TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

NitroGolf, LLC
4490 SE Cheri Court
Stuart, Florida 34997

NitroGolf, LLC Stuart Facility
Facility ID No. 0850143

PROJECT

Project No. 0850143-004-AC & -005-AO
Application for Minor Source Concurrent Air Construction Permit and Operation Permit Renewal

COUNTY

Martin County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Section
Southeast District Office
3301 Gun Club Road, MSC 7201-1
West Palm Beach, Florida 33406

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); 62-213 (Operation Permits for Major Sources of Air Pollution); 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.

Facility Description and Location

NitroGolf, LLC is an existing golf ball recycling facility, which is categorized under Standard Industrial Classification (SIC) Code No. 3949, and North American Industry Classification System (NAICS) Code No. 339920. The facility is located in Martin County at 4490 S.E. Cheri Court, in Stuart, Florida. The UTM coordinates of the existing facility are Zone 17, 578.34 km East, and 3003.29 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 a Minor 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 a synthetic Non-Title V 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

NitroGolf, LLC is an existing golf ball recycling facility, which currently operates under Permit No. 0850143-003-AO which allows the operation of two spray booths emitting up to 11.50 tons of volatile organic compounds (VOCs) per year. The project is to concurrently permit construction and operation of the facility. The facility requested that the permit be modified to reflect reflect the removal of one spray booth, and the use of a catalyst containing less than one ton per year of hazardous air pollutants (HAPs).

Processing Schedule

September 15, 2014: Received the application for a concurrent minor source air pollution construction permit, and air operation permit renewal.

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.

PSD Applicability for Project

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	Project Potential Emissions (TPY)	PSD Significant Emissions Rate (TPY)	Subject To PSD?
VOC	11.5	40	No
Total HAPs	<0.3	NA	No
Indiv HAP	<0.2	NA	No

As shown in the above table, total project emissions will not exceed the PSD significant emissions rates; therefore, the project is not subject to PSD preconstruction review.

3. APPLICATION REVIEW

Discussion of Emissions

The facility's current spraying system uses a two part system comprised of a polyurethane coating and catalyst in the production process. According to information provided in the application, with the facility limiting spraying operation to 3,075 hours a year, emissions will be limited as shown in the following table:

Pollutant	Pollutant Code	Project Potential Emissions (TPY)	PSD Significant Emissions Rate (TPY)	Subject To PSD?	Title V Emission Threshold (TPY)	Subject To Title V?
Total VOC	VOC	11.50	40	No	NA	No
Total HAPs	HAP	0.259	NA	No	25	No
Indiv HAP xylene	H186	0.185	NA	No	10	No
Indiv HAP Ethyl Benzene	H085	0.0616	NA	No	10	No
Indiv HAP Hexamethylene-1,6-Diisocyanate	H102	0.0123	NA	No	10	No

Limiting the facility to current emission rates will keep the facility under PSD and Title V thresholds.

State Requirements

62-4 F.A.C.	Permits
62-210	Stationary Sources
62-210.370(3)	Annual Operating Report for Air Pollutant Emitting Facility
62-296.320	Emission Standards
62-297	Testing, Reporting and Record Keeping

Federal NSPS Provisions

None

Federal NESHAP Provisions

None

Other Draft Permit Requirements

Facility shall monitor and keep records of VOC and HAP containing material use and maintain the records for a period of at least 5 years. Facility shall also report the VOC and HAP emissions in the annual operating report.

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. Scott D. Trainor, P.E. 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 the Southeast District Office at 3301 Gun Club Road, MSC 7210-1; West Palm Beach, Florida 33406. The email address for the Southeast District Office Air Program is: sed.air@dep.state.fl.us.