TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Owens Corning Roofing and Asphalt, LLC
1035 Talleyrand Ave
Jacksonville, Florida 32206
Jacksonville Plant
Facility ID No. 0310050

PROJECT

Project No. 0310050-019-AC
Application for Air Construction Permit
Dust Collectors Replacement

COUNTY

Duval, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Northeast District Office
Waste and Air Resource Management
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

COMPLIANCE AUTHORITY

Florida Department of Environmental Protection
Northeast District Office
Compliance Assurance
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

January 15, 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 (FS). 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. The City of Jacksonville (COJ), Jacksonville Environmental Protection Board (JEPB), regularly adopts these state regulations in Rule 2, JEPB.

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, FAC.

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

This facility consists of a manufacturing plant for the production of asphalt and a manufacturing plant for the production of roofing products, including asphalt shingles. The plant processes several types of asphalts with various characteristics such as non-oxidized and oxidized. Regulated emission units include material handling operations, mineral application area (surfacing area), asphalt coater system, asphalt convertors (blowing stills), asphalt and asphalt products storage tanks, and asphalt loading equipment. The facility does not utilize a catalyst in the asphalt blowing process.

The existing facility is located at 1035 Talleyrand Avenue, in Duval County, Fl. UTM Coordinates: Zone 17, 439.5 km East and 3356.2 km North. Latitude: 30º 20` 14.9675" North and Longitude: 81º 37` 48.2012" West.

This site is an area that is in attainment (or designated as unclassifiable) for all pollutants subject to a National Ambient Air Quality Standard (NAAQA).

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 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 authorizes the replacement of the existing Donaldson Company (Torit) M/N 64PJD10 Dust Collector that control emissions from the Limestone Filler Heater (EU 003) with a new Donaldson Company (Torit) CPV4 Dust Collector. This project also authorizes the replacement of the existing dust collector for the existing Sand System with a new Donaldson Company (Torit) 64FTD Dust Collector. The existing Sand System control unit currently vents to the control system for the Bulk Granule Handling System (EU 029). Upon installation, the proposed new control unit will be reconfigured to no longer vent to EU 029. The Sand System emissions will be exhausted to the atmosphere. classifying the unit as a new emissions source (EU 045).

Proposed Work

Existing EU 003: The permittee is authorized to, replace, and operate (for purposes of testing and unit shakedown) a new Donaldson Company (Torit) CPV4 Dust Collector for the control of particulate matter emissions for the Limestone Filler Heater (EU003).

This project makes the changes listed below to Permit No. 0310050-018-AV

The following Specific Condition is modified as follows:

Specific Condition No. C. 4

From:

C.4. **PM Emissions**. PM emissions shall be limited to 0.03 gr/dscf [0.10 lbs/hr and 0.43 TPY]. [Rule 62- 296.711(2)(b), FAC, and Rule 2.1101, JEPB]

TO:

A.3. **Particulate Matter Emissions:** PM emissions shall be limited to 0.03 gr/dscf [~~0.10 lbs/hr~~ 0.69lbs/hr and ~~0.43 TPY~~ 3.01TPY].

[Rule 62- 296.711(2)(b), FAC, and Rule 2.1101, JEPB]

New EU No. 045: The permittee is authorized to, install, and operate (for purposes of testing and unit shakedown) a new Donaldson Company (Torit) 64FTD Dust Collector for the control of particulate matter emissions for the Sand System (EU045).

Processing Schedule

November 06, 2013 -- Received the application for a construction permit.
November 06, 2013 -- Application complete

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, FAC. Under preconstruction review, it must first be determined if a project is subject to the PSD requirements ("PSD applicability review") and, if so, a PSD preconstruction review must be conducted. 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

The existing facility is not a major stationary source of air pollution for Prevention of Significant Deterioration (PSD) purposes because the potential emissions of PSD air pollutants are less than 250 tons per year pursuant to Rule 62-210.200(194), F.A.C., and Rule 2.301, JEPB. This project is not subject to PSD preconstruction review requirements since the proposed project itself has potential emissions of PSD air pollutants that are less than 250 tons per year pursuant to Rule 62-210.200(194), F.A.C., and Rule 2.301, JEPB. The facility after completion of this project will not be a major stationary source of air pollution for PSD purposes because the potential emissions of PSD air pollutants will be less than 250 tons per year pursuant to Rule 62-210.200(194), F.A.C., and Rule 2.301, JEPB.

Based on the submitted application there will be no increase in production or throughput at the Jacksonville Plant. No other emissions units at the facility will be affected by the proposed project therefore there will be no increase in emissions from other emissions units as a result of this proposed activity.

3. DEPARTMENT OF ENVIRONMENTAL PROTECTION APPLICATION REVIEW

Discussion of Emissions

Particulate Matter (PM) emissions are associated with the Limestone Filler Heater System (EU 003) and the Sand System (EU 045) which emits PM, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ are not specifically emission limited by this project other than through the emission limits for PM.

Local COJ, JEPB Requirements

EU 003 & EU 045 shall be subject to the COJ Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].

EU 003 & EU 045 shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIV.

State Requirements

EU No. 003 & EU No. 045 will be subject to the requirements of Rule 62-296.700, F.A.C., and Rule 2.1101, JEPB, Reasonably Available Control Technology (RACT) Particulate Matter; and Rule 62-296.711, F.A.C. and Rule 2.1101, JEPB, Materials Handling, Sizing, Screening, Crushing and Grinding Operations.

- Rule 62-296.700, F.A.C., and Rule 2.1101, JEPB contains general RACT requirements including 1) Applicability, 2) Exemptions, 3) Specific RACT Emission Limiting Standards for Stationary Emissions Units (description), 4) Maximum Allowable Emission Rates, 5) Circumvention, and 6) Operation and Maintenance Plan.

- Rule 62-296.711, F.A.C. and Rule 2.1101, JEPB contains the specific RACT rule to which this EU is subject: Materials Handling, Sizing, Screening, Crushing and Grinding Operations. The specific limitations are as follows: PM -- not to exceed 0.03 gr/dscf; Visible Emissions (VE) -- not to exceed 5% opacity. The test methods are: PM -- EPA Reference Method (RM) 5 (minimum of 30 dscf sample volume); VE -- EPA RM 9.

Federal Requirements

A. **NSPS Review** 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. This emission unit is not subject to any applicable NSPS Requirements.

B. NESHAP Review

The U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). 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. This modification will not subject this emission unit to an applicable NESHAP.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable local, 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. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Yasmin K. Enriquez is the project specialist responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project specialist at the Florida Department of Environmental Protection, Northeast District Office, Waste and Air Resource Management Program, 8800 Baymeadows Way West, Suite 100, Jacksonville, FL 32256, Phone: 904-256-1700.