



ADDITIONAL TECHNICAL INFORMATION FOR GRAIN ELEVATORS

The following information will be used for the technical review of a permit to install application for a **grain elevator**. This information is in addition to the general requirements outlined in the AQD document "Information for an Administratively Complete Permit to Install Application", Part 2 - Additional Supporting Information, Items A through F. All of the information may not be needed for each application. Also, this document may not be all inclusive. Additional information beyond that identified may be necessary to complete the technical review of any individual application. In the event a determination is made that new additional information is needed for a technical review, this document will be updated.

All referenced guidance documents are available at <http://www.deq.state.mi.us/aps> or you may contact the Permit Section at 517-373-7023.

NOTE: A grain elevator or grain handling process may be exempt from the requirements to obtain a Permit to Install pursuant to Rule 285(p) or Rule 290 of the State of Michigan, Department of Environmental Quality, Act 451 of 1994, Natural Resources and Environmental Protection Act and Air Pollution Control Rules. Please review these rules and contact the appropriate district office with any questions.

A. Process Description

1. List and describe all equipment and activities (receiving, internal grain handling, grain cleaning, grain drying, and shipping) which constitute the grain elevator. Include make, model number, and maximum design throughput capacities for each component.
2. List and describe any air pollution control equipment and methods/work practices used to reduce emissions (i.e., enclosures, buildings, bin vents, fabric filter dust collectors).
3. Indicate the specific types of grains handled at the facility (wheat, corn, soybeans, sorghum, etc.). Include the maximum annual amount (in bushels) of each type of grain handled at the facility. For existing facilities, the maximum annual amount shall be over the last five years.
4. Indicate how the grain is delivered to and shipped from the facility (i.e., truck, rail, barge, ship, etc.). If multiple means are used, indicate the percentage of the total for each method.
5. For facilities which include feed milling operations, indicate the maximum annual amount (in bushels) of each type of grain milled and bagged at the facility.
6. Date of original installation and dates of any subsequent equipment modifications that have occurred.
7. For each column dryer indicate (in inches) the size of the column plate perforation. For each rack dryer indicate the size of the screen filter.

B. Regulatory Discussion

The following state air pollution control regulations may be applicable. Please review these regulations carefully to determine if they apply to your process and summarize the results in the application. The Air Pollution Control Rules may be viewed and downloaded from the AQD website at: www.michigan.gov/deqair.

1. State of Michigan, Department of Environmental Quality, Act 451 of 1994, Natural Resources and Environmental Protection Act, Part 55 Air Pollution Control and the following promulgated rules:
 - a) Rules 215 and 216 apply to an existing facility which has a current Renewable Operating Permit (ROP). A Permit to Install issued for the installation of new equipment or modifications to existing equipment is incorporated into an ROP pursuant to Rules 215 and 216.

- b) Rule 301 specifies a process or process equipment shall not discharge visible emissions of a density greater than the most stringent of a 6-minute average of 20% opacity, or a limit specified by an applicable federal NSPS or as a condition of a Permit to Install.
- c) Rule 331 specifies a maximum allowable particulate emission rate for material handling equipment if no federal limit applies.
- d) Rule 901 prohibits emissions of an air contaminant in quantities that cause either a) injurious effects to human health or safety, animal life, plant life of significant economic value, or property; or b) unreasonable interference with the comfortable enjoyment of life and property. Please submit the following to address this rule:

A description of the continuous fugitive dust control program used to control dust from the plant, roads, and yard during construction and operation of the facility.

- 2. Federal Standards of Performance for New Stationary Sources (NSPS), 40 CFR, Part 60, Subpart DD, Grain Elevators. If the equipment has been previously operated and NSPS testing has been performed, provide a copy of the test results.

C. Control Technology Analysis

- 1. Describe the bin vents and/or fabric filter collectors for particulate control, including both the expected efficiency and guaranteed efficiency (in percent). Include all of the information requested on the information sheet for fabric filters (available separately).
- 2. Describe any enclosures and their locations on the equipment. Indicate whether these enclosures will be used during unloading and loading operations.
- 3. Indicate whether a bypass of the air pollution control equipment and/or the main stack is provided. If a bypass exists, include a complete description of the circumstances and duration for which the process would operate in the bypass mode.