

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Wilmington Regional Office
County: New Hanover
NC Facility ID: 6500240
Inspector's Name: Mark Hedrick
Date of Last Inspection: 05/04/2005
Compliance Code: 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Chemsolve Terminal Inc Facility Address: Chemsolve Terminal Inc 2005 North 6th Street Wilmington, NC 28402 SIC: 4226 / Special Warehousing & Storage NAICS: 49319 / Other Warehousing and Storage Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: X (added natural gas firing to ES5.5, revised pm limits) NSPS: X (added natural gas firing to ES12) NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 6500240.05A Date Received: 07/19/2005 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 04382/T10 Existing Permit Issue Date: 07/30/2001 Existing Permit Expiration Date: 04/30/2006
Bruce Kirk General Manager (910) 762-8588 P O Box 117 Wilmington NC, 28402	Bruce Kirk General Manager (910) 762-8588 P O Box 117 Wilmington NC, 28402	Bruce Kirk General Manager (910) 762-8588 P O Box 117 Wilmington NC, 28402	
Review Engineer: Wallace Pitts Review Engineer's Signature: _____ Date: _____		Comments / Recommendations: Issue 04382/T11 Permit Issue Date: Permit Expiration Date:	

I. Purpose of Application

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513. The initial Title V permit (04382T09) was issued on May 29, 2001 with an effective date of July 13, 2001, and an expiration date of April 30, 2006. The complete renewal application was received on August 11, 2005 or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. In addition, the Permittee submitted an application to allow the firing of natural gas in two boilers: ES-12 (12 mmBtu/hour heat input), and ES-5.5 (5 mmBtu/hour heat input).

II. Facility Description

Chemsolve Terminal is a bulk storage facility that receives shipments of various industrial products by barge or ship and stores them in bulk tanks until they are shipped out to their ultimate destination by rail car, tank truck, or barge. Chemsolve stores these materials for a fee.

III. History/Background/Application Chronology

May 29, 2001 – Initial Title V Permit 04382T09 issued, effective date July 13, 2001.

July 30, 2001 – 502(b)(10) amendment to 04382T09, issued as 04382T10, effective date July 30. Installed an internal floating roof on 2,807,993 gallon storage tank ID No. 1005. This required the addition of a PSD avoidance condition for VOC emissions.

August 11, 2005 – Completed Title V permit Renewal application 6500240.05A received

July 19, 2006, – Received application 6500240.06A to allow the firing of natural gas in ES-12 and ES-5.5

July 19, 2006, – Received check for \$834.00 for Permit Application 6500240.06A

August 15, 2006, – Draft permit to Wiro.

August 15, 2006, – WiRo responds no comments.

August 29, 2006, – Draft permit to Permittee.

September 8, 2006, – Permittee requests revision to PSD avoidance condition monitoring, to use the original language.

September 8, 2006, – Requested and Permittee provided spreadsheet with VOC emissions for 2004 and 2005.

September 18, 2006, – Requested additional VOC emissions data: error in spreadsheets provided 9-08-06. Received same day. VOC emissions are significantly less than 250 tons per year.

September 19, 2006, –WiRO agrees with changes to revert to original PSD avoidance language.

IV. Permit Modification/Changes

The following table describes the modifications to Permit 04382T10 and incorporated into Permit 04382T11.

Old Page	New Page	Section	Description of Change(s)
All	All	All	Revised permit number and dates to reflect renewal.
3	3	1	Added natural gas firing for ES12 and ES5.5 in emission source table.
3	3	1	Deleted * footnote to emission source table denoting that ES1005 was modified under 502(b)(10).
4	5	2.1 A.1.a	Rounded particulate emission standard to two significant figures after the decimal for consistence with 2D .0503.
4	5	2.1 A.2.a	Changed the 2D .0516 sulfur dioxide emission standards to reflect natural gas firing. 2D .0516 does not apply when firing No. 2 fuel oil since this fuel is covered in 2D .0524.
4	5	2.1 A.1.a	Added natural gas.
4	5	2.1 A.1.c	Added natural gas
4	5	2.1 A.2.a	Added natural gas.
4	5	2.1 A.2.c	Added natural gas monitoring language.
5	6	2.1 A.3.c	Added noncompliance statement.
5	6	2.1 A.3.d	Added noncompliance statement.
5	6	2.1 A.3.e	Changed reporting from quarterly to semi-annual.

Old Page	New Page	Section	Description of Change(s)
5	7	1.1 A.4.c	Added natural gas.
5	7	2.1 B	Changed PM standards for ES3.2, ES5.5, and ES6 for consistency with 2D .0503 and the time in which the emission sources were added.
6	7	2.1 B.1.a	Added natural gas.
6	7	2.1 B.2.d	Added monitoring language for ES5.5 when natural gas is fired.
7	8-9	2.1 C	Revised 2D .0949 language.
8	10	2.2 A.1.a	Added noncompliance statement
8	10	2.2 A.1.c	Deleted requirement to begin determining actual VOC emissions beginning January 1, 2001.
8	10	2.2 A.1.d	Now 2.2 A.1.b and added records retention from 3 years to 5 years.
8	10	2.2 A.1.e	Now in 2.2 A.1.c
8	10	2.2 A.2	Added requirement to fulfill requirements of 2Q .0705 and 2D .1100 .
9	11	3	Updated General Conditions

V. Regulatory Review

The facility is subject to the following regulations:

15A NCAC 2D .0503, Particulates from Fuel Burning Indirect Heat Exchangers
 15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources
 15A NCAC 2D .0521, Control of Visible Emissions
 15A NCAC 2D .0524, New Source Performance Standards
 15A NCAC 2D .0948, VOC Emissions from Transfer Operations,
 15A NCAC 2D .0949, Storage of Miscellaneous Volatile Organic Compounds,
 15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions, and
 15A NCAC 2Q .0317, Avoidance conditions for 2D .0530 (PSD for VOC)

In addition, if the facility remains a major source of Hazardous Air Pollutants, then the facility will become subject to the Organic Liquids Distribution MACT (40 CFR 63 Subpart EEEE), 15A NCAC 2D .1111, the Commercial, Industrial, and Institutional Boilers and Process Heaters MACT (40 CD 63 Subpart DDDDD) and the NC Air Toxics rule, 15A NCAC 2D .1100, Control of Toxic Air Pollutants. The compliance date for Subpart EEEE is February 3, 2007. The Permittee has indicated that they are considering submitting a Permit Application to add avoidance conditions for MACT and to become a synthetic minor facility.

2D .0503

All of the boilers (ES3.2, ES5.5, E-6, and ES12) are subject to the particulate standards. ES3.2 (3.2 mmBtu/hr) was permitted in 1986, and is subject to the 0.60 lb/mmBtu emission standard. The emission standards for boilers added after this date are determined using the cumulative heat input. ES5.5 (5.5 mmBtu/hr) and ES-6 (6 mmBtu/hr) were added in 1988. The cumulative heat input is, therefore, 3.2 + 5.5 + 6 = 14.7 mmBtu/hr. Using this value, the emission standards for ES-5.5 and ES-6 are:

$$E=1.090*(14.7)^{-0.2594} = 0.54 \text{ lb/mmBtu.}$$

ES1.7 (insignificant activity, 1.7 mmBtu/hr) commenced operation in 1989. The cumulative heat input is 14.7 + 1.7 = 16.4 mmBtu/hr.

ES12 (12 mmBtu/hr) was added in 1993. The emission standard for this emission source is:

$$E=1.090*(16.4+12)^{-0.2594} = 0.46 \text{ lb/mmBtu.}$$

VI. NSPS, NESHAP/MACT, PSD, 112r, CAM

NSPS –ES-12 is subject to NSPS Subpart Dc. No new NSPS requirements have been added.

NESHAP/MACT –

The Permittee submitted on June 6, 2006 an initial notification that the facility was were potentially subject to the Organic Liquids Distribution MACT (Subpart EEEE).

PSD – N/A The facility has a 250 tons per year PSD avoidance condition for VOC emissions. The highest VOC emission rate for 2004-2005 was 19.2 tons per year.

112r – N/A

CAM – There are no control devices at this facility. Therefore CAM is not applicable.

VII. Facility Wide Air Toxics

A permit condition was added to the permit that requires that the facility submit a facility wide air toxics demonstration as required under 15A NCAC 2Q .0705. This must be done no later than the compliance date for the last applicable MACT (02/03/200 for MACT Subpart EEEE Organic Liquids Distribution). Note that the facility may not be required to conduct the facility wide air toxics analysis if they become a synthetic minor facility.

VIII. Statement of Compliance

The facility was last inspected on May 5, 2005 and was found to be in compliance with all permit requirements.

IX. Facility Emissions Review

The use of 100% natural gas instead of No. 2 fuel oil in ES12 and ES5.5 will reduce Total PM emissions by 1.3 tons per year, SO2 emissions by 39.1 tons per year, and NOx emissions by 3.2 tons per year. Also, there will be an increase in CO emissions of 3.4 tons per year. The actual reduction or increase in these pollutant emissions will vary with the actual amount of No. 2 fuel oil that is replaced by natural gas. With respect to total HAPS/Taps, there will be an increase of 116.1 pounds per year if 100% natural gas is used.

X. Stipulation Review

WIRO offered no stipulations.

XI. Public Notice / EPA and Affected State Review

Pursuant to 2Q. 0521, a notice of the draft Title V Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above.

South Carolina is an affected state.

Comments Received on DRAFT Permit – **???? comments were received.**

XII. Conclusions, Comments, and Recommendations