TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

I. GENERAL INFORMATION

A. APPLICANT

Owens Corning
Jacksonville Roofing & Asphalt Plant
1035 Talleyrand Ave.
Jacksonville, FL 32224

Permit No. 0310050-009-AC
County: Duval

B. PROJECT

The applicant, Owens Corning, applied on December 29, 2006, to the Department for a permit to construct a replacement asphalt coater no. 2 and construction of two new filler transport systems for the movement of limestone to two new filler hoppers. The replacement asphalt coater no. 2 and the existing apshalt surge tank will be vented to the existng fiber bed filter for particulate matter (PM) control. Each new transport system and associated filler hopper will be equipped with a bin vent for the control of PM emissions. Two new filler/adhesive mixing tanks (laminate and sealant systems) will be constructed for the mixing of filler and adhesive. Emissions will be vented to the existing CECO fiber bed filter (for the control of PM emissions) which also serves the laminate applicators (Emission Unit No. 030). The existing steam generator will be added as an EU, the process rate for shingle production will be increased, storage tank descriptions updated, and applicability requirements for Coating Tank No. 1 will be updated.

II. RULE APPLICABILITY

The facility is located in an area designated as unclassifiable for the air pollutants lead, sulfur dioxide, and particulate matter less than or equal to ten (10) micrometers in aerodynamic diameter, and in an air quality maintenance area for the air pollutants particulate matter (PM) and ozone. The area is classified as attainment for all other criteria pollutants pursuant to Rule 62-204, Florida Administrative Code (FAC), and Rule 2.201, Jacksonville Environmental Protection Board (JEPB).

The facility is a major source of air pollution because the potential emissions of regulated air pollutants are greater than or equal to 100 tons per year pursuant to Rule 62-210, FAC, and JEPB Rule 2.301.

40 CFR 60, Subpart UU, Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture, 40 CFR 60, Subpart A, General Provisions; and 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction Reconstruction, or Modification Commenced after July 23, 1984, shall apply to this project. Reasonably Available Control Technology (RACT) requirements including **Specific RACT Emission Limiting Standards for Stationary Emissions Units** [Rule 62-296.700(3), FAC, and Rule 2.1001, JEPB]**; Maximum Allowable Emission Rates** [Rule 62-296.700(4), FAC, and Rule 2.1001, JEPB]; **Circumvention** [Rule 62-296.700(5), FAC, and Rule 2.1001, JEPB], and **Operation and Maintenance Plan** [Rule 62-296.700(6), FAC, and Rule 2.1001, JEPB] shall apply to this project. The project shall be subject to Rule 62-296.320(2), FAC, Rule 2.1001, JEPB, and City of Jacksonville Ordinance Code, Chapter 376 limiting the emission of objectionable odors.

Prevention of Significant Deterioration (PSD) requirements do not apply since the facility potential emissions of any one regulated pollutant is less than 250 tons per year thereby making the facility **minor** for PSD purposes, and the modification itself is minor (ie: potential to emit less than 250 tons per year) for PSD purposes.

III. TECHNICAL EVALUATION

Emission Unit No. 028-Mineral Application System (Surfacing Area)

The maximum process throughput rate in the mineral application system shall be limited to 70 tons per hour of coating asphalt, filler, mat, and surface application minerals.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

Emission Unit No. 030-Shingle Laminator System

Modified Emission Unit Description: This system includes a line branching off from the existing shingle manufacturing line to produce laminated asphalt shingles. Adhesive and sealant is used in the manufacture of laminated roofing shingles. Two 100 gallon adhesive and sealant intermediate storage tanks and two adhesive and sealant applicators are used in the process. Two new filler/adhesive mixing tanks shall be added to this EU. Filler and adhesive are mixed prior to being used in the asphalt coating process (aka the Sure Nail Process). Emissions from the two new tanks shall be vented to the existing Fiber Bed Filter as are the other operations in this system.

Emission Unit No. 031-Adhesive Tank

Emission Unit Description: Modified Laminate Adhesive (MLA) storage tank with a capacity of 15,000 gallons (57 cubic meters) -- This tank was formerly subject to Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction Reconstruction, or ModificationCommenced after July 23, 1984, Recordkeeping and Reporting requirements. The regulations have been modified and no longer apply to Liquid Storage Vessels less than 75 cubic meters in capacity.

Pollutant Control Device: Emissions are vented to a Fiber Bed Filter.

Emissions from this emission unit shall be vented to a fiber bed filter for PM control.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

This EU shall be allowed to operate continuously, i.e., 8760 hours per year.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

40 CFR 60, Subpart UU, Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture,
40 CFR 60, Subpart A, General Provisions

VE shall be limited to zero (0) percent (%) opacity.
[40 CFR 60.472(c); Rule 62-296.204.800, FAC, and Rule 2.201, JEPB]

The 0% opacity may be exceeded during one consecutive 15 minute period per 24 hours when the transfer lines are being blown for clearance, provided the control device is not bypassed during this period.

[40 CFR 60.472(c); Rule 62-204.800, FAC, and Rule 2.201, JEPB]
Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A), and the procedures in 40 CFR 60.11, for the visual determination of opacity.
[40 CFR 60.474(5); Rule 62-204.800, FAC, and Rule 2.201, JEPB]

VE testing shall be conducted annually from the date of November 1, 2006. VE testing shall be conducted for a minimum period of 30 minutes.
[40 CFR 60.11, Rule 62-204.800, FAC, Rule 2.201, JEPB, Rule 62-297.310(4)(a)2., FAC, and Rule 2.1101, JEPB]

Emission Unit No. 034 - Asphalt Coater System No. 2

The production rate of asphalt shingles and/or mineral surfaced roll roofing shall be limited to a maximum of 70 TPH.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

This EU shall be allowed to operate continuously, i.e., 8760 hours per year.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

40 CFR 60, Subpart UU, Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture and 40 CFR 60, Subpart A, General Provisions shall apply to this emission unit.

PM emissions shall be limited to 0.04 kg/megagram (.08 lbs/Ton) [5.60 lbs/hr and 24.53 TPY] of asphalt shingle or mineral surfaced roll roofing produced.
[40 CFR 60.472(a)(1); Rule 62-204.800, FAC, and Rule 2.201, JEPB]

VE shall be limited to a maximum of twenty (20) percent (%) opacity.
[40 CFR 60.472(a)(2); Rule 62-204.800, FAC, and Rule 2.201, JEPB]

No visible emissions from a saturator capture system shall be allowed for more than 20 percent of any period of consecutive valid observations totaling 60 minutes.
[40 CFR 60. 472(a)(3), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method **5A** (as described in 40 CFR 60, Appendix A), for the determination of the PM concentration. Testing procedures shall be in accordance with the requirements in 40 CFR 60.474 (a)(b), (c), and (d); Rule 62-204.800, FAC, and Rule 2.201, JEPB.

Initial PM testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will operate but no later than 180 days after initial startup of the EU.
[40 CFR 60. 11, Rule 62-204.800, FAC, and Rule 2.201, JEPB]

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A), and the procedures in 40 CFR 60.11, for the visual determination of opacity.
[40 CFR 60.474(5); Rule 62-204.800, FAC, and Rule 2.201, JEPB]

Initial VE testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will operate but no later than 180 days after initial startup of the EU. Initial VE compliance testing shall be conducted for a minimum period of 3 hours and shall be conducted concurrently with the initial PM testing.
[40 CFR 60. 11, Rule 62-204.800, FAC, and Rule 2.201, JEPB]

Initial visible emission testing to determine compliance with the requirements of (no visible emission from saturator capture system) shall be conducted by using EPA RM 22, modified so that readings are recorded every 15 seconds for a period of consecutive observations during representative conditions [in accordance with 40 CFR 60.8)(c)] totaling 60 minutes. A performance test shall consist of one run.
[40 CFR 60.474(d), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

The owner/operator shall continuously monitor and record the temperature of the gas at the inlet to the fiber bed control device. The temperature monitoring instrument shall have an accuracy of +/- 15 degrees Centigrade over its range. Monitoring results shall be reported with the initial PM performance test results.
[40 CFR 60.473(a) and 40 CFR 60. 474(e); Rule 62-204.800, FAC, and Rule 2.201, JEPB]

The owner/operator shall maintain a file of the temperature monitoring results for at least five years.
[40 CFR 60.473(d); Rule 62-204.800, and Rule 62-213.440(1)(b), FAC, Rule 2.201, JEPB, and Rule 2.501, JEPB]

The permittee shall submit a notification of the date construction of the affected EU commenced postmarked not later than 30 days after such date. The permittee shall submit a notification of the actual date of initial startup of the EU postmarked within 15 days after such date.
[40 CFR 60.7(a), Rule 62-204.800, FAC, and Rule 2.201, JEPB]

Emission Unit No. 035-Filler Transport System No. 1

Emission Unit Description: Bulk limestone is transferred from the storage silo(s) to the new filler transport system no. 1 for the movement of limestone to the new filler hopper no. 1.

Particulate Matter (PM) control device: J.D.B. Dense Flow, Inc. dust collector Model Number (M/N) DF90R bin vent

The estimated maximum process input rate to the filler transport system no. 1 is 2000 pounds of crushed limestone per hour.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

This EU shall be allowed to operate continuously, i.e., 8760 hours per year.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

Reasonably Available Control Technology (RACT) requirements including **Specific RACT Emission Limiting Standards for Stationary Emission Units** [Rule 62-296.700(3), FAC, and Rule 2.1001, JEPB]**; Maximum Allowable Emission Rates** [Rule 62-296.700(4), FAC, and Rule 2.1001, JEPB]; **Circumvention** [Rule 62-296.700(5), FAC, and Rule 2.1001, JEPB], and **Operation and Maintenance Plan** [Rule 62-296.700(6), FAC, and Rule 2.1001, JEPB], shall apply to this emission unit.

PM emissions shall be limited to 0.03 gr/dscf [0.06 lbs/hr and 0.28 TPY].
[Rule 62-296.711(2)(b), FAC, and Rule 2.1001, JEPB]

VE shall be limited to five (5) percent (%) opacity.
[Rule 62-296.711(2)(a), FAC, and Rule 2.1001, JEPB]

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.
[Rule 62-296.711(3), FAC, and Rule 2.1001, JEPB]

Initial VE testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will operate but no later than 180 days after initial startup of the EU. Initial VE compliance testing shall be conducted for a minimum period of 30 minutes.
[Rule 62-297.310(4)(a), FAC, and Rule 2.1101, JEPB]

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A), for the determination of the PM concentration.
[Rule 62-296.711(3), FAC, and Rule 2.1001, JEPB]

PM testing shall be conducted upon request of the Department.
[Rule 62-296.711(3), FAC, and Rule 2.1001, JEPB]

Records of process input rate shall be maintained on a monthly basis. Records shall be maintained for a minimum period of five years and shall be made available to the Department upon request.
[Rule 62-213.440(1)(b)2.b., FAC, and Rule 2.501, JEPB]

The permittee shall submit an Operation and Maintenance Plan (O&M) with the Title V Revision permit application.
[Rule 62-296.700(6), FAC, and Rule 2.1001, JEPB]

. A Compliance Assurance Monitoring (CAM) determination shall be made based upon relevant information available on this emission unit. It is noted that uncontrolled PM emission data may be required to determine CAM applicability.
[40 CFR 64, Rule 62-213.440, FAC, and Rule 2.501, JEPB]

Emission Unit No. 036-Filler Transport System No. 2

Emission Unit Description: Bulk limestone is transferred from the storage silo(s) to the new filler transport system no. 2 for the movement of limestone to the new filler hopper no. 2.

Particulate Matter (PM) control device: J.D.B. Dense Flow, Inc. dust collector Model Number (M/N) DF90R bin vent

The estimated maximum process input rate to the filler transport system no. 1 is 2000 pounds of crushed limestone per hour.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

This EU shall be allowed to operate continuously, i.e., 8760 hours per year.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

Reasonably Available Control Technology (RACT) requirements including **Specific RACT Emission Limiting Standards for Stationary Emission Units** [Rule 62-296.700(3), FAC, and Rule 2.1001, JEPB]**; Maximum Allowable Emission Rates** [Rule 62-296.700(4), FAC, and Rule 2.1001, JEPB]; **Circumvention** [Rule 62-296.700(5), FAC, and Rule 2.1001, JEPB], and **Operation and Maintenance Plan** [Rule 62-296.700(6), FAC, and Rule 2.1001, JEPB], shall apply to this emission unit.

PM emissions shall be limited to 0.03 gr/dscf [0.06 lbs/hr and 0.28 TPY].
[Rule 62-296.711(2)(b), FAC, and Rule 2.1001, JEPB]

VE shall be limited to five (5) percent (%) opacity.
[Rule 62-296.711(2)(a), FAC, and Rule 2.1001, JEPB]

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.
[Rule 62-296.711(3), FAC, and Rule 2.1001, JEPB]

Initial VE testing shall be conducted within 60 days after achieving the maximum production rate at which the EU will operate but no later than 180 days after initial startup of the EU. Initial VE compliance testing shall be conducted for a minimum period of 30 minutes.
[Rule 62-297.310(4)(a), FAC, and Rule 2.1101, JEPB]

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A), for the determination of the PM concentration.
[Rule 62-296.711(3), FAC, and Rule 2.1001, JEPB]

PM testing shall be conducted upon request of the Department.
[Rule 62-296.711(3), FAC, and Rule 2.1001, JEPB]

Records of process input rate shall be maintained on a monthly basis. Records shall be maintained for a minimum period of five years and shall be made available to the Department upon request.
[Rule 62-213.440(1)(b)2.b., FAC, and Rule 2.501, JEPB]

The permittee shall submit an Operation and Maintenance Plan (O&M) with the Title V Revision permit application.
[Rule 62-296.700(6), FAC, and Rule 2.1001, JEPB]

. A Compliance Assurance Monitoring (CAM) determination shall be made based upon relevant information available on this emission unit. It is noted that uncontrolled PM emission data may be required to determine CAM applicability.
[40 CFR 64, Rule 62-213.440, FAC, and Rule 2.501, JEPB]

Emission Unit No. 037 - Steam Generating Boiler

Emission Unit Description: This EU consists of one steam generating boiler. It is rated at 12.6 MMBTU per hour maximum heat input while firing natural gas. The boiler is a Industrial Combustion, Inc., Model Number 300-2.

This EU shall be allowed to operate continuously; i.e.: 8760 hours per year.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

The maximum heat input for this EU shall be limited to 12.6 MMBtu per hour.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

Visible emissions (VE) shall not exceed 20 percent opacity except that VE not exceeding 27 percent opacity are allowed for up to 6 minutes in any one-hour period.
[Rule 62-296.406(1), FAC, and 2.1001, JEPB]

Sulfur dioxide (SO_2) and particulate matter (PM) emissions shall be controlled in accordance with the attached Best Available Control Technology (BACT) Determination.
[Rule 62-296.406(2) and (3), FAC, and Rule 2.1001, JEPB]

Testing for demonstration of compliance shall be performed in accordance with Environmental Protection Agency (EPA) Reference Method (RM) 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.
[Rule 62-297.310(7)(a)1., FAC, and Rule 2.1101, JEPB]

Initial VE compliance testing on the boiler shall be conducted within 90 days after permit issuance.
[Rule 62-4.070, FAC, and Rule 2.1301, JEPB]

The initial VE compliance test shall be a minimum of one (1) hour in length while firing natural gas.
[Rule 62-297.310(4)(a)2., FAC, and Rule 2.1101, JEPB]

Emission Unit No. 038 - Coating Tank No. 1

Modified Emission Unit Description: This tank stores blown asphalt and other asphalt products. This tank was formerly part of EU 016 (Asphalt Storage Tank No. 42 and Coating Tank No. 1). This tank was formerly subject to Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction Reconstruction, or ModificationCommenced after July 23, 1984. The tank is no longer subject to Subpart Kb because the tank is considered a process tank which is excluded from Subpart Kb requirements.

Pollutant Control Device: Air pollutant emissions from this tank are vented to the fume incinerator, which also controls the emissions from the asphalt blowing stills.

Emissions from this emission unit are vented to the fume incinerator which also controls the asphalt blowing stills.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

This EU shall be allowed to operate continuously, i.e., 8760 hours per year.
[Rule 62-210.200, FAC, and Rule 2.301, JEPB]

40 CFR 60, Subpart UU, Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture and 40 CFR 60, Subpart A, General Provisions shall apply to this emission unit.

VE shall be limited to zero (0) percent (%) opacity.
[40 CFR 60.472(c); Rule 62-204.800, FAC, and Rule 2.201, JEPB]

The 0% opacity may be exceeded during one consecutive 15 minute period per 24 hours when the transfer lines are being blown for clearance, provided the control device is not bypassed during this period.
[40 CFR 60.472(c); Rule 62-204.800, FAC, and Rule 2.201, JEPB]

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A), and the procedures in 40 CFR 60.11, for the visual determination of opacity.
[40 CFR 60.474(5); Rule 62-204.800, FAC, and Rule 2.201, JEPB]

VE testing shall be conducted annually from the date of November 1, 2006, concurrently with PM testing of the blowing stills. VE testing shall be conducted for a minimum period of 30 minutes during each PM test.
[Rule 62-297.310(4)(a)2., FAC, and Rule 2.1101, JEPB]

The owner/operator shall continuously monitor and record the temperature in the combustion zone of the fume incinerator (preheater) control device. The temperature monitoring instrument shall have an accuracy of +/- 10 degrees Centigrade over its range. This requirement is in accordance with 40 CFR 60.473(b); Rule 62-204.800, FAC, and Rule 2.201, JEPB.

The owner/operator shall maintain a file of the temperature monitoring results for at least five years.
[40 CFR 60.473(d), Rule 62-213.440(1)(b), FAC; Rule 2.201, JEPB, and Rule 2.501, JEPB]

Emission Unit No. 039-Asphalt Storage Tank No. 42

Modified Emission Unit Description: This tank stores blown asphalt and other asphalt products. This tank was formerly part of EU No. 016 (Asphalt Storage Tank No. 42 and Coating Tank No. 1)

IV. CONCLUSION

Based upon information provided by Owens Corning, Jacksonville Asphalt & Roofing Plant, the Department has reasonable assurance that the proposed construction/modification of the above referenced emission units, as described in this evaluation and subject to the conditions proposed herein, will not cause, or contribute to a violation of any ambient air quality standard or other technical provision of Chapters 62-296 and 62-297, FAC, JEPB Rules 2.1001 and 2.1101.

s:\air quality\permitv\TVCP\draft\0310050-009te-AC