



Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs

Department of Environmental Protection

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AQ02 - Non-Major Comprehensive Plan Approval Process Application

Permittee Information

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Address: 1331 MAIN STREET
WEST WARWICK, RI 02893

Permittee Company Information

Name: Seekonk Asphalt Corporation
Jeffrey Joaquin
Phone: (401) 312-6565
Address: 1331 MAIN STREET
WEST WARWICK, RI 02893

Professional Engineer Information

Name: LYNNE SANTOS
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SOUTHBOROUGH, MA 01772

Application Submitter Information

Name: LYNNE SANTOS
Phone: (978) 376-1522
Address: 153 CORDAVILLE RD, SUITE 120
SOUTHBOROUGH, MA 01772

Facility Information

Seekonk Asphalt Corporation
45 INDUSTRIAL COURT SEEKONK, MA 02771
DEP REGION:
FACILITY ID:
HW ID:

Facility Related Information

Standard Industrial Classification (SIC) Code

2951

North American Industry Classification System (NAICS) Code

324121

Project Coordination

Is this project subject to MEPA Review?

No

Proposed Project Description

Provide a Brief description of the proposed project, including relevant parameters and associated air pollution controls, if any

Seekonk Asphalt Corporation is planning to construct a new hot mix asphalt plant. The plant will consist of aggregate handling, hot melt asphalt mixing operation, and storage tanks. A rotary drum dryer that burns natural gas and has a heat input of 75 (MMBtu/hr) will be equipped with a Low NOX burner. A fabric filter baghouse will be installed to control PM from the dryer/mixer. A blue smoke abatement system will be installed to control VOC and HAP emissions from the silos. The liquid asphalt tanks will have condensers to control VOC and HAP. The hot oil heater will have a Low NOX burner. The conveyors and storage piles will be covered to control PM. Ecosorb or a similar additive will be used in the asphalt storage tanks to suppress fugitive odors.

Are you going to attach a more detailed project description?

Yes

Will this proposed Project result in an increase in any existing facility-wide emission cap(s)?

No

Is the Proposed Project Modifying Previously approved equipment?

No

Is the proposed project replacing previously approved Equipment?

No

Has Air Quality Modeling been performed to demonstrate the impact of this project on Air Quality?

Yes

Is Netting being used to avoid applicability to 310 CMR 7.00, Appendix A?

No

Is the proposed project subject to 310 CMR 7.00, Appendix A Nonattainment Review?

No

Prevention Of Significant Deterioration (Psd) Information

Is the proposed project subject to PSD?

No

Is the application proposing an emissions limitation for the purpose of avoiding PSD Applicability or is Netting going to be used to avoid Appendix A applicability (YES to question about netting)?

No

If you have indicated NO to Appendix A and/or PSD applicability, provide a brief description of what lead to this conclusion and attach an applicability analysis for both 310 CMR 7.0 Appendix A and PSD to this application.

The MassDEP has its own NNSR permitting program as promulgated in 310 CMR Appendix A which establishes the major source threshold at 100 tpy for any regulated NSR pollutant except for volatile organic compounds (VOC) and nitrogen oxides (NOX), which have a lower threshold of 50 tpy each in a serious ozone nonattainment area. The Seekonk Facility permitted PTE will not exceed the PSD major source threshold of 250 tpy for any criteria pollutants. Therefore, the facility will be considered a minor source for the purposes of PSD.

Is the proposed Equipment or Activity Subject to 40 CFR 60: New Source Performance Standards?

Yes

Is the proposed Equipment or Activity Subject to 40 CFR 63 or 40 CFR 61: NESHAPS for Source Categories- Maximum Achievable (MACT) or Generally Available (GACT) Control Technology?

No

Federal Applicability

Emission Unit #	Part	Sub Part
EU 1, 2, 3	60	I
EU 3	60	Kb

Proposed Project Details: Equipment

Emission Unit # (EU#) or Group of Emission Units	New or Modified?	Equipment Type	Specify if Other or Other Ancillary Fuel Use	Description of Equipment	Manufacturer	Model number or Equivalent
EU 1	New	Other	75 MMBtu/hr	Rotary Drum Dryer/Mixer	Asphalt Drum Mixers, Inc.	Model EX8844 Rotary Drum Dryer or equivalent
EU 2	New	Process Heater		Hot Oil Heater	Asphalt Drum Mixers, Inc.	HC-120 or equivalent
EU 3	New	Material Storage		Material Handling and Storage	Various	

Ancillary Combustion Equipment

Emission Unit # (EU#) or Group of Emission Units	Manufacturer's Maximum Heat input rating in Btu/Hr	Fuel Type	Fuel Used	Sulfur Content of Fuel(% by weight)	Manufacturers Fuel Firing Rate (Gal/ hr or MMcuft/ hr)	Type of Burner	Is Emission Unit Equipped with Flue Gas Recirculation?
EU 1	75000000	Primary Fuel	Natural Gas	0.0015		Low NOx	Yes
EU 2	1411765	Primary Fuel	Natural Gas	0.0015		Low NOx	No
EU 2	1411765	Back-Up Fuel	Distillate Oil	0.0015			No

Proposed Project Potential Emissions

Emission Unit # (EU#) or Group of Emission Units	Pollutant	Specify	Potential Emissions uncontrolled (tons per 12 consecutive month period)
EU 1	NOx		1.13
EU 1	CO		10.25
EU 1	SO2		0.43
EU 1	VOC		3.75
EU 1	PM		1.45
EU 1	Total HAP		0.457
EU 2	NOx		0.89
EU 2	CO		0.51
EU 2	SO2		0.03
EU 2	VOC		0.51
EU 2	PM		0.09
EU 2	Total HAP		0.0129
EU 3	CO		0.1
EU 3	VOC		0.186
EU 3	PM		0.72
EU 3	Total HAP		0.0151

Pollution Control Device (Pcd) Info

Are you proposing an Air Pollution Control Device?

Yes

Pcd Equipment

PCD ID Number	PCD Description	New or Existing?	Emission Unit # (EU#) Served by PCD	Stack #
PCD 1	Baghouse	New	EU 1	1
PCD 2	Blue Smoke Silo Recovery	New	EU 3	2

Pcd Efficiency

PCD ID Number	Air Contaminant	Specify	Capture Efficiency (CE) (percent by weight)	Destruction or Removal Efficiency (DE) (Percent by weight)	Overall Control (% by Weight)
PCD 1	PM		100	99.8	99.8
PCD 2	PM		100	95	95

Stack Description

Stack #	Stack Height above ground (feet)	Stack Height above roof (Feet)	Stack Exit Diameter (inches)	Exhaust gas Exit Temperature (degrees F)	Exhaust gas velocity range (CFM)	Stack Liner Material
1	40		59.84	275	23,500 - 47,000	Steel
2	8.8		12.6	400	682	Steel
3	15		156	Ambient	40,000	Steel

Emissions

Is Top-Case BACT Proposed? Yes

Production/Operational Limits

EU#	Material Type	Proposed Monthly production or operational limits (if any)- including unit of measure	Proposed 12-month consecutive period production or operational limits including unit of measure
EU 1	Asphalt	225 ton/hour	250,000 ton/year

Administrative Controls

Are you also proposing Administrative Controls for this project? No

External Noise Info

Is there external sound generating equipment associated with the proposed project? Yes

Have you performed or do you plan to perform a sound study? Yes

Sound Suppression Equipment

EU#/Stack#	Type of Sound Suppression Equipment (Measures?)	Equipment Manufacturer	Equipment Model No
EU 3	Sound Walls		

Proposed Project Potential

Describe the potential for visible emissions from the proposed project and how they will be controlled?

Blue smoke visible emissions can result from the release of condensable organics from the liquid asphaltic material when it is heated. A blue smoke recovery system will be used for silo load-out and silo filling. This system, along with the dryer recovery fan and the dryer/mixer PM controls, will limit visible emissions from the baghouse stack to no greater than 5% except for a maximum of 20% not to exceed 2 minutes during any hour, exclusive of uncombined water vapor.

Describe the potential for odor impacts from the proposed project and how they will be controlled

Ecosorb or a similar additive will be used in the asphalt storage tanks to suppress fugitive odors. Odor from blue smoke can result from the release of condensable organics from the liquid asphaltic material when it is heated. A blue smoke recovery system will be used for silo load-out and silo filling.

Monitoring And Record Keeping

Emission Unit/PCD #	Parameters Monitored	Method of Monitoring	Frequency of Monitoring	Frequency of Monitoring Hours	Record Keeping Procedures	Frequency of Data Record	Frequency of Data Record Hours
EU 1	Pressure	Pressure Drop	Continuous		Electronic	Continuous	
EU 1	Visible Emissions	Check	Daily		Manual	Daily	
EU 3	Pressure	Pressure Drop	Continuous		Electronic	Continuous	
Facility Wide	Asphalt Production	Usage Records	Monthly		Electronic	Monthly	
EU 1	Baghouse Leaks	Baghouse Visolite Testing	Monthly		Manual	Monthly	

Energy Efficiency Evaluation Survey

Do you know where your electricity and/or fuel and/or water and/or heat and/or compressed air is being used/consumed? No

Has your facility had an energy audit performed by your utility supplier (or other) in the past two years? No

Did the audit include evaluations for heat loss, lighting load, cooling requirements and compressor usage? No

Did the audit influence how this project is configured? No

Does your facility have an energy management plan? No

Have you identified and prioritized energy conservation opportunities? No

Have you identified opportunities to improve operating and maintenance procedures by employing an energy management plan? No

Has each emission unit proposed herein been evaluated for energy consumption including average and peak electrical use; efficiency of electric motors and suitability of alternative motors such as variable speed; added heat load and/or added cooling load as a result of the operation of the proposed process; added energy load due to building air exchange requirements as a result of exhausting heat or emissions to the ambient air; and/or use of compressors? No

Has your facility considered alternative energy methods such as solar, geothermal or wind power as a means of supplementing all or some of the facility's energy demand? No

Select Applicable Supplemental Form(S)

Equipment Type	PCD ID #	Supplemental Form Record ID
Baghouse or Fabric Filters	EU #1	22TMP-000466-BAG-EU #1

Please Describe If Your Proposed Equipment Is Not Listed In Equipment Type List

Are you proposing Other Air Pollution Control Device (PCD) than list?

Yes

If Yes, please explain in brief

Blue smoke recovery system

Special Fee Provision

Exemption

Exclusion (special agreement or policy)

Substitution (ASP/IRP)

Double Fee for Enforcement

Hardship payment extension request

List Of Documents

Documents

Required Documents:

1. APCD Manufacturer Specifications
2. AQ Modeling Analysis/ Report
3. Applicability Analysis for PSD and/or New Source Review
4. Calculations to Support This Plan Application
5. Detail of Proposed Project Description
6. Process Equipment Manufacturer Specifications including but not limited to emission data
7. Sound Study/ Protocol .

Attachments

Name	Description	Type	Latest Updated
Seekonk Asphalt Corporation - Project Description.pdf	Project Description	Detail of Proposed Project Description	01/28/2022
Seekonk EJ Fact Sheet.pdf	EJ Fact Sheet	Other	01/28/2022
Attachment-Equipment Info.pdf	Equipment Info	Process Equipment Manufacturer Specifications including but not limited to emission data	01/28/2022
Seekonk Modeling Protocol 2022-0126.pdf	Modeling Protocol	AQ Modeling Analysis/ Report	01/28/2022
Attachment-APC Info.pdf	APCD Info	APCD Manufacturer Specifications	01/28/2022
Seekonk Regulatory Review.pdf	Applicability Analysis	Applicability Analysis for PSD and/or New Source Review	01/26/2022
Seekonk Asphalt - BACT Analysis.pdf	BACT Statement	Top Down BACT Analysis	01/28/2022
Seekonk Asphalt Emissions Calcs.pdf	PTE Calculations	Calculations to Support This Plan Application	01/28/2022
Seekonk Modeling Report 2022-0127.pdf	Modeling Report	AQ Modeling Analysis/ Report	01/28/2022
Sound-study.pdf	Sound Report	Sound Study/ Protocol	01/28/2022
Z0001020c-Model.pdf	Equipment layout	Plot Plan	01/28/2022
Sound-forms.pdf	Sound Forms	Sound Study/ Protocol	01/28/2022

Application Contributors

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n/a	Seekonk Asphalt Corporation	Jeffrey Joaquin	(401) 312-6565	Permittee Company	jeff@seekonkasphalt.com

Fee Info

Amount: \$ 2,370.00

Description: AQ02 Fee

Status:

Certification Information

Individual
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