



**ADDITIONAL TECHNICAL INFORMATION FOR
CONTROL EQUIPMENT: ACID GAS SCRUBBER**

The following information will be used for the technical review of a permit to install application for an **acid gas scrubber**. 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.

1. Make and model number of the scrubber, and any available literature.
2. Gas flow rate for the scrubber, in standard cubic feet per minute (scfm).
3. The chemical composition of the scrubber liquid.
4. Flow rates of all streams in and out of the scrubber (both volume and mass).
5. Description of any proposed bypass, if applicable.
6. Inlet and outlet concentrations of the toxic air contaminant (TAC), in pounds per hour and parts per million by volume.
7. Inlet temperature of all streams.
8. Control efficiency of the scrubber, in percent.
9. Proposed pH range of the scrubber liquid to be maintained during operation. Describe the method (or device) and procedures to monitor and record the pH value of the scrubber liquid.
10. Describe the method of treatment and disposal for the spent scrubber liquid.
11. If the scrubber liquid is recirculated, provide the flow rate of the make-up stream. Describe the method (or device) and procedures to monitor and record the flow rates.