

Air Permit Review

Permit Issue Date: **PROPOSED**
CDS ID No.: 3712900118

Region: Wilmington Regional Office
County: New Hanover
NC Facility ID: 6500118
Inspector's Name: Ashby Armistead
Date of Last Inspection: 08/03/2005
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)		
Applicant (Facility's Name): Southern States Chemical Facility Address: Southern States Chemical 2600 Highway 421 North Wilmington, NC 28402 SIC: 2819 / Industrial Inorganic Chemicals NAICS: 325188 / All Other Basic Inorganic Chemical Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other: renewal		
Contact Data			Application Data		
Facility Contact	Authorized Contact	Technical Contact	Application Number: 6500118.06A Date Received: 02/01/2006 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 01853/T14 Existing Permit Issue Date: 11/06/2001 Existing Permit Expiration Date: 10/31/2006		
Tommy Penny (910) 762-5054 2600 Highway 421 North Wilmington NC, 28402	Reed Dulany III President (912) 944-3740 PO Box 546 Savannah GA, 31404	Bryan Beyer Environmental Manager (912) 944-3740 1600 East Presidents Street Savannah GA, 31404			
Review Engineer: Michael Brandon, P.E. Review Engineer's Signature: _____ Date: 02/15/06			Comments / Recommendations:		
			Issue 01853/T15 Permit Issue Date: PROPOSED Permit Expiration Date: PROPOSED		

1. Purpose of Application

The Permittee is requesting renewal of the Title V permit and some changes as follows:

- a. the removal of nitric acid tanks, mixed acid blending, mixed acid load out, and mixed acids tanks (ID Nos. ES-12 through ES-18) from the facility and permit, and
- b. the addition of the following six insignificant activities:
 - i. diesel fuel tank No. 7 (ID No. I7);
 - ii. sulfuric acid lay down tank (ID No. I604);
 - iii. aviation fuel tank (ID No. I701); and
 - iv. three weak acid storage tanks: (ID Nos. I101, I102, and I103).

In addition to the above, the Permittee has submitted facility wide modeling for the toxic air pollutant sulfuric acid mist. However, it is not required and the applicant has requested that no limits be included in the permit.

2. Facility Description

This facility manufactures sulfuric acid.

3. Application Chronology

The application chronology is detailed on the attached IBEAM Report.

4. Permit Modification/Changes

Emission sources were added and removed from the permit per the Permittee's request. There are no other changes to the permit.

5. Regulatory Review

There are no new or modified regulations that apply for the renewal of this permit.

6. NSPS, NESHAPS, PSD, Attainment Status, 112(r), CAM

There are no NSPS, MACT/NESHAP, PSD, or non-attainment regulations that apply to the sources at this facility.

The requirement for compliance assurance monitoring (CAM) is assessed as follows.

- a. The Permittee reported uncontrolled emissions of sulfuric acid mist from the sulfuric acid plants (ID Nos. ES-1 and ES-2) to be about 1,621 tons per year (370 lb/hr) and potential emissions are estimated to be 20.5 tons per year (0.5 lb/ton) after control with the mist eliminator (ID No. ME-3). However, review of AP-42 emission factors for production of sulfuric acid from recovered sulfur shows that worst case uncontrolled emissions should be about 0.8 lb/ton of sulfur produced (Table 8.10-2). The resulting uncontrolled annual sulfuric acid emission using the permitted production rate of 9.38 tons of sulfuric acid per hour and the AP-42 emission factor is about 33 tons of sulfuric acid mist. Since the emission factor provided by the Permittee is not documented, AP-42 will be used to assess CAM applicability. Uncontrolled emissions are not greater than 100 tons per year and CAM does not apply.
- b. Uncontrolled emission from the acid unloading and storage are estimated to be about 20 tons per year. Therefore, the facility is not required to provide for compliance assurance monitoring for the mist eliminator control device (ID No. ME-4).

7. Facility Compliance Status

The last inspection report of August 24, 2004 by Ashby G. Armistead states that the facility is in apparent compliance with applicable regulations and permit provisions.

8. Statement of Compliance

The responsible official, Mr. Reed Dulany, III, has certified compliance of the facility.

9. Facility Emissions Review

Estimated potential emissions from this facility are estimated based on allowable and are as follows:

Sulfur dioxide: 1,109 tons per year
Sulfuric acid mist: 20.5 tons per year
nitrogen oxides: 238.3 tons per year

10. Stipulation Review

The permit stipulations were reviewed and the only change made to existing conditions was to eliminate the visible emissions requirement to determine normal visible emissions in the first thirty days of the permit.

11. Public Notice/EPA

The proposed permit is subject to a 30-day public notice and a concurrent 45-day EPA review period.

12. Conclusions, Comments, and Recommendations

Renew permit number 1853 for an additional five-year term.