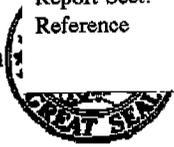


AP-42 Section 11.14
Reference 5
Report Sect. 5
Reference 5

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



James W. Warr, Director

Jim Folsom
Governor

Mailing Address:
PO BOX 301453
MONTGOMERY AL
36130-1453

Physical Address:
1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36109-2608

(205) 271-7700
FAX 270-5612

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.

FACSIMILE TRANSMITTAL

Field Offices:

110 Vulcan Road
Birmingham, AL
35209-4702
(205) 942-6168
FAX 941-1603

400 Wall Street
P.O. Box 953
Decatur, AL
35602-0953
(205) 353-1713
FAX 340-9359

2204 Perimeter Road
Mobile, AL
36615-1131
(205) 450-3400
FAX 479-2593

DATE: 10/18/94

TO:
NAME: BRUCE LARSON Ron Myers
ORGANIZATION: EMISSION INVENTORY BRANCH
FACSIMILE PHONE: (919) 541-0684
OFFICE PHONE: (919) 541-5407

FROM:
NAME: DAVID OUSLEY
OFFICE PHONE: (205) 271-7861

NUMBER OF PAGES TO FOLLOW: 2



CORPORATION

Research and Development Center

720 S. EDGEWOOD AVENUE - URBANA, OHIO 43078

513-652-1341 - FAX #513-652-7077

October 10, 1994

Mr. David Ousley
ADEM
P.O. Box 301463
Montgomery, Al 36130-1463

*Mostly continuous smelters
used nowadays -*

Dear Mr. Ousley:

We would like to comment on the process description and raw materials used.

The main constituents of the charge include silica, fluorspar, soda ash, potassium carbonate, borax, feldspar, zircon, aluminum oxide, lithium carbonate, magnesium carbonate and titanium oxide which would be in a cover coat and a ground coat. A ground coat would also have low levels of various metals like cobalt oxide, nickel oxide, copper oxide, and manganese oxide.

The raw materials are no longer screened before being weighed. They are mixed thoroughly and fed into a continuous smelter by a screw feeder. The continuous smelter, which operates at a temperature range of 2000F to 2600F, eliminates the step of drying the frit. The glass is then spray quenched as it comes between water-cooled metal rollers that size the thickness of the glass before it is shattered into many small pieces. It is then put into 100 pound paper bags or into 2000 pound bulk bags to be shipped to the customer

Wet milling by frit manufacturers on a large scale is not done very much any more. Dry grinding is done by two methods. In one method frit, clays, and other electrolytes are added and then ground to a certain fineness. In the other one frit is ground with an encapsulating agent and is known as EDS (Electrostatic Deposition Spray).

If you have any questions, please feel free to contact me.

Sincerely,

Bruce W. Larson
Bruce W. Larson
Manager, Chemical Testing

EDS.

*Frit -> ball mill
organic silicon additive ground
in with frit. Electrostatically
sprayed powder ~~top~~ onto part
then goes through furnace.*

↑
OCT 1994
RECEIVED
ADEM
R&D DIVISION

Established 1918

