COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Southwest Regional Office
August 7, 1997

SUBJECT: Review of Application
Title V Operating Permit
Consolidated Natural Gas Transmission
Corporation (CNGT)
Oakford Station
Salem Township
Westmoreland County

TO: Air Quality Permit File: 65-00837

THROUGH: Mark Wayner, Chief
Title V Section
Air Quality

FROM: Nicholas J. Waryanka
Air Pollution Control Engineer

BACKGROUND

CNGT is an interstate gas transmission subsidiary for Consolidated Natural Gas Company and operates facilities in Pennsylvania for the production, storage, and transmission of natural gas. The Oakford Station is designed for storage purposes and its operation results in various sources of air contaminants. As a result of the levels of NOx emitted, South Oakford is a major stationary source as defined in Title I, Part D of the Clean Air Act Amendments. As such, the facility is subject to the Title V permitting requirements adopted at 25 Pa. Code, Chapter 127, Subchapter G.

CNGT received notice of Title V applicability under 25 Pa. Code §127.505 on July 20, 1995 and submitted the application to the Department on November 16, 1995. The application was deemed timely and complete on December 5, 1995. An application shield, as described in 25 Pa. Code §125.505(e), was granted at that time.

The application was initial submission. The company made various changes to the AIM-generated application by striking out incorrect information and updating it accordingly. One such change was the contact information identified in Section 1.3.

A RACT Operating Permit was issued to the facility on October 13, 1995 under Permit No. 65-000-837. The RACT determination made for Oakford Station called for the installation of high energy plasma ignition systems on the twelve (12) Cooper GMW-10TF natural gas compressor engines and ignition timing retard on two (2) Worthington SEHG-L auxiliary power generating engines. Five (5) other combustion sources, three boilers and a two dehy reboiler units, qualified for presumptive RACT emission limitations which were the installation, maintenance and operation of the source in accordance with manufacturers specifications. VOC emission limits were established for the internal combustion engines to address VOC RACT. As with NOx RACT, VOC RACT for the remaining combustion sources is operation in accordance with good air pollution control practices. Applicable requirements were established for the storage vessels in Chapter 129 through the SIP process between 1979 and 1987. These included seven (7) gasoline and (2) methanol storage tanks.

EMISSION INFORMATION

The Title V Permit for the site will include twenty-four (24) sources: twelve (12) Cooper 2500 horsepower GMW-10TF compressor engines, two (2) Worthington 1445 horsepower SEHG-L auxiliary power generating engines, one (1) Ingersoll Rand 110 horsepower JVG Dehy engine, one (1) Continental 14 horsepower air compressor engine, two (2) Babcock & Wilcox 12.8 MMBTU/HR Type FM heating boilers, two (2) NATCO 9.4 MMBTU/HR Type WT Dehydration Units, seven (7) 14,600 gallon gasoline storage tanks, two (2) 6000 gallon methanol storage tanks, one (1) 11,600 gallon distillate storage tank and fugitive emissions from facility pumps, valves, flanges, etc. Additional sources at the site are considered trivial activities as a result of their heat input rating (< 1 MMBTU/hr) and/or their emission levels. These sources include:

Combustion Units	Small Storage Tanks
Lennox CWB-4D Boiler	Tank T1, Scrubber Oil
A. O. Smith B180-852 Water Heater (0.105 MMBTU/hr)	Tank T2, Brine Water
	Tank T5, Used Oil
A. O. Smith GG40-751 Water Heater (0.04 MMBTU/hr)	Tank T14, Wastewater
	Tank T15, Lube Oil
Mor-Flo 72-50A Water Heater	Tank T16, Lube Oil
Luxair PDSU-LD12N105A Space Heater	Tank T17, Waste Oil
(2) Bruest BG24FM Space Heaters (0.006 MMBTU/hr each)	Tank T18, Ethylene Glycol
	Tank T19, Ethylene Glycol
(3) Bruest B1248-FXN Space Heaters (0.02 MMBTU/hr each)	Tank T20, Ethylene Glycol
	Tank T21, Ethylene Glycol
(3) Hastings P-50X Space Heaters (0.05 MMBTU/hr each)	Tank T22, Ethylene Glycol
	Tank T23, Ethylene Glycol

Hastings GF-100X Space Heater
Sears 867 Space Heater
Perfection Space Heater (0.02 MMBTU/hr)
Comfort Glow CGN12 Space Heater
Preway ACC60 Air Conditioner

The total maximum potential to emit for the above trivial sources is 0.5 tons per year of NOx or VOC.

25 Pa. Code §129.57 requires storage tanks with capacities equal to or greater than 2,000 gallons and which contain VOCs with a vapor pressure greater than 1.5 psia be equipped with pressure relief valves. The VOCs in the above tanks have vapor pressures which are well below 1.5 psia under actual storage conditions.

The two (2) Kewanee 16.74 MMBTU/hr boilers were grouped as G01. The compressor engines were grouped as G02. Processes, except for storage tanks, were grouped as G03. The two (2) Worthington auxiliary power generator engines were grouped as G04 and the two (2) NATCO Dehy units were grouped as G05. No incinerators or control equipment exist at this site.

CNGT applied for and received Air Quality Plan Approval #65-302-069 for the construction of the Kewanee boilers on June 22, 1994. The plan approval conditions addressed only stack testing requirements for the boilers in addition to referencing the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units promulgated in 40 CFR 60.40(c), Subpart Dc which is applicable to the boilers. Because these stack testing requirements were fulfilled, the conditions of the Plan Approval/Operating Permit were not incorporated into the Title V permit.

Potential emissions for the compressor, dehy and auxiliary power generating engines were based upon continuous operation (8760 hours) and calculated using RACT limits and AP-42 emission factors. Actual emissions were calculated using the same limits and factors for 1993 operating hours. Potential emissions for the other combustion sources were calculated using AP-42 emission factors. Actual emissions were calculated using the same factors for 1993 hours. HAP emissions for all sources were quantified using the Gas Research Institute's (GRI) "Technical Reference Manual for GRI-HAPCalc", Version 1.0, July 1994.

Four alternate operating scenarios (AOS) were proposed by CNGT. None of these qualify as true alternative operating scenarios. AOS1 and AOS2 discussed temporarily or permanently replacing an engine with no increase in emissions. AOS4 requested the waiver of emission limits during periods of maintenance. AOS3 proposed relief of emission limits for startup and shutdown periods. Because startups and shutdowns are

normal operating practices associated with these sources, AOS3 was incorporated into the Title V operating permit conditions.

AMENDMENTS

CNGT has compared the operations at Oakford Station with those in effect at the time of this review, to those in effect at the time of the Title V application submittal. There were no amendments necessary for this application.

OPERATIONAL FLEXIBILITY

The Title V permit may include provisions to allow a permitted facility to make certain changes without requiring a permit revision. CNGT has requested the flexibility of increasing emissions by the de minimus levels specified in 25 Pa. Code §127.449(d) and the installation of the minor sources listed in 25 Pa. Code §127.449(e). These provisions will be specified in the Title V permit.

CNGT has requested that the permit shield be granted for this permit. The permit shield has been specified in the permit special conditions.

CONCLUSIONS AND RECOMMENDATIONS

I have completed my review of CNGT's Title V permit application for their Oakford Station. CNGT has met the regulatory requirements associated with this application submittal. The attached draft permit reflects terms and conditions as described in CNGT's permit application. It is my recommendation to issue a Title V permit for this facility.