Title V Air Operation Permit Renewal
Permit No. 0330114-007-AV

APPLICANT

The applicant for this project is Pensacola Christian College. The applicant's responsible official and mailing address are: Mr. Troy Shoemaker, President, Pensacola Christian College, Post Office Box 18000, Pensacola, Florida 32523.

FACILITY DESCRIPTION

The applicant operates the Pensacola Campus located at 250 Brent Lane in Pensacola, Escambia County.

Pensacola Christian College (PCC) is a private educational institution consisting of classrooms, dorms, recreational areas, book distribution, food preparation, maintenance, and warehouse space located in Pensacola, Escambia County. The regulated activity at the facility is primarily a standby generation plant that includes three 1,500 Hp stationary spark ignition IC engines and eight stationary compression ignition internal combustion generators, all fired by natural gas. The standby generation plant is utilized for backup power generation, such as during power outages.

Emissions Unit No. 005 is comprised of two 1,500 Hp natural gas-fired stationary spark ignition internal combustion engines (Nos. 9and 10) manufactured by Waukesha model L7042GSL, each driving a generator producing 1.1 MW of electricity. These engines started up in January 1988 and are regulated by Rule 62-210.300(2)(a), F.A.C., and permit AC17-129619. 40 CFR 63 Subpart ZZZZ does not apply as the facility is not a major source of HAP. 40 CFR 60 Subpart JJJJ does not apply as the engines were operating before June 12, 2006 requirement in 40 CFR 60.4230(a)(4).

Emissions Unit No. 003 is one 1,500 Hp natural gas-fired stationary spark ignition internal combustion engine (No. 11) manufactured by Waukesha model L7042GSL, driving a generator to produce 1.1 MW of electricity. This engine started up August 1988 and is regulated by Rule 62-212.400(5), F.A.C., and permit AC17-139470/PSD-FL-128. 40 CFR 63 Subpart ZZZZ does not apply as the facility is not a major source of HAP. 40 CFR 60 Subpart JJJJ does not apply as the engines were operating before June 12, 2006 requirement in 40 CFR 60.4230(a)(4).

Emissions Unit No. 009 is comprised of eight 1,818 bhp natural gas-fired stationary compression ignition internal combustion engines (Nos. 1 - 8) manufactured by Caterpillar model G3516B-LE, each driving 1,300 Kilo-Watt Caterpillar DM5495 generators. These engines started up in May 2005 and are regulated by permit 0330114-004-AC. 40 CFR 63 Subpart ZZZZ does not apply as the facility is not a major source of HAP. 40 CFR 60 Subpart IIII does not apply as the engines with a displacement of less than 30 liters per cylinder were operating before July 11, 2005 requirement in 40 CFR 60.4200(a)(2).

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities, including Emissions Unit No. 006, Hot Water Generators. Unregulated Emissions Unit No. 007 includes two 800-ton cooling towers used to dissipate heat generated by the engines in Emissions Units Nos. 005 and 003.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit 0330114-006-AV, effective June 16, 2008, for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received on November 1, 2012
Notice of Intent to Issue Air Permit issued January 28, 2013
Public Notice Published February 5, 2013

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility

PROJECT REVIEW

There were no major changes to the permit since the last Title V permit was issued.

Unregulated Emissions Units and Activities are:

EU 007 - Cooling Towers: 3 Marley 8814 (each 800 gpm) serving the Central Energy Plant #1 were removed.

EU 006 - Domestic Hot Water Generators: 1 PVI (0.54 MMBtu/hr) serving the Academic Center and 1 Lochinvar (0.35 MMBtu/hr) serving Campus House were removed. 3 Noritz (each 0.12 MMBtu/hr) serving Campus House and 2 PVI (each 1.0 MMBtu/hr) serving Dixon Towers were added.

EU 006 - Heating Hot Water Generators: A Cleveland steamer (0.16 MMBtu/hr) was added to serve Academy. 2 Burnham (each 1.75 MMBtu/hr) serving Ballard North and Ballard South were replaced with 1 Fulton (0.5 MMBtu/hr) and 1 Fulton (0.75 MMBtu/hr), respectively. A Weil McLain (3.103 MMBtu/hr) serving Bradley Tower was replaced with 1 Fulton (1.4 MMBtu/hr). 2 Burnham (each 1.7 MMBtu/hr) serving Coberly North and Coberly South were replaced with 1 Fulton (0.5 MMBtu/hr) and 1 Fulton (0.75 MMBtu/hr), respectively. A Lars (1.999 MMBtu/hr) serving Dixon Tower was replaced with 2 Fulton (each 1.0 MMBtu/hr). A Weil McLain (3.103 MMBtu/hr) serving Library was replaced with 1 Fulton (1.4 MMBtu/hr). 2 Burnham (each 5.314 MMBtu/hr) serving MacKenzie were replaced with 2 Fulton (each 2.0 MMBtu/hr). A Lars (0.325 MMBtu/hr) was added to serve Rawson Apartments. 2 Fulton (each 1.4 MMBtu/hr) serving Sports Center were redesignated to serve Sports Center (A) with 2 Fulton (each 2.0 MMBtu/hr) added to serve Sports Center (B). A Peerless (3.15 MMBtu/hr) serving Swim Center was replaced with 1 Patterson Kelly (1.05 MMBtu/hr). 2 Cleveland (steamer) (each 0.16 MMBtu/hr) and 1 Burnham (5.021 MMBtu/hr) were added to serve Varsity Dining Room.

CONCLUSION

This project renews Title V air operation permit No. 0330114-006-AV, which was issued on June 16, 2008. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.