

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.



March 8, 1994

Mr. Ronald E. Meyers
Emission Factors and Methodologies Section
Emission Inventory Branch
United States Environmental Protection Agency
Office of Air Planning and Standards
Research Triangle Park, NC 27711

Dear Mr. Meyers:

As per our telephone discussion, I have reviewed the proposed addition to AP-42: Section 8.31, Abrasives Manufacturing. My comments are as follows:

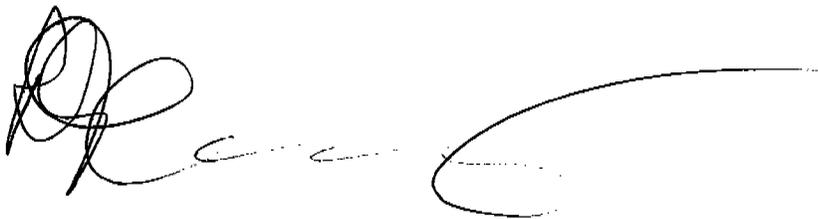
- 8.31-1: Some garnet is still used, but in decreasing quantities.
- 8.31-2: Paragraph 4 does not include the Solgel method of producing aluminum oxide. This method is used at 3M for production of some of our abrasives.
- 8.31-3: 3M does not wash abrasive grains during the crushing and screening process.
- 8.31-7: A typical length of backing (paragraph 4) used to produce a "Jumbo" ranges from 1500 to more than 3000 yards in length. The shorter lengths are for fiber backed products - the longer are for film backed abrasives.
- 8.31-9: Paragraph 2 discusses the "Size Coat". This coat was also known as the "Sand Size" in the past and is still sometimes referred to as such.
- 8.31-9: Section 8.31.3 should also include NOx emissions from the Solgel method of producing aluminum oxide.
- 8.31-10: 3M primarily uses fabric filters for abrasive particulate control, since they can readily attain output concentrations of 0.02 gr/dscf (99.9+ % efficiency). These filters often include a cyclone as a prefilter to reduce fabric filter load. Scrubbers are also used in the aluminum oxide manufacturing process for NOx control.
- 8.31-10: Emissions of phenol, formaldehyde, and other VOC's resulting from the production of coated abrasive products are also frequently controlled by thermal oxidizers. The industry is presently evaluating alternative emissions control methodologies, including scrubbers and biofiltration

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Emission factors are generally not applicable for 3M abrasive processes since we primarily use baghouses for particulate control. A baghouse is a constant concentration emissions control device, thus its performance is relatively independent of process throughput. Control efficiency is therefore meaningless to this device.

Please contact me at the above address or at (612) 778-6366 if you have any questions or desire further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert L. Renz", with a long horizontal flourish extending to the right.

Robert L. Renz, PE

c. Ms. Susan M. Young
Coated Abrasives Manufacturers' Institute
1300 Sumner Ave
Cleveland, Ohio 44115-2851