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OXY Occidental Chemical Corporation

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May 4, 1989

Mr. Bill Thomas
Bureau of Air Quality
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Thomas:

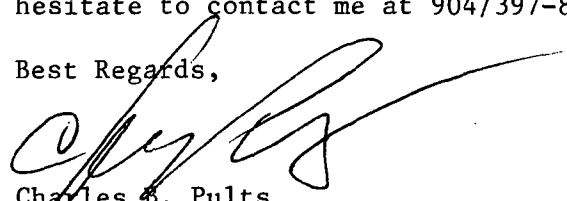
As part of our ongoing efforts to improve production, Occidental is going to change from the use of caustic soda to soda ash in the pollyphos production process. The caustic soda will be retained as a back-up raw material.

To effect this changeover requires the installation of a 330 ton storage silo and a 20 ton day tank with associated pneumatic transfer equipment. Estimated annual usage will be 13,300 tons. Please see the attached diagrams and calculations for a detailed estimate of the total annual emissions. Total emissions will be approximately 40 pounds per year.

Because of the anticipated small quantity of emissions and the location of this source (in an already permitted manufacturing facility) Occidental is asking that this installation be excepted from the permit requirements of Chapter 17-4 in accordance with the provisions of Chapter 17-4.040(1)(b).

If you should have any questions concerning this matter, please do not hesitate to contact me at 904/397-8442.

Best Regards,



Charles B. Pults
Environmental Engineer

psb

- cc: W. Marvin Miller, OXY
- M. E. Pauley, OXY
- W. P. Stewart, Jacksonville, FL
- J. Cole, Jacksonville, FL
- D. Raval*

OxyChem[®]

Agricultural Products - Florida Operations
County Road 137, P.O. Box 300, White Springs, Florida 32096
(904) 397-8101



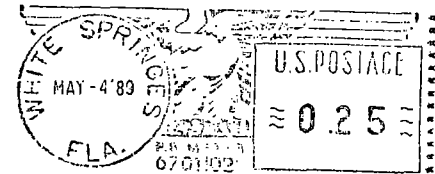
Occidental Chemical Corporation

Agricultural Products - Florida Operations

County Road 137, P.O. Box 300, White Springs, Florida 32096

OxyChem®

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Bag emissions = 0.02 grains/SCF AIR (Manufacturer Specs)

Annual Soda Ash usage = 13,300 tons (estimated)

Discharge rate to 330 ton silo = 1450 cfm AIR (15 ton/hr)

Transfer rate to 20 ton silo = 120 cfm AIR (10 ton/hr)

Emissions during Soda Ash unloading:

$$\frac{1450 \text{ CF}}{\text{min}} \cdot \frac{0.02 \text{ gr}}{\text{CF}} \cdot \frac{1 \text{ lb}}{7000 \text{ gr}} \cdot \frac{60 \text{ min}}{\text{hr}} = 0.249 \text{ lb/hr}$$

$$\frac{13300 \text{ ton}}{\text{yr}} \cdot \frac{\text{hr}}{15 \text{ ton}} \cdot \frac{0.249 \text{ lb}}{\text{hr}} = 220.4 \text{ lb/yr}$$

In-Line Filter between Baghouse discharge and Vacuum Pump

Inlet - 97-98% removal by manufacturer's specs.

$$\frac{220.4 \text{ lb}}{\text{yr}} (1 - 0.97) = 6.6 \frac{\text{lb}}{\text{yr}}$$

Emissions during Soda Ash transfer:

$$\frac{120 \text{ CF}}{\text{MIN}} \cdot \frac{0.02 \text{ gr}}{\text{CF}} \cdot \frac{1 \text{ lb}}{7000 \text{ gr}} \cdot \frac{60 \text{ min}}{\text{hr}} = 0.021 \text{ lb/hr}$$

$$\frac{13300 \text{ ton}}{\text{yr}} \cdot \frac{\text{hr}}{10 \text{ ton}} \cdot \frac{0.021 \text{ lb}}{\text{hr}} = 27.4 \text{ lb/yr}$$

Summing Emissions: $6.6 + 27.4 = \sim 34.0 \text{ lb/yr}$

DRAWN BY: C. Pultz

DATE: 5/4/89

SCALE

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TITLE

SODA ASH UNLOADING
CALCULATIONS



OCCIDENTAL
CHEMICAL

JOB NO.

REV. NO.

CHARGE NO.

SKETCH NO.