



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR MANAGEMENT

NEW SOURCE REVIEW PERMIT
TO CONSTRUCT AND OPERATE
A STATIONARY SOURCE

Issued pursuant to Title 22a of the Connecticut General Statutes and Section 22a-174-3a of the Regulations of Connecticut State Agencies.

Owner/Operator:	Tilcon Connecticut, Inc.
Address:	P.O. Box 67, North Branford, CT 06471-0067
Equipment Location:	3 Plumtrees Road, Danbury, CT 06811
Equipment Description:	350 TPH Asphalt Batch Plant

Permit Number:	0005
Town/Premises Numbers:	044/0039
Original Permit Issue Date:	03/28/2002
Revision Issue Date:	2/26/2003
Expiration Date:	N/A

Jane K. Stahl for _____
Arthur J. Rocque, Jr.
Commissioner

2/26/03
Date

PERMIT FOR ASPHALT BATCHING EQUIPMENT

**STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION
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The conditions on all pages of this permit and attached appendices shall be verified at all times except those noted as design specifications. Design specifications need not be verified on a continuous basis; however, if requested by the Commissioner, demonstration of compliance shall be shown.

PART I. OPERATIONAL CONDITIONS

- A. Processing Equipment: asphalt plant
- B. Type (batch or drum mix): batch
- C. Maximum Annual Asphalt Production (tons/year): 650,000
- D. Fuel Type(s): No. 2 Fuel Oil and Natural Gas
- E. Maximum Sulfur in Fuel (% by weight): 0.3% for No. 2 Fuel Oil

Design Specifications

- A. Design Maximum Rated Capacity (tons/hour): 350
- B. Maximum Fuel Firing Rate: 740.7 gal/hr No. 2 Fuel Oil and 100,000 ft³/hr
- C. Maximum Heat Input (MM BTU/hr): 100
- D. Minimum Stack Height (ft above grade): 90
- E. Stack Exit Diameter (ft): 5.0
- F. Minimum Gas Flow Rate at Max. Rated Capacity at 100% load(acfm): 69,669
- G. Minimum Distance from Stack to Property Line (ft): 95

PART II. CONTROL EQUIPMENT (Applicable if -X- checked)
(See Appendix E for specifications)

A. Type

- Fabric Filter
- Other: _____

Manufacturer & Model #: Esstee ST-12-732

B. Minimum Efficiency

1. Capture Efficiency (%): _____
2. Removal Efficiency (grains/DSCF): 0.04
3. Overall Efficiency (%): _____

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PART III. MONITORING, REPORTING AND RECORD KEEPING REQUIREMENTS

- A. The Permittee shall monitor asphalt production using component weigh scales.
- B. The Permittee shall monitor the pressure range on the fabric filter.
- C. The Permittee shall keep a record of the monthly and twelve (12) consecutive month asphalt production. The twelve (12) consecutive month asphalt production shall be determined by adding the current month's asphalt production to that of the previous eleven (11) months. The Permittee shall make this calculation within 30 days of the previous month.
- D. The Permittee shall keep all records required by this permit for a period of no less than five (5) years and shall submit such records to the Commissioner upon request.

PART IV. OPERATION AND MAINTENANCE REQUIREMENTS

- A. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.
- B.
 - 1. Control equipment shall be in place and functioning whenever the asphalt batch plant is in operation.
 - 2. The Permittee shall operate, inspect, and maintain the control equipment, specified in Part II and Appendix E of this permit, in accordance with the manufacturer's specifications to achieve the removal efficiencies specified in this permit.
- C. The Permittee shall monitor the pressure range on the fabric filter. If the pressure drop is outside of the recommended range, the baghouse's cleaning schedule shall be modified in accordance with the manufacturer's specifications.

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PART IV. OPERATION AND MAINTENANCE REQUIREMENTS, continued

- D.** The Permittee shall operate this source and premise at all times in a manner so as not to violate or significantly contribute to the violation of any applicable state requirements for the control of fugitive dust emissions, as set forth in Section 22a-174-18(b) of the Regulations of Connecticut State Agencies (hereinafter referred to as the Regulations). The Permittee shall take the following steps to reduce fugitive dust emissions:
1. Minimize fugitive dust emissions from all materials storage piles within the premise.
 2. Minimize fugitive dust emissions from unpaved roads or driveways within the premise through use of water sprays or any other equivalent method. During the winter months water shall be used to the extent that it is feasible and practical so as to not cause a safety hazard.
 3. Sweep paved roadways within the premise to control fugitive dust emissions.
 4. Minimize drag out to paved roads caused by the source's operation through the rinsing of construction equipment with water or any other equivalent method.
 5. Ensure that all open-bodied trucks and vehicles transporting materials likely to give rise to fugitive dust emissions shall be covered at all times when in motion. This condition shall apply to all open-bodied trucks and vehicles entering, exiting and/or conducting business on the premises. For any vehicle which can not be covered due to design, water spray shall be used to prevent fugitive particulate emissions.
 6. Cover conveyors and enclose material transfer points, or use watersprays, as needed.
- E.** The Permittee shall operate this source and all accompanying equipment at all times in a manner so as not to violate or significantly contribute to the violation of any applicable state noise control regulations, as set forth in Sections 22a-69-1 through 22a-69-7.4 of the Regulations.

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PART IV. OPERATION AND MAINTENANCE REQUIREMENTS, continued

F. The Permittee shall comply with state odor regulations, as set forth in Section 22a-174-23 of the Regulations.

PART V. ALLOWABLE EMISSION LIMITS

The Permittee shall not exceed the emission limits stated herein at any time.

Batch Plant:

<u>Criteria Pollutants</u>	<u>#/hr</u>	<u>grains/DSCF</u>	<u>TPY</u>
PM-10	12.38	0.04	11.5
SO _x	13.48		12.5
NO _x	18.5		17.2
VOC	9.66		9.0
CO	106.1		98.5
Pb			

<u>Hazardous Air Pollutants</u>	<u>MASC * (ug/m³)</u>
Benzene	6442
Carcinogenic PAH**	4.3
Arsenic	2.15
Beryllium	0.43

*maximum allowable stack concentration, 8 Hours Hazardous Limiting Value
**Carcinogenic PAH: define as the sum of (Emission Factors from AP-42, Table 11.1-9, 12/00)

Benzo(a)pyrene:	3.1E-10 lb/ton of hot mix asphalt produced
Dibenz(a,h)anthracene:	9.5E-11 lb/ton of hot mix asphalt produced
Benzo(a)anthracene:	4.6E-9 lb/ton of hot mix asphalt produced
Benzo(b)fluoranthene:	9.4E-9 lb/ton of hot mix asphalt produced
Benzo(k)fluoranthene:	1.3E-8 lb/ton of hot mix asphalt produced
Chrysene:	3.8E-9 lb/ton of hot mix asphalt produced
Indeno (1,2,3-cd)pyrene:	3.0E-10 lb/ton of hot mix asphalt produced

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PART V. ALLOWABLE EMISSION LIMITS, continued

Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources:

Emission factors provided by the equipment manufacturer (Gencor);

No.2 Fuel Oil and Natural Gas:

PM: 0.0354 lb/ton

CO: 0.303 lb/ton

VOC: 0.0276 lb/ton

NOx: 0.0528 lb/ton

SOx: 0.0385 lb/ton (Not applicable for Natural Gas)

The above statement shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulations.

PART VI. STACK EMISSION TESTING REQUIREMENTS (Applicable if -X- checked)

Stack emission testing shall be required for the following pollutant(s):

None at this time

TSP SOx NOx

CO VOC PM-10 Pb

Other (HAPS):

PART VII. APPLICABLE REGULATORY REFERENCES (The Regulations of Connecticut State Agencies)

22a-174-3a; 22a-174-18; 22a-174-23; 22a-174-24; 22a-174-29

These references are not intended to be all inclusive -- other sections of the Regulations may apply.

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Town No: 044

Premise No: 39

Permit No: 0005

Stack No: 01

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PART VIII. SPECIAL REQUIREMENTS (Applicable if -X- checked)

The Permittee shall comply with all applicable sections of the following New Source Performance Standards at all times:

40 CFR Part 60, Subpart: [X] I [X] A

(See Appendix C for detailed requirements)

PART IX. ADDITIONAL TERMS AND CONDITIONS

- A. This permit does not relieve the permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency.
B. Any representative of the DEP may enter the permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
C. This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
D. This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby.
E. Any document, including any notice, which is required to be submitted to the Commissioner under this permit shall be signed by a duly authorized representative of the permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the

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PART IX. ADDITIONAL TERMS AND CONDITIONS, continued

submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."

- F.** Nothing in this permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the permittee by the Commissioner.
- G.** Within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the correct or omitted information to the Commissioner.
- H.** The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.
- I.** Any document required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of Assistant Director; Compliance & Field Operations; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

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Appendices attached (Applicable if -X- checked)

- B Stack Emission Test Requirements
- C New Source Performance Standards
- E Control Equipment Specifications

Town No: 044

Premise No:39

Permit No:0005

Stack No:01

APPENDIX E
Control Equipment

Air Pollution Control Equipment (applicable if -X- checked).

A. *Enforceable Conditions* - The following shall be verified at all times.

Fabric Filter

Pressure Drop, range (in. H₂O): 2-5

B. *Design Specifications* - The following specifications need not be verified on a continuous basis, however, if requested by the Bureau, demonstration of compliance shall be shown.

Fabric Filter

Make and Model: Esstee ST-12-732

Number of Bags in Use: 732

Air/Cloth Ratio: 5.5:1

Bag Material: Nomex

Cleaning Method: pulse jet

Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): 77,000

Design Removal Efficiency (grains/ft³): 0.04

Wet Dust Suppression (ultrasonic or equivalent)

Number of Nozzles: _____

Water Flow Rate: _____

Location: _____

Other: _____

Control Equipment Malfunction

A. Equipment or methods which control "air pollutant" "emissions" from a "stationary source" and which are necessary to the operation of such "stationary source" in compliance with applicable "emission standards" and regulations shall be maintained in operation at all times that the "stationary source" is in operation or emitting "air pollutants". This includes instruments required by permit, order, or regulation which measure those source operating parameters which affect air pollutant emissions, air pollution control equipment, or other instruments which measure meteorological data required by permit, order or regulation.

B. No "person" shall deliberately shut down any such control equipment, method or other instruments specified in subsection 22a-174-7(a) while the "source" is in operation except for such necessary maintenance as cannot be accomplished when the "stationary source" itself is not in operation and is not emitting "air pollutants".

APPENDIX E
Control Equipment

Control Equipment Malfunction, continued

- C. In the event of breakdown, failure, or deliberate shut down of any control equipment, method, or other instrument specified in subsection 22a-174-7(a) during which time the "stationary source" will be in operation, all reasonable measures shall be taken to assure resumption of the control equipment as soon as possible. Due diligence shall be exercised to minimize "emissions" while the control equipment or method is inoperative. In the event such shutdown of control equipment or methods is expected or may reasonably be expected to continue for longer than 72 hours, and if the "source" is to be operated at any time during that period, the "Commissioner" shall be notified within twenty-four (24) hours or by 10 o'clock a.m. (10:00am) the following business day, whichever is later. Such notice shall include, but is not limited to, the following:
1. Identification of the specific equipment or instrument taken out, or to be taken out, of service as well as its location, and, where applicable, registration or permit number;
 2. The expected length of time that the "air pollution" control equipment or instrument will be out of service;
 3. The nature and quantity of "emissions" of "air pollutants" likely to be emitted during the shutdown period;
 4. Measures such as the use of offshift labor and equipment that will be taken to minimize the length of the shutdown period;
 5. The reasons that it would be impossible or impractical to shut down the "stationary source" operation during the maintenance period;
- D. The "Commissioner" may attach conditions to the operation of the "source" during the period of shutdown or breakdown.