TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

SICAMU, Inc.
1066 Strong Road
Quincy, Florida 32351

Quincy Facility
Facility ID No. 0390047

PROJECT

Project No. 0390047-001-AC
Application for Minor Source Air Construction Permit
Construction of an aerosol and nonaerosol production facility

COUNTY

Gadsden County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Waste Management/Air Resources Program
Northwest District Office
160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

June 6, 2014
Revised June 26, 2014

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

SICAMU, Inc. proposes to construct a new minor source facility to manufacture aerosol and nonaerosol products, which is categorized under Standard Industrial Classification Code No. 2842, as a soap, detergent, perfumes, and cosmetic preparation facility. The facility will be located in Gadsden County at 1066 Strong Road, in Quincy, Florida, which is the location previously occupied by the Printing House (ID 0390031). The UTM coordinates of the facility are Zone 17, 574.8 km East, and 2863.3 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

This project is for the construction of an aerosol and nonaerosol product manufacturing facility. The proposed operation will consist of mixing various materials in tanks to prepare soaps, waxes, lubricants, fragrances, etc, and package these in bottles or cans. A natural gas fired boiler, with a heat input of less than 2 million British thermal units (MMBtu) per hour will provide hot water/steam for melting waxes used in some of the products. An existing emergency diesel generator will only be used in case of loss of power at the site. The boiler and generator engine are categorically exempt from air permitting requirements per Rule 62-210.300(3)(a), F.A.C.

Processing Schedule

May 5, 2014 Received the application for a minor source air pollution construction permit.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

<u>PSD Applicability for Project</u>

This facility will be a new minor stationary source for PSD because it will emit less than 250 tons per year of a regulated pollutant. Based on these facts is it determined that the project is not subject to PSD preconstruction review. As provided in the application, the following table summarizes potential emissions and PSD applicability for the project.

Table A. Potential Emissions (Tons/Year) and PSD Applicability

Pollutant (TPY)	Pre-Project Potential Emissions	Post Project Potential Emissions	Total Emissions Change	PSD Major Stationary Source Threshold for Facility Type & Project	Subject to PSD
CO	None - new			250	NO
NO_X	None - new				
PM	None - new				
SO_2	None - new				
VOC	None - new	13	13		
HAPs (total)	None - new	1	1		
HAPs (indiv)	None - new				

3. APPLICATION REVIEW

Application Fee

This is a permit type AC1E (source less 25 tons per year but more than 5 tons per year) and has a fee of $1000.

Discussion of Emissions

Air emissions from the manufacturing activity, which are mostly fugitive VOC and HAPS from container filling operations, have been estimated based on process knowledge to be 13 tons per year of VOC and less than 1 ton per year of HAP. These emissions are based on full production of around 17 million containers per year, but the facility is not expected to reach full production for a year or two after construction.

State Requirements

62-4.070(3)

Federal NSPS Provisions

None

Federal NESHAP Provisions

None

Other Draft Permit Requirements

The 12-month rolling total usage of VOC and HAP containing materials is estimated to not exceed 25 tons per consecutive 12-month rolling total of VOC emissions; 10 tons per consecutive 12-month rolling total of any single HAP emissions; and 25 tons per consecutive 12-month rolling total of total HAP emissions. Verification will be through monthly recordkeeping of material usage and tracking emissions.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Debbie Moore is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at 850-595-0624 or Deborah.L.Moore@dep.state.fl.us.