Florida Department of

Memorandum Environmental Protection

TO: Rick Bradburn
THROUGH: Armando I. Sarasua, P.E.
FROM: Debbie Moore
DATE: June 15, 2011
SUBJECT: Evaluation Summary for Citgo Petroleum Corporation, Niceville Bulk Terminal, 0910045-008-AF, Okaloosa County

We recommend issuing a permit to Citgo Petroleum Corporation to operate their Niceville Bulk Terminal. This permit is a renewal of Permit 0910045-005-AF, effective March 29, 2006 and incorporates Permit 0910045-006-AC, effective June 16, 2008.

Process Description. This existing facility is a petroleum products terminal consisting of diesel and gasoline storage tanks, and a truck loading rack with a Vapor Recovery Unit (VRU). The truck loading rack consists of two truck loading lanes. VOCs are recovered from the tank trucks, as they are loaded with liquids and the VOCs then are captured and controlled by a VRU. The VRU is manufactured by John Zink Company, Model AA-609-8-7 and is a carbon adsorption/absorption regenerative VRU. There are three storage tanks (2, 4 and 5). Tank 2 has a capacity of 55,000 barrel (bbl) and is equipped with an internal floating roof with a mechanical shoe seal. Tanks 4 and 5 each have a capacity of 30,000 bbl and are equipped with external floating roofs, mechanical shoe primary seals and rim-mounted secondary seals.

Permit 0910045-006-AC removed the artificial emission limit of 27 tons of VOC per year for the loading rack and the artificial 10 tons of VOC per year limit for the storage tanks because those numbers were estimates and not rule-based. Compliance is now established by product throughput, tank maintenance and VRU tests.

This renewal eliminates the maximum allowable operating rate in gallons per hour (previously specific condition A.1.). The testing operating rate is set by 40 CFR 60.503 (at least 300,000 liters during the six hour test).

The truck loading rack emissions unit is subject to New Source Performance Standard (NSPS) 40 CFR 60, Subpart XX – Bulk Gasoline Terminals. All three storage tanks are subject to NSPS subpart Kb. The diesel storage tank, additive storage tanks, the petroleum contact water (PCW) storage tank 3, and ethanol tanks and blending equipment, are considered exempt sources of pollution and not identified as emission points.

Pollution Control Equipment. A carbon absorption vapor recovery unit controls VOCs from tanker truck loading emissions. The VOCs from the three gasoline storage tanks are controlled with either internal or external floating roofs.

Environmental Impact.

Airborne Contaminant Emitted	FAC Rule	Estimated Emissions	
		lbs/hr	T/yr
VOC	N/A	N/A	50.41
HAPs (combined)	N/A		1.91
Objectionable Odors	62-296.320(2)	None allowed off plant property	
VE	62-296.320(4)	Not more than 20% opacity	

Emissions based on current EPA factors for tanks.
EU 006 VOC emissions are estimated to be 39.76 TPY by using 35 mg/L as a VRU emission factor times the allowed throughput, equivalent to 27.02 TPY, and adding 12.74 TPY from truck and piping fugitives.
Actual VRU emissions are closer to 1 mg/L based on most recent compliance test results.
*****EU006 (39.76 TPY) + EU007 (10.66 TPY) with gasketed covers on the slotted guide poles.***

Applicable Rules & Regulations. This source is regulated in accordance with 40 CFR 60 Subpart XX (for truck loading rack) and Subpart Kb (for the three gasoline storage tanks).

Compliance Monitoring. Annual VOC test for truck loading rack; inspections of the internal and external storage tanks floating roofs, and associated reports.

Compliance History. This renewal application was submitted late. However, previous inspection reports note the facility to be in compliance. Facility submitted initial notification required by 40 CFR 63.11093(a) on April 21, 2008 {40 CFR 63, subpart BBBBBB}. Florida has not adopted BBBBB as of this date.

Fee Summary. This is an AF2A ($1,500 fee) minor source with a stack test, and AF2C ($750 fee) minor source with no stack test.

DM/c