

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CONTROL TECHNOLOGY INFORMATION

SIC Code \_\_\_\_\_

Max. Design Capacity \_\_\_\_\_ Units \_\_\_\_\_

CAS\_No. \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Pollutant \_\_\_\_\_ SCC \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_

MACT \_\_ LAER \_\_ PSD BACT \_\_ 702 BACT \_\_ NESHAP \_\_ TBACT \_\_ NSPS \_\_

Limit \_\_\_\_\_ Units \_\_\_\_\_

Control Code #1 \_\_\_\_ Code #2 \_\_\_\_ Code #3 \_\_\_\_ Efficiency

Control \_\_\_\_\_ %

Letter sent to other states. \_\_\_\_/\_\_\_\_/\_\_\_\_

Comments:

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-----[tbact]-----

EMISSIONS FROM EQUIPMENT COVERED BY THIS PERMIT

Pol. Codes	Expected*		Allowable*		Limits
	PPH	TPY	PPH	TPY	
PM10					
SO2					
CO					
NO2					
VOC					

\* all rates may be entered with up to three places past the decimal (x.xxx); however, a maximum of two is recommended for pounds per hour (PPH), and one for tons per year (TPY).

ATTAINMENT STATUS PM10 CO O3

Attainment            \_\_\_    \_\_\_    \_\_\_    P - Primary    S - Secondary    A - All Standards

NonAttainment        \_\_\_    \_\_\_    \_\_\_    Unclassified \* Close to Non Attainment

MAXIMUM ALLOWED OPERATING SCHEDULE:

HR/DAY \_\_\_ HR/WK \_\_\_ HR/MO \_\_\_

DAYS/WK \_\_\_ DAYS/MO \_\_\_ DAYS/YR \_\_\_ WKS/YR \_\_\_

-----[emissions]-----

STACK INFORMATION

Equipment Description \_\_\_\_\_

SCC 1 \_\_-\_\_-\_\_-\_\_ SCC 2 \_\_-\_\_-\_\_-\_\_ SCC 3 \_\_-\_\_-\_\_-\_\_

Cont. Code \_\_\_\_ Cont. Code \_\_\_\_ Cont. Code \_\_\_\_

No.	Good Engr. Practice			Stack Information			Lin	Type	Diam or Dim	
	Bldg Ht (ft)	Bldg Ln (ft)	Bldg Wd (ft)	Stack Ht (ft)	Total Ht (ft)	Act Bldg Ht (ft)			(in)	by

Stack Exit Information				
Vel (F/S)	Temp(F)	Flow (CFM)	Dir	Cap

Map Coordinates			Plume
Zone	Horizontal	Vertical	Ht (ft)

----[stack]----

## **ATTACHMENT C:** **CONTROL TECHNOLOGY ANALYSIS**

This document applies to analyses for the following types of control technology determinations:

Best Available Control Technology (BACT). BACT means an emission limitation (including opacity limits) based on the maximum degree of reduction which is achievable for each pollutant, taking into account energy, environmental, and economic impacts, and other costs. This definition is applicable to both the federal Prevention of Significant Deterioration (PSD) regulations and state Rule 702 (R 336.1702). {Ref. 40 CFR 51.21(b)(12)}

Lowest Achievable Emission Rate (LAER). LAER means the more stringent of the following:  
{Ref. R 336.1112(f) [Rule 112(f)]}

(1) The most stringent emission limitation which is contained in the implementation plan of any state for such class or category of process or process equipment, unless the owner or operator of the proposed major offset source or major offset modification demonstrates that such limitation is not achievable.

(2) The most stringent emission limitation which is achieved in practice by such class or category or process or process equipment.

Best Available Control Technology for Toxics (T-BACT). T-BACT means the maximum degree of emission reduction the commission [Department] determines is reasonably available for each process that emits toxic air contaminants, taking into account energy, environmental, and economic impacts, and other costs. {Ref. R 336.1102(a) [Rule 102(a)]}

### I. General Requirements

- A. The analysis must be pollutant and emission unit specific with respect to each pollutant subject to review.
- B. The analysis must evaluate the entire range of demonstrated options, including alternatives that may be transferable or innovative.
- C. The level of detail in the control options analysis should vary with the relative magnitude of the emissions and the emissions reduction achievable.
- D. All emission limits should be expressed in pounds per hour (based on maximum capacity) and in terms of process unit variables such as material processed, fuel consumed or pollutant concentrations (e.g., lbs/10<sup>6</sup> BTU, lbs/gal of solids applied, g/dscm).
- E. Emission limits and work practice standards must be enforceable as a practical matter. Permit conditions should specify appropriate stack testing, continuous emission monitoring, continuous process monitoring, recordkeeping, and any other parameters necessary to make the emission limitations enforceable as a practical matter.

## II. Specific Procedure (step-by-step)

### A. Pollutant Applicability

1. Rule 702 BACT is applicable to volatile organic compounds (VOC) only.
2. PSD BACT and LAER. Determine which “regulated pollutants” are emitted in significant quantities. Fugitive emissions must be included for those source categories listed in 40 CFR 52.21(a)(1) and R 336.1116(m) for BACT and LAER respectively. Regulated pollutants include all pollutants which have a National Ambient Air Quality Standard (NAAQS), are regulated under the federal Performance Standards for New Stationary Sources (NSPS) under the federal Clean Air Act (CAA), or are regulated under the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Asbestos, Beryllium, Mercury, or Vinyl Chloride. Pollutants which fall into two categories must be accumulated in each category (e.g., Dimethyl Sulfide is both a reduced sulfur compound and a VOC). Exception: Pollutants that are Hazardous Air Pollutants (HAPs) regulated under Section 112 of the federal CAA are not regulated under PSD as HAPs (e.g., hexane is a HAP and a VOC, but would only be regulated under PSD as a VOC).
3. T-BACT applies to all pollutants considered to be toxic air contaminants (TACs) as defined under Rule 120(f), unless specifically exempted under R 336.1230(4) [Rule 230(4)].

### B. Emission Unit Applicability

Determine all potential emission units and emission points, including fugitive units as described above. Examples of emission points include each stack, relief valve, pump, storage pile or tank, conveyor, and valve.

### C. Potentially Sensitive Concerns

Identify any potentially sensitive concerns involving energy, economic, and environmental issues. All potentially sensitive air quality concerns, including the control of non-targeted pollutants, should be addressed. For example, limestone may have to be injected upstream of a baghouse to control hydrogen chloride even though particulate is the regulated pollutant of concern in the analysis.

### D. Selection of Alternative Control Strategies

1. **BACT (Rule 702 and PSD) and T-BACT only.** Determine a base case. The base case is the control strategy that, in the absence of a control requirement, would normally have been applied.
2. Identify all alternative control strategies including: (a) transferable and innovative control technologies, (b) processes that inherently produce less pollution, and (c) various configurations of same technology which achieve different control efficiencies. For BACT and T-BACT, these are strategies affording greater control than the base case. All of the following sources of information should be investigated to ensure that all possible control strategies are identified:

- a) Literature
  - b) Industrial surveys
  - c) The U. S. Environmental Protection Agency's (EPA) RACT/BACT/LAER Information Clearinghouse
  - d) EPA/State/Local air pollution control agency surveys
  - e) **(LAER only)** State and Local regulations
3. **PSD BACT only.** Rank all possible control technology alternatives in descending order based on overall control efficiency.
- E. Selection of final control strategy
1. **BACT (Rule 702 and PSD) and T-BACT.** Normally the most efficient or stringent alternative is chosen. If the most efficient alternative is not feasible because of energy, economic or environmental impacts or other costs, continue evaluating the less efficient technologies. BACT is the most efficient alternative which is not demonstrated to be infeasible. The following are examples when energy, economic, or environmental impacts may make an alternative not feasible.
    - a) Energy: Natural gas for operating an afterburner is not available based on local regulations.
    - b) Economic:
      - (1) The increased cost of the final product (e.g., automobile, cement, coke, etc.) would increase to a level that the project would no longer be feasible. This demonstration requires that the facility submit financial information to verify this claim.
      - (2) The increased and/or incremental cost is out of proportion to the environmental benefit. (e.g., The increased cost of going from 93% control to 94% control increases the capital cost from \$2,000,000 to \$4,000,000 and the operating costs from \$500,000/year to \$1,000,000/year and only reduces the emissions of nitrogen oxides by 50 tons per year.)
    - c) Environmental: A wet scrubber may create a by-product which cannot be disposed of without creating a more detrimental impact.
  2. **LAER.** The application of the most stringent alternative is required unless it can be proven to be technologically infeasible or unachievable.
- F. Establish emission limits with reasonable margin of safety (e.g., 95% confidence level of available test data); establish averaging time if necessary. Establish other requirements such as stack testing, continuous emission monitoring, recordkeeping, and reporting requirements to make the emission limitation enforceable as a practical matter.

**ATTACHMENT D:**  
**PERMIT CONDITIONS**

The following document is the template used by the Permit Section to develop all Permits to Install. It contains a table of contents, a list of acronyms, the General Conditions attached to all Permits to Install and the layout for Special Conditions. Applicants should contact the Air Quality Division for examples of recently issued permits similar to the source being permitted.

A modified version of this template is used for a modified emission unit or flexible group at a source that has an existing Renewable Operating Permit (ROP). For these emission units or flexible groups, the applicable revised table(s) and/or appendices from the ROP become the Special Conditions.

An electronic version of the Permit to Install template, in Microsoft Word, is available from the Air Quality Division upon request.

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**PERMIT TO INSTALL**

**Table of Contents**

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### Common Abbreviations / Acronyms Used in this Permit to Install

Common Acronyms		Pollutant/Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
ANSI	American National Standards Institute	°C	Degrees Celsius
BACT	Best Available Control Technology	CO	Carbon Monoxide
CAA	Clean Air Act	dscf	Dry standard cubic foot
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	HP	Horsepower
GC	General Condition	lb	Pound
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NO <sub>x</sub>	Oxides of Nitrogen
MAP	Malfunction Abatement Plan	PM	Particulate Matter
MDEQ	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns diameter
MIOSHA	Michigan Occupational Safety & Health Administration	pph	Pound per hour
MSDS	Material Safety Data Sheet	ppm	Parts per million
NESHAP	National Emission Standard for Hazardous Air Pollutants	ppmv	Parts per million by volume
NSPS	New Source Performance Standards	ppmw	Parts per million by weight
NSR	New Source Review	psia	Pounds per square inch absolute
PS	Performance Specification	psig	Pounds per square inch gauge
PSD	Prevention of Significant Deterioration	scf	Standard cubic feet
PTE	Permanent Total Enclosure	sec	Seconds
PTI	Permit to Install	SO <sub>2</sub>	Sulfur Dioxide
RACT	Reasonable Available Control Technology	THC	Total Hydrocarbons
SC	Special Condition	tpy	Tons per year
SCR	Selective Catalytic Reduction	µg	Microgram
SRN	State Registration Number	VOC	Volatile Organic Compounds
TAC	Toxic Air Contaminant	yr	Year
VE	Visible Emissions		

\* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

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### GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **[R336.1201(1)]**
2. If the installation, reconstruction, relocation, or alteration of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, PO Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration of the equipment allowed by this Permit to Install. **[R336.1201(4)]**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **[R336.1201(6)(b)]**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **[R336.1201(8), Section 5510 of Act 451]**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **[R336.1219]**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **[R336.1901]**
7. The owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. The notice shall be provided no later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the District Supervisor within ten days, with the information required in this rule. **[R336.1912]**
8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451.

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9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of Act 451 and the rules promulgated thereunder.
11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R336.1303. **[R336.1301]**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this permit to install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R336.1370(2). **[R336.1370]**
13. Except as allowed by Rule 285 (a), (b), and (c), permittee shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. **[R336.1201(1)]**
14. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**

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### SPECIAL CONDITIONS

#### Emission Unit Identification

<b>Emission Unit ID</b>	<b>Emission Unit Description</b>	<b>Stack Identification</b>
Max of 16 characters		Max of 16 characters
EUNAME1	Description	SVNAME1
EUNAME2	Description	SVNAME2
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290.		

#### Flexible Group Identification

<b>Flexible Group ID</b>	<b>Emission Units Included in Flexible Group</b>	<b>Stack Identification</b>
FGNAME1andNAME2	EUNAME1 EUNAME2	Max of 16 characters
FGFACILITY	All equipment at the facility including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

#### The following conditions apply to: EUNAME1

##### Emission Limits

	<b>Pollutant</b>	<b>Equipment</b>	<b>Limit</b>	<b>Time Period</b>	<b>Testing/ Monitoring Method</b>	<b>Applicable Requirement</b>
1.1a						
1.1b						
1.1c						
This area to be used for additional text, notes or comments with respect to the emission limits in the table.						

##### Visible Emission Limits

1.2 Text Condition [**AR in Bold**]

1.3 Text Condition [**AR in Bold**]

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**Material Limits** (A table format may be used if several materials are limited.)

	<b>Material</b>	<b>Equipment</b>	<b>Limit</b>	<b>Time Period</b>	<b>Testing/ Monitoring Method</b>	<b>Applicable Requirement</b>
1.4a						
1.4b						
1.4c						
This area to be used for additional text, notes or comments with respect to the material limits in the table.						

1.5 Text Condition [**AR in Bold**]

**Process/Operational Limits**

1.6 Text Condition [**AR in Bold**]

1.7 Text Condition [**AR in Bold**]

**Equipment**

1.8 Text Condition [**AR in Bold**]

**Testing**

1.9 Text Condition [**AR in Bold**]

**Monitoring**

1.10 Text Condition [**AR in Bold**]

1.11 Text Condition [**AR in Bold**]

**Recordkeeping/Reporting/Notification**

1.12 Text Condition [**AR in Bold**]

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1.13 Text Condition [**AR in Bold**]**Stack/Vent Restrictions**

	<b>Stack &amp; Vent ID</b>	<b>Maximum Diameter (inches)</b>	<b>Minimum Height Above Ground Level (feet)</b>	<b>Applicable Requirement</b>
1.14a				
1.14b				
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air. Additional text, descriptions, stack/vent conditions, etc. as needed.				

**Permit Dates**1.15 Text Condition [**AR in Bold**]**Portable Equipment**1.16 Text Condition [**AR in Bold**]

**The following conditions apply to: FGNAME1andNAME2**

**Emission Limits**

	<b>Pollutant</b>	<b>Equipment</b>	<b>Limit</b>	<b>Time Period</b>	<b>Testing/ Monitoring Method</b>	<b>Applicable Requirement</b>
2.1a						
2.1b						
2.1c						
This area to be used for additional text, notes or comments with respect to the emission limits in the table.						

**Recordkeeping / Reporting / Notification**2.2 Text Condition [**AR in Bold**]

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**ATTACHMENT E:**  
**EXAMPLE FACT SHEET**

A Fact Sheet is one part of the Public Participation Documents package prepared by the Air Quality Division (AQD) for a Permit to Install that is subject to the public comment process. In addition to the Fact Sheet the package will include the proposed permit conditions, and the Notice of Public Comment and Hearing (see Attachment F). The package may also include other documents, such as a map or flow diagram, to help explain the proposed permit more fully.

The attached *example* Fact Sheet was for a simple electric generating facility subject to the federal Prevention of Significant Deterioration (PSD) regulations. A Fact Sheet should be kept to a minimum number of pages, preferably two to three. Additional detailed technical information can be presented in appendices to the Fact Sheet.

Current Fact Sheets can be viewed on, or downloaded from, the AQD's permit web page at the following address: <http://www.michigan.gov/deq> (select "Air," "Air Permits"). A Microsoft Word template for development of a Fact Sheet is available from the AQD upon request.

STATE OF MICHIGAN  
JENNIFER M. GRANHOLM, Governor



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
STEVEN E. CHESTER, Director

**AIR QUALITY DIVISION**

CONSTITUTION HALL 525 W ALLEGAN STREET PO BOX 30260 LANSING MI 48909  
INTERNET: <http://www.michigan.gov>

# PUBLIC PARTICIPATION DOCUMENTS

For

**Marathon Ashland Petroleum LLC**

**1300 South Fort Street, Detroit, Michigan**

## PERMIT APPLICATION NUMBER

67-02

February 24, 2003

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FACT SHEET  
February 24, 2003

**Purpose and Summary**

The Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD) is proposing to act on Permit to Install Application No. 67-02 from Marathon Ashland Petroleum LLC (MAP) for the installation of a gas-fired boiler and heat recovery steam generator. The proposed equipment is intended to replace existing steam generating equipment commonly referred to as the CO Boiler and the Zurn Boiler as well as eliminating the need for a portable boiler used on a temporary basis during repair and maintenance activities.

The CO boiler replacement project is the first step of several equipment replacement, improvement, and expansion projects planned for the refinery during the next three years. MAP has provided a comprehensive analysis of the emission increases and decreases for this project as one part of the total changes in emissions at the refinery during the contemporaneous period.

The proposed boiler replacement project is subject to permitting requirements of the Department's Rules for Air Pollution Control. Draft permit No. 67-02 is subject to the public participation process. Prior to acting on this application, AQD is holding a 30-day public comment period and a public hearing, if requested, to allow all interested parties the opportunity to comment on the proposed Permit to Install. All relevant information received during the comment period and hearing, if requested, will be considered by the decision-maker prior to taking final action on the application.

**Background Information**

The proposed boiler replacement project will provide reductions in emissions of oxides of nitrogen (NO<sub>x</sub>) as mandated in the May 11, 2001 Consent Decree entered into between Marathon Ashland Petroleum LLC and U.S. EPA [Civil No. 01-40119, United States District Court for the Eastern District of Michigan]. The Consent Decree (also referred to as the "Settlement Agreement") affects all seven of MAP's U.S. refineries. The requirements of the Consent Decree will be implemented through December 31, 2008. The existing CO boiler is also listed in Appendix B to 40 CFR Part 97, Final Section 126 Rule: Non-EGU Allocations, 2003-2007. This (40 CFR Part 97) is the Federal NO<sub>x</sub> Budget Trading Program.

**Key Permit Review Issues**

- Paragraph 13 of the May 11, 2001 Consent Decree requires NO<sub>x</sub> emission reductions from heaters and boilers.
- Paragraph 15 of the May 11, 2001 Consent Decree requires sulfur dioxide (SO<sub>2</sub>) and particulate matter (PM) emission reductions from heaters and boilers.
- The federal Prevention of Significant Deterioration (PSD) rules define a significant emissions increase in terms of creditable increases and decreases in actual emissions contemporaneous with a physical change such as that proposed in Permit application No. 67-02. The contemporaneous period for the CO boiler replacement project alone is April 1, 1998 to December 31, 2003.
- The analysis presented by MAP and reviewed by AQD shows that potential emissions of NO<sub>x</sub> from the proposed boiler replacement project would be greater than a PSD significant increase without accounting for emission decreases. Note, the amount of NO<sub>x</sub> emission reductions credited to the Consent Decree requirements cannot be included in the PSD net emission increase (or decrease) calculation.
- MAP has identified two sources of NO<sub>x</sub> emission decreases during the contemporaneous period: 254.52 tons from the shutdown of the CP air compressor and 204.85 tons from the shutdown of the CO boiler.

Marathon Ashland Petroleum LLC

Permit No. 67-02

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- MAP has identified seven sources of NO<sub>x</sub> emissions increases totaling 125.38 tons during the contemporaneous period. From the CP air compressor shutdown, MAP has appropriately allocated the 254.52 tons per year of the NO<sub>x</sub> emission reduction to the Consent Decree requirement. The remaining 204.85 tons per year NO<sub>x</sub> emission decrease from the CO boiler shutdown and total increase of 125.38 tons per year result in a net emission decrease of 79.47 tons per year NO<sub>x</sub> as defined in the PSD regulation.
- MAP will be required to provide a similar PSD net emissions increase and decrease analysis for each future portion of the complete refinery improvement plan. The contemporaneous periods for these future analyses are expected to include many of the emission units included in the boiler replacement project. AQD staff have discussed the complete refinery improvement plan with MAP and expect that the project will be implemented in compliance with all applicable requirements.
- On January 13, 2003, a Proposed Rule, National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD] was published for comment. When this rule becomes final, the equipment will be required to operate in compliance with any applicable provisions. The proposed rule includes a potential requirement for monitoring carbon monoxide emissions that is not a condition of the draft permit.

#### **Key Aspects of Draft Permit Conditions**

- Removal of the old boilers is required upon completion of installation and testing of the new boiler. This assures there is no increase in operating capacity.
- Low NO<sub>x</sub> burners are required. This limits emission of nitrogen oxides.
- Continuous monitoring of NO<sub>x</sub> emissions and the H<sub>2</sub>S concentration of the fuel gas is required. This is to verify that emissions are in compliance with the permit limits. Requirements for calibration and auditing of the monitoring equipment are consistent with the May 11, 2001 Consent Decree requirements.

#### **Conclusion**

Based on the analyses conducted to date, staff concludes that the proposed project would comply with all applicable federal air quality requirements and with all Michigan Department of Environmental Quality, Air Quality Division regulations. It is also staff's conclusion that this project, as proposed, would not violate the federal National Ambient Air Quality Standards and the federal PSD increments. Based on these conclusions, staff has developed draft permit terms and conditions attached to this fact sheet, which would ensure that the proposed facility design and operation are enforceable and that sufficient monitoring, recordkeeping, and reporting would be performed by the applicant to determine compliance with these terms and conditions. If the permit application is deemed approvable, the delegated decision-maker may determine a need for additional or revised conditions to address issues raised during the public participation process.

If you would like additional information about this proposal, please contact David K. Riddle of the Air Quality Division Permit Section at 517-373-7081.

FACT SHEET  
STATE AND FEDERAL AIR REGULATIONS

State Rule	Description of State Air Regulations
<b>R 336.1201</b>	Requires an Air Use Permit for new or modified equipment that emits, or could emit, an air pollutant. However, there are other rules that allow smaller emission sources to be installed without a permit (see Rules 336.1279 through 336.1290 below). Rule 336.1201 also states that the Department can add conditions to a permit to assure the air laws are met.
<b>R 336.1205</b>	Outlines the permit conditions that are required by the federal Prevention of Significant Deterioration Regulations (PSD) and/or Section 112 of the Clean Air Act. Also, the same types of conditions are added to their permit when a plant is limiting their air emissions to legally avoid these federal requirements. (See the Federal Regulations table for more details on PSD.)
<b>R 336.1224</b>	New or modified equipment that emits toxic air contaminants must use the Best Available Control Technology for Toxics (T-BACT). The T-BACT review determines what control technology must be applied to the equipment. A T-BACT review considers energy needs, environmental and economic impacts, and other costs. T-BACT may include a change in the raw materials used, the design of the process, or add-on air pollution control equipment. This rule also includes a list of instances where other regulations apply and T-BACT is not required.
<b>R 336.1225 to R 336.1232</b>	The concentration of each toxic air contaminant present in the outdoor air must be less than specified levels. These levels, called the initial risk screening level (IRSL) for cancer causing air contaminants and the initial threshold screening level (ITSL) for non-cancer causing air contaminants, are health-based standards. Air Quality Division Toxicologists develop these standards following the methods in the rules. The standards are designed to protect all humans, including the most sensitive populations such as the young, elderly, and ill.
<b>R336.1279 to R 336.1290</b>	These rules list equipment or processes that have very low emissions and do not need to get an Air Use permit. However, these sources must meet all requirements identified in the specific rule and other rules that apply.
<b>R 336.1301</b>	Limits how air emissions are allowed to look at the end of a stack. The color and intensity of the color of the emissions is called opacity.
<b>R336.1331</b>	The particulate emission limits for certain sources are listed. These limits apply to both new and existing equipment.
<b>R336.1370</b>	Material collected by air pollution control equipment, such as dust, must be disposed of in a manner, which does not cause more air emissions.
<b>R336.1401 and 336.1402</b>	Limit the sulfur dioxide emissions from power plants and other fuel burning equipment.
<b>R336.1601 to336.1651</b>	Volatile organic compounds (VOCs) are a group of chemicals found in such things as paint solvents, degreasing materials, and gasoline. VOCs contribute to the formation of smog. The rules set VOC limits or work practice standards for existing equipment. The limits are based upon Reasonably Available Control Technology or RACT. RACT is required for all equipment listed in the Rules 336.1601 through 336.1651.
<b>R336.1702</b>	New equipment that emits VOCs is required to install the Best Available Control Technology (BACT). The technology is reviewed on a case-by-case basis. The VOC limits and/or work practice standards set for a particular piece of new equipment cannot be less restrictive than the RACT limits for existing equipment outlined in R336.1601 through 336.1651.
<b>R336.1801</b>	Nitrogen oxide emissions limits for larger boilers and stationary internal combustion engines are listed.
<b>R336.1901</b>	Prohibits the emission of an air contaminant in quantities that cause injurious effects to human health and welfare, or prevent the comfortable enjoyment of life and property. As an example, a violation may be cited if excessive amounts of odor emissions were found to be preventing residents from enjoying outdoor activities.
<b>R336.1910</b>	Air pollution control equipment must be installed, maintained, and operated properly.
<b>R336.1911</b>	When requested by the Department, a facility must develop and submit a malfunction abatement plan (MAP). This plan is to prevent, detect, and correct malfunctions and equipment failures.
<b>R336.1912</b>	A facility is required to notify the Department if a condition arises which causes emissions that exceed the allowable emission rate in a rule and/or permit.
<b>336.2001 to 336.2060</b>	Allow the Department to request that a facility test its emissions and to approve the protocol used for these tests.

FACT SHEET  
STATE AND FEDERAL AIR REGULATIONS

Citation	Description of Federal Air Regulations or Requirements
<p style="text-align: center;"><b>Section 109 of the Clean Air Act – National Ambient Air Quality Standards (NAAQS)</b></p>	<p>The United States Environmental Protection Agency has set maximum permissible levels for six pollutants. These National Ambient Air Quality Standards (NAAQS) are designed to protect the public health of everyone, including the most susceptible individuals, the children, elderly, and those with chronic respiratory ailments. The six pollutants, called the criteria pollutants, are carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter less than 10 microns, and sulfur dioxide. All areas in Michigan are meeting the NAAQS. Further, in Michigan, State Rules 336.1225 to 336.1232 are used to ensure the public health is protected from other compounds.</p>
<p style="text-align: center;"><b>40 CFR 52.21 – Prevention of Significant Deterioration (PSD) Regulations</b></p> <p style="text-align: center;"><b>Best Available Control Technology (BACT)</b></p>	<p>The Prevention of Significant Deterioration (PSD) regulations allow the installation and operation of large new sources and the modification of existing large sources in areas that are meeting the NAAQS. The regulations define what is considered a large or significant source, or modification.</p> <p>In order to assure that the area will continue to meet the NAAQS, the permit applicant must demonstrate that it is installing the best available control technology or BACT. By law, BACT must consider the economic, environmental, and energy impacts of each installation on a case-by-case basis. As a result, BACT can be different for similar facilities.</p> <p>In its permit application, the applicant identifies all air pollution control options available, the feasibility of these options, the effectiveness of each option, and why the option proposed represents BACT. As part of its evaluation, the Air Quality Division verifies the applicant's determination and reviews BACT determinations made for similar facilities in Michigan and throughout the nation.</p>
<p style="text-align: center;"><b>40 CFR 60 – New Source Performance Standards (NSPS)</b></p>	<p>The United States Environmental Protection Agency has set national standards for specific sources of pollutants. These New Source Performance Standards (NSPS) apply to new or modified equipment in a particular industrial category. These NSPS set emissions limits or work practice standards for over 60 categories of sources.</p>
<p style="text-align: center;"><b>Section 112 of the Clean Air Act</b></p> <p style="text-align: center;"><b>Maximum Achievable Control Technology (MACT)</b></p> <p style="text-align: center;"><b>Section 112g</b></p>	<p>In the Clean Air Act, Congress listed 189 compounds as Hazardous Air Pollutants (HAPS). For facilities which emits, or could emit, HAPS above a certain level, one of the following two requirements must be met:</p> <ol style="list-style-type: none"> <li>1). The United States Environmental Protection Agency has established standards for specific types of sources. These Maximum Achievable Control Technology (MACT) standards are based upon the best-demonstrated control technology or practices found in similar sources.</li> <li>2). For sources where a MACT standard has not been established, the level of control technology required is determined on a case-by-case basis.</li> </ol>

Notes:

**An “Air Use Permit”, sometimes called a “Permit to Install”, provides permission to emit air contaminants up to certain specified levels. These levels are set by state and federal law, and are set to protect public health and welfare. By staying within the levels set by the permit a facility is operating lawfully, and public health and air quality are protected.**

The Air Quality Division does not have the authority to regulate noise, local zoning, property values, truck traffic, or lighting.

These tables list the most frequently applied state and federal regulations. All regulations listed may not be applicable in each case. In addition, there may be other regulations that must be met. Please refer to the draft permit conditions provided to determine which regulations apply.

**ATTACHMENT F:**  
**EXAMPLE PUBLIC HEARING NOTICE**

This attachment is an example of a public notice used for a permit that required public comment. The time, date and location of all hearings are determined by the Air Quality Division (AQD) based on the availability of the decision maker and facilities in which to hold the hearing.

Additional examples of public notices can be viewed on, or downloaded from, the AQD's permit web page at the following address: <http://www.michigan.gov> (select "Air," "Air Permits"). A Microsoft Word template of the public notice form is available from the AQD upon request.

**EXAMPLE****NOTICE OF AIR POLLUTION COMMENT PERIOD AND PUBLIC HEARING**

The Michigan Department of Environmental Quality is holding a public comment period until March 25, 2003, and a public hearing, if requested, on March 27, 2003, on Marathon Ashland Petroleum LLC's proposed installation of a gas-fired boiler and heat recovery steam generator to replace existing equipment. The public comment period and hearing, if requested, are to allow all interested parties the opportunity to comment on the Department's proposed conditional approval of an application for a Permit to Install. The proposed boiler replacement project is located at 1300 South Fort Street, Detroit, Michigan. It has been preliminarily determined that the installation of the boiler and generator will not violate any of the Department's rules nor the National Ambient Air Quality Standards.

This proposal is subject to the federal Prevention of Significant Deterioration rules and regulations for a major modification to an existing major stationary source based on the emissions of nitrogen oxides. The boiler replacement project will consume only insignificant amounts of the federal Prevention of Significant Deterioration Air Quality increments for particulate, sulfur dioxide, and nitrogen dioxide.

Copies of the Department staff's analysis and proposed permit conditions are available for inspection at the following locations, or you may request a copy be mailed to you by calling 517-373-2856. Please reference Permit to Install Application Number 67-02.

**AQD Internet Home Page - <http://www.michigan.gov/deq>**

Detroit Field Office: MDEQ--Air Quality Division, Cadillac Place,  
Suite 2-300, 3058 W. Grand Boulevard, Detroit (Phone: 313-456-4684)

LANSING: Air Quality Division, Department of Environmental Quality, Constitution Hall, 3rd  
Floor, 525 West Allegan (Phone: 517-373-2856)

The public is encouraged to present its written views on the proposed permit action. Written comments should be sent to the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan, 48909, to the attention of the Permit Section Supervisor. All statements received by March 25, 2003 will be considered by the decision-maker prior to final permit action. If a hearing is requested, the comment period will be extended until the close of the hearing.

If a public hearing is requested in writing by March 25, 2003, it will be held on March 27, 2003 starting at 7 PM in the Auditorium of the Henry Ford Centennial Library, 16301 Michigan Avenue, Dearborn, Michigan. Those interested may contact the Air Quality Division at 517-373-7081 on March 26, 2003, to determine if a hearing was requested and will be held. The sole purpose of this hearing will be to take testimony on the record. The hearing will be recorded. Staff will not be responding to questions during testimony at the hearing. Staff will be available to answer questions outside the Auditorium during the hearing.

Individuals needing accommodations for effective participation at the hearing should contact Barb Wilcox at 517-373-2856 a week in advance to request mobility, visual, hearing or other assistance.

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY**

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**Lynn Fiedler, Supervisor, Permit Section**

**February 24 2003**