NRO-046-10

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193-1453
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

February 17, 2010

Mr. David M. Horton
Plant Manager
Virginia Paving Company
5601 Courtney Avenue
Alexandria, Virginia 22304

Registration No.: 70579

Dear Mr. Horton:

Attached is a minor new source review permit to modify and operate an asphalt concrete plant located in Alexandria in accordance with the provisions of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution (Regulations). This amended permit supersedes your permit dated July 20, 2006. This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

The Department of Environmental Quality (DEQ) deemed the application complete on August 5, 2009, and has determined that the application meets the requirements for modification of a stationary source, as stated in 9 VAC 5-80-1100. The Department solicited written public comments by placing a newspaper advertisement in the Alexandria Gazette Packet on November 5, 2009. The required comment period, provided by 9 VAC 5-80-1170 D, expired on December 10, 2009. A public hearing was held on December 10, 2009.

This permit approval to modify and operate shall not relieve Virginia Paving Company of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within thirty days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-200 provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

A copy of the results of performance test required by 40 CFR 60, Subparts I and OOO, shall be sent to:

Associate Director
Office of Air Enforcement (3AP12)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

If you have any questions concerning this permit, please contact the regional office at 703.583.3800.

Sincerely,

Terry H. Darton
Regional Air Permit Manager

TAF/THD/AK/10-046-mnsr

Attachments: Permit
Source Testing Report Format

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP12), U.S. EPA, Region III
Division Chief for Environmental Quality, City of Alexandria
Regional Air Compliance Manager (electronic file submission)

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Thomas A. Faha
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STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE
This permit includes designated equipment subject to New Source Performance Standards (NSPS).

This permit supersedes your permit dated July 20, 2006.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Virginia Paving Company
5601 Courtney Avenue
Alexandria, Virginia 22304
Registration No.: 70579

is authorized to modify and operate

an asphalt concrete plant

located at

5601 Courtney Avenue
City of Alexandria, Virginia 22304

in accordance with the Conditions of this permit.

Approved on: February 17, 2010.

Thomas A. Faha
Regional Director

Permit consists of 18 pages.
Permit Conditions 1 to 42.

INTRODUCTION

This permit approval is based on the permit applications dated January 4, 2007, and January 26, 2007; and supplemental information dated February 28, 2007, May 10, 2007, May 15, 2007, December 27, 2007, August 3, 2009; and stack test report dated April 30, 2009. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-80-1110 (definitions) and 9 VAC 5-10-20 of the State Air Pollution Control Board's (Board) Regulations for the Control and Abatement of Air Pollution (Regulations). The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the Department of Environmental Quality (DEQ) or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

1. **Equipment List** - Equipment to be permitted at this facility consists of the following:

Equipment to be Modified				
Reference No.	**Equipment Description**	**Rated Capacity**	**Federal Requirements**	
P:1	A counter flow drum mix asphalt concrete plant, CMI model STD600 with Hauck Eco Star II model 175B w/low NOx burner	600 tons/hour hot mix asphalt concrete product	NSPS, subpart I	
H:1	Asphalt cement heater, Gencor – Hy Way model HYTGO-340 hot oil heater	3.4 million Btu/hour	-	
H:2	Asphalt cement heater, Heatec HC-120 hot oil heater (backup to H:1)	1.5 million Btu/hour	-	

Equipment permitted prior to the date of this permit				
Reference No.	**Equipment Description**	**Rated Capacity**	**Federal or State Requirements**	**Original Permit Date**
P:2	A counter flow drum mix asphalt concrete plant, CMI model STD400 with Hauck Eco Star burner	400 tons/hour hot mix asphalt concrete product	NSPS, subpart I	2/17/2005, 7/20/2006
RAP	A recycled asphalt product processing plant	125 tons/hour	NSPS, subpart OOO	2/17/2005, 7/20/2006

Equipment Exempt from Permitting			
Reference No.	**Equipment Description**	**Rated Capacity**	**Exemption Citation**
1A, 1B	Two tanks for office heating fuel	500 gallons capacity, each	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
2	Motor oil storage tank	500 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
3	ATF AST storage tank inside the shop	500 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
4, 5	Two diesel fuel storage tanks	6000 gallons capacity, each	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
6	Gasoline dispensing facility storage tank	6000 gallons capacity	9 VAC 5-40-5220 E. , F., or 9 VAC 5-80-1320 B.8.
7	Recycled fuel oil storage tank	275 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
8	Kerosene fuel oil storage tank	275 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
9, 10	TACK storage tanks	10,000 gallons capacity, each	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
11	Recycled fuel storage tank	20,000 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
12	Diesel fuel storage tank	5,000 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
13, 14, 15	Three AC/asphalt storage tanks	20,000 gallons capacity, each	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
16	Liquid AC/asphalt storage tank	17,000 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
17	Asphalt additive storage tank	17,000 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8.
18	Petroleum, oils and lubricating fluids	55 gallons capacity	9 VAC 5-40-5200 C., or 9 VAC 5-80-1320 B.8
100-A	Parts cleaning machine, Purewash S620	40 gallons capacity	9 VAC 5-80-1320 D., Note: Subject to 9 VAC 5-40-6820 to 9 VAC 5-40-6960

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.
(9 VAC 80-1180 D 3)

2. **NOx Emission Controls: Asphalt Plant Dryer -** Emissions of nitrogen oxides (as NO_2) from the dryer for CMI model STD600 asphalt plant (Ref. # P:1) shall be limited through the use of a low NOx burner, Hauck Eco Star II model 175B; and the dryer for CMI model STD400 asphalt plant (Ref. # P:2) shall be limited through the use of low NOx burner, Hauck Eco Star. The emissions from use of natural gas as burner fuel for the CMI model STD600 asphalt plant (Ref. # P:1) shall be controlled further by the use of flue gas recirculation. The equipment shall be provided with adequate access for inspection and shall be in operation when the drum dryer is operating.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

3. **Emission Controls: Asphalt Plant -** Particulate emissions from each drum dryer (Ref. # P:1 and P:2) shall be controlled by a fabric filter baghouse. The fabric filter shall be provided with adequate access for inspection and shall be in operation when the drum dryer is operating.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

4. **Monitoring Devices** - Each drum dryer's fabric filter baghouse shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter baghouse is operating.

   The permittee shall record the differential pressure drop readings on a daily basis, in a log book, when the plant is operating. These records shall be maintained on site and be available for inspection. Such records shall be current for the most recent five-year period.
(9 VAC 5-80-1180 D, 9 VAC 5-50-20 C and 9 VAC 5-50-260)

5. **Fugitive Dust Emission Controls** – Fugitive emission controls shall include the following, or equivalent, as approved by the DEQ:

   a. Dust from material handling, load-outs, and the RAP crusher shall be controlled by wet suppression or equivalent (as approved by the DEQ).

   b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling, or covered at all times to minimize emissions.

   c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.

   d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

   e. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any

other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.
(9 VAC 5-50-90 and 9 VAC 5-50-260)

OPERATING LIMITATIONS

6. **Production** - The hourly production of asphalt concrete from the CMI model STD400 plant (Ref. # P:2) shall not exceed 310 tons per hour, as demonstrated from hourly plant production records maintained on site.
(9VAC 5-80-1180)

7. **Production** - Total production of asphalt concrete shall not exceed the following, calculated monthly as the sum of each twelve consecutive month period:

   Unit 1 (Ref. # P:1) – 810,000 tons per year
   Unit 2 (Ref. # P:2) – 170,000 tons per year

   Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.
(9 VAC 5-80-1180)

8. **Fuel** - The approved fuels for the asphalt plants, Units 1 and 2 (Ref. # P:1 and P:2) are No. 2 distillate fuel oil, recycled fuel oil and natural gas that do not exceed the specifications provided in Condition 10. Natural gas may be used as an approved fuel for the equipment that is appropriately designed to accommodate this fuel. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-1180)

9. **Fuel** - The approved fuels for the liquid asphalt storage tank heaters are No. 2 distillate fuel oil and natural gas that do not exceed the specifications provided in Condition 10. Natural gas may be used as an approved fuel for the equipment that is appropriately designed to accommodate this fuel. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-1180)

10. **Fuel Specifications** - The fuels shall meet the specifications below:

DISTILLATE OIL which meets the ASTM specifications for numbers 1 or 2 fuel oil:	
Maximum sulfur content per shipment:	0.5%
RECYCLED/USED OIL	
Maximum Sulfur Content (weight percent)	0.5%
Maximum halogen (as chlorine) content (parts per million)	1000 ppm

PCB (parts per million)	49	ppm
Chromium (parts per million)	10	ppm
Lead (parts per million)	100	ppm
Arsenic (parts per million)	5	ppm
Cadmium (parts per million)	2	ppm
Flash Point (minimum)	100° F	

NATURAL GAS of pipeline quality (with estimated heat content of 1000 Btu/scf HHV).
(9 VAC 5-80-1180)

11. **Fuel Certification: Distillate Oil** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

    a. The name of the fuel supplier;

    b. The date on which the distillate oil was received;

    c. The volume of distillate oil delivered in the shipment;

    d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM) for numbers 1 or 2 fuel oil; and

    e. The sulfur content of the distillate oil.

    (9 VAC 5-170-160)

12. **Fuel Certification: Recycled/Used Oil** - The permittee shall obtain a certification from the recycled/used oil supplier, including sampling and analysis representative of each shipment purchased. Each used oil supplier certification shall include the following:

    a. The name of the fuel supplier;

    b. The date on which the recycled/used oil was received;

    c. The volume of recycled/used oil delivered in the shipment;

    d. The content of arsenic, cadmium, chromium, lead, PCBs, and halogens with the recycled/used oil in ppm, by weight;

    e. The sulfur content of the recycled/used oil;

    f. The flash point of the recycled/used oil;

g. Documentation of the recycled/used oil analysis indicating the location of the recycled/used oil when the sample was drawn; and

h. The test methods used to determine the contaminant level in the recycled/used oil.
(9 VAC 5-170-160)

13. **Fuel Throughput** - The total throughput of No. 2 distillate fuel oil for the liquid asphalt storage tank heaters, Gencor – Hy Way model HYTGO-340, and the Heatec model HC-120 (Ref. # H:1 and H:2), shall not exceed 120,000 gallons per year, calculated monthly as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months. Natural gas may be used instead of distillate fuel oil in the asphalt heaters. The throughput of natural gas shall not exceed 16.6 million cubic feet per year, calculated monthly as the sum of each consecutive twelve-month period, which is equivalent in heat value to the fuel oil limit of 120,000 gallons per year. If both natural gas and distillate fuel oil are used in the heaters, the throughputs shall be reduced such that their combined total emissions, calculated using the emission factors in Condition 20, do not exceed the annual emission limits specified in Condition 21.
(9 VAC 5-80-1180)

14. **Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the NSPS equipment as described in Condition 1 shall be operated in compliance with the requirements of 40 CFR 60 Subpart I (applicable to hot mix asphalt facilities) and Subpart OOO (applicable to the RAP crusher as non-metallic mineral processing equipment).
(9 VAC 5-80-1180, 9 VAC 5-50-400 and 9 VAC 5-50-410)

15. **Testing/Monitoring Ports** – The facility shall be modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested by the DEQ at the appropriate locations and safe sampling platforms and access shall be provided.
(9 VAC 5-50-30 F and 9 VAC 5-80-1180)

EMISSION LIMITS

16. **Emission Limits: Asphalt Dryers** - Emissions from the operation of the drum dyers (Ref. # P:1 and P:2) shall not exceed the particulate matter limit of 0.04 grains/dry standard cubic foot (gr/dscf) of exhaust gas as measured by EPA Method 5 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-260, 9 VAC 5-50-400, 9 VAC 5-50-410 and 9 VAC 5-80-1180)

17. **Emission Limits: Asphalt Dryers** - Emissions from the operation of the drum dryers (Ref. #P:1 and P:2) shall not exceed the limits specified below:

	Unit 1	Unit 2
Nitrogen Oxides (as NO_2)		
Using recycled or distillate oil	0.052 lb/ton	0.063 lb/ton
Using natural gas	0.024 lb/ton	0.029 lb/ton
Carbon Monoxide		
Using recycled or distillate oil	0.084 lb/ton	0.073 lb/ton
Using natural gas	0.082 lb/ton	0.092 lb/ton
Volatile Organic Compounds (VOCs)		
Using recycled or distillate oil	0.020 lb/ton	0.020 lb/ton
Using natural gas	0.030 lb/ton	0.030 lb/ton
Sulfur Dioxide (SO2)		
Using recycled or distillate oil	0.034 lb/ton	0.034 lb/ton
Using natural gas	0.0034 lb/ton	0.0034 lb/ton
PM10 (filterable and condensable)	0.036 lb/ton	0.029 lb/ton
PM-2.5 (filterable and condensable)	0.036 lb/ton	0.027 lb/ton

The above emission limits are in pounds per ton of asphalt produced, and derived from earlier stack testing conducted at the facility and manufacturer data at or near the maximum design capacity of the drum dryer plants. The permittee shall conduct emissions testing for nitrogen oxides (as NO_2) when natural gas becomes available as an alternative fuel for the facility, as stated in Condition 25. The permittee may also conduct emissions testing to establish fuel specific emission factors, if approved by DEQ. In addition, the facility may be subject to additional testing, if required by the DEQ, to demonstrate continuing compliance with the pollutant emission limits for Unit 1 or Unit 2 drum mix asphalt plants (Ref. # P:1 and P:2). These emission values shall be used as emission factors to calculate and demonstrate compliance with the annual emission limits provided in Condition 18. (9 VAC 5-50-260)

18. **Hourly Emission Limits: Asphalt Dryers** - Maximum hourly emissions from the operation of the drum dryers (Ref. #P:1 and P:2) are determined as specified below:

	Unit 1 Ref. # P:1	Unit 2 Ref. # P:2
Nitrogen Oxides (NO_2)	31.20 lbs/hr	19.53 lbs/hr
Carbon Monoxide	50.40 lbs/hr	28.52 lbs/hr
Sulfur Dioxide	20.40 lbs/hr	10.54 lbs/hr
PM10 (filterable and condensable)	21.60 lbs/hr	8.99 lbs/hr
PM-2.5 (filterable and condensable)	21.60 lbs/hr	8.37 lbs/hr
Volatile Organic Compounds (VOCs)	18.00 lbs/hr	9.30 lbs/hr

These emissions are derived from the limits given in Condition 17, and the maximum rated or permitted capacity for each drum dryer unit. The emissions are provided for informational and inventory purposes only. Compliance with the emission limits will be determined based on Conditions 17 and 19.
(9 VAC 5-50-260 and 9 VAC 5-80-1180)

19. **Emission Limits: Asphalt Dryers** – Total annual emissions from the operation of the counter flow dryers (Ref. # P:1 and P:2) shall not exceed the limits specified below:

Nitrogen Oxides (NO_2)	26.42	tons/yr.
Carbon Monoxide	41.84	tons/yr.
Sulfur Dioxide	16.66	tons/yr.
PM10 (filterable and condensable)	17.05	tons/yr.
PM-2.5 (filterable and condensable)	16.88	tons/yr.
Volatile Organic Compounds (VOCs)	14.70	tons/yr.
Formaldehyde	1.52	tons/yr.
PAH*	0.43	tons/yr.

*Evaluated against worst case scenario of anthracene exemption levels.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 7, 8, 10, 16 and 17.
(9 VAC 5-80-1180, 9 VAC 5-50-260 and 9 VAC 5-60-320)

20. **Emission Limits: Asphalt Heaters** – Emissions from the operation of the asphalt cement heaters (Ref. # H:1 and H:2) shall not exceed the limits specified below, and shall be used in the calculation of the annual emissions, as limited in Condition 21.:

	Distillate Fuel Oil	Natural Gas
Nitrogen Oxides (as NO_2)	20 lb/1000 gal.	100 lb/million scf.
Carbon Monoxide	5 lb/1000 gal.	84 lb/million scf.
Volatile Organic Compounds (VOCs)	0.34 lb/1000 gal.	5.5 lb/million scf.
PM10 (filterable and condensable)	2.3 lb/1000 gal.	7.6 lb/million scf.
PM-2.5 (filterable and condensable)	2.1 lb/1000 gal.	7.6 lb/million scf.
Sulfur Dioxide (SO_2)	71 lb/1000 gal.	0.6 lb/million scf.
(SO_2 factor for oil = 142 x max. sulfur content)		(scf. = standard cubic feet)

Compliance shall be based on the proper operation and maintenance of the heaters using the approved fuels and by testing, if required by DEQ.
(9 VAC 5-50-260)

21. **Emission Limits: Asphalt Heaters** – Total annual emissions from the operation of the asphalt cement heaters (Ref. #H:1 and H:2) shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	1.20	tons/yr.
Sulfur Dioxide	4.26	tons/yr.
CO	0.70	tons/yr.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 9, 10, and 13.
(9 VAC 5-50-260 and 9 VAC 5-80-1180)

22. **Visible Emission Limit: Baghouse** - Visible emissions from each asphalt plant baghouse exhaust shall not exceed 5% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

23. **Visible Emission Limit: RAP Processing Plant** - Visible emissions from the RAP processing plant shall not exceed 10% opacity, as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-1180, 9 VAC 5-50-260 and 9 VAC 5-50-410)

INITIAL COMPLIANCE DETERMINATION

24. **Stack Testing Verification Meeting** - The permittee shall arrange to meet with the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO) to discuss any further stack testing of the asphalt plants (Ref. # P:1 and P:2). The meeting shall take place prior to the submittal of the final stack test protocol and is required in order for the protocol to be accepted.
(9 VAC 5-80-1180)

25. **Stack Test: Drum Dryer** - Initial performance tests have been conducted for particulate matter, PM10 and PM2.5 (filterable and condensable), nitrogen oxides (as NO_2), sulfur dioxide (SO_2), carbon monoxide and volatile organic compounds emissions from the exhaust of both asphalt plants (Ref. # P:1 and P:2) operating on recycled/ used fuel oil using EPA reference methods 1-5, 6, 7E, 10, OTM-027 and 25Aap, as approved by the DEQ, to determine compliance with the emission limits contained in Conditions 16 and 17. Initial performance tests shall also be conducted for nitrogen oxides (as NO_2), carbon monoxide and volatile organic compounds from the exhaust stack of each asphalt plant (Ref. # P:1 and P:2) with the burner operating on natural gas, when available on site. The results of the tests may be used to establish revised emission limits for operation of each plant with natural gas. Initial performance tests may be conducted for nitrogen oxides (as NO_2) using

distillate (No. 2) fuel oil, if the permittee chooses to establish unique emission factors for such operation as compared to the previous test results using recycled/used fuel oil. Testing shall be performed with the asphalt plants (Ref. # P:1 and P:2) producing 80% or more of its rated or permitted hot mix asphalt output. The tests for compliance with natural gas emission limits shall be performed within 90 days of the plants commencing operation using natural gas. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO). The permittee shall submit a test protocol at least thirty days prior to testing. Two copies of the test results shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO within sixty days after test completion and shall conform to the test report format enclosed with this permit. One copy of the test results shall be sent to EPA Region III within forty-five days after test completion at the address in the cover letter of this permit.

All correspondence to the DEQ concerning this permit should be submitted to the following address:

Regional Air Compliance Manager
Department of Environmental Quality
NRO
13901 Crown Court
Woodbridge, VA 22193
(9 VAC 5-50-30, 9 VAC 5-80-1200 and 9 VAC 5-50-410)

26. **Visible Emission Evaluation: Baghouse -** Concurrently with the initial performance tests to be conducted when natural gas becomes available for facility use, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the permittee on the visible emissions exhaust from the asphalt plants (Ref. # P:1 and P:2) with their burners operating on natural gas to determine compliance with the emission limit contained in Condition 22. The permittee may also conduct VEE for the plants using distillate fuel oil to demonstrate compliance with the emission limit contained in Condition 22. Testing shall be performed with each asphalt plant (Ref. # P:1 and P:2) producing 80% or more of its rated hot mix asphalt output. Each test shall consist of thirty sets of twenty-four consecutive observations (at fifteen second intervals) to yield a six minute average. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 25). The permittee shall submit a test protocol at least thirty days prior to testing. The tests for compliance with the natural gas opacity limits shall be performed within 90 days of the plants commencing operation using natural gas. Should conditions prevent concurrent opacity observations, the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 25) shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within thirty days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 25) within forty-five days after test completion and shall conform to the test report format enclosed with this permit. One copy

of the test results shall be sent to EPA Region III within forty-five days after test completion at the address in the cover letter of this permit.
(9 VAC 5-50-30, 9 VAC 5-80-1200, and 9 VAC 5-50-410)

27. **Visible Emissions Evaluation: RAP Processing Plant -** Within 180 days from the date of this permit, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the permittee on the RAP processing plant to determine compliance with the emission limit contained in Condition 23. Each test shall consist of thirty sets of twenty-four consecutive observations (at fifteen second intervals) to yield a six minute average. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 25). The permittee shall submit a test protocol at least thirty days prior to testing. The evaluation shall be performed, reported and demonstrate compliance within ninety days after the permit issue date. Two copies of the test result shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 25) within forty-five days after test completion and shall conform to the test report format enclosed with this permit. One copy of the test results shall be sent to EPA Region III within forty-five days after test completion at the address in the cover letter of this permit.
(9 VAC 5-50-30, 9 VAC 5-80-1200, and 9 VAC 5-50-410)

28. **Visible Emissions Evaluation RAP Processing Plant -** Visible Emission Evaluations (VEE) required in Condition 23 on the RAP processing plant may be reduced to ten sets of twenty-four consecutive observations (at fifteen second intervals) to yield a six minute average if:

    a. There are no individual readings greater than 10% opacity for the RAP processing plant, and

    b. There are no more than three readings of 10% opacity for the one hour period for the RAP processing plant.

    (9 VAC 5-180-1200, 40 CFR 60.675(C)(4) and 9 VAC 5-50-410)

CONTINUING COMPLIANCE DETERMINATION

29. **Stack Tests** - Upon request by the DEQ, the permittee shall conduct additional performance tests to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO at the address referenced in Condition 25.
(9 VAC 5-80-1200 and 9 VAC 5-50-30 G)

30. **Visible Emissions Evaluation** - Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO at the address referenced in Condition 25.
(9 VAC 5-80-1200 and 9 VAC 5-50-30 G)

RECORDS

31. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO at the address referenced in the Condition 25. These records shall include, but are not limited to:

    a. Hourly production of asphalt concrete for Plant 2 (Ref. #P:2), that demonstrate compliance with the hourly production limit (as referenced in Condition 6).

    b. Annual production of asphalt concrete for each asphalt plant (as referenced in Condition 7), calculated monthly as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

    c. Annual throughput of No. 2 distillate fuel oil and natural gas for the asphalt cement heaters (as referenced in Condition 13), calculated monthly as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

    d. All fuel supplier certifications (as referenced in Conditions 10, 11, and 12).

    e. The daily fabric filter baghouse differential pressure gauge readings as required by Condition 4.

    f. Monthly emission calculations or data necessary to demonstrate compliance with the emission limits contained in Conditions 19 and 21.

    g. Annual throughput of the solvent (TEKUSOLV II) used in the parts cleaning machine (Ref. #100-A), calculated as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

    h. Results of all stack tests, visible emission evaluations and performance evaluations.

    i. Records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. The records shall be maintained in a form suitable for inspection and maintained for at least two years (unless a longer period is specified in the applicable emission standard) following the date of the occurrence.

    These records shall be available for inspection by the DEQ and shall be current for the most recent five years, unless otherwise noted.
    (9 VAC 5-80-1180 and 9 VAC 5-50-50)

NOTIFICATIONS

32. **Initial Notifications** - The permittee shall furnish written notification to the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 25) of:

    a. The actual date on which modification of the burner for the Unit 1 drum mix asphalt plant (Ref. # P:1) commenced within fifteen days after permit issue date.

    b. The actual start-up date of the Unit 1 drum mix asphalt plant (Ref. # P:1) with the new burner, within fifteen days after permit issue date.

    c. The anticipated start-up date of the drum mix asphalt plants (Ref. # P:1 and P:2) with the burners operating on natural gas (when natural gas becomes available for use at the facility), postmarked not more than sixty days nor less than thirty days prior to such date.

    d. The anticipated date of performance tests of the drum mix asphalt plant (Ref. # P:1 and P:2) with the new burner when operating on natural gas as stated in Conditions 25 and 26, postmarked at least thirty days prior to such date.

    Copies of the written notifications referenced in items a and b above are to be sent to:

    Associate Director
    Office of Air Enforcement (3AP10)
    U.S. Environmental Protection Agency
    Region III
    1650 Arch Street
    Philadelphia, PA 19103-2029

    (9 VAC 5-50-50 and 9 VAC 5-80-1180)

GENERAL CONDITIONS

33. **Certification of Documents**

    A. The following documents submitted to the Board shall be signed by a responsible official: (i) any emission statement, application, form, report, or compliance certification; (ii) any document required to be signed by any provision of the regulations of the Board; or (iii) any other document containing emissions data or compliance information the owner wishes the Board to consider in the administration of its air quality programs. A responsible official is defined as follows:

        1. For a business entity, such as a corporation, association or cooperative, a responsible official is either:

            a. The president, secretary, treasurer, or a vice president of the business entity in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the business entity; or

b. A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars) or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.

2. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.

3. For a municipality, state, federal, or other public agency, a responsible official is either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of the principal geographic unit of the agency.

B. Any person signing a document under subsection A above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Subsection B shall be interpreted to mean that the signer must have some form of direction or supervision over the persons gathering the data and preparing the document (the preparers), although the signer need not personally nor directly supervise these activities. The signer need not be in the same line of authority as the preparers, or do the persons gathering the form need to be employees (e.g., outside contractors can be used). It is sufficient that the signer has authority to assure that the necessary actions are taken to prepare a complete and accurate document.

(9 VAC 5-20-230)

34. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:

a. Knowingly makes material misstatements in the permit application or any amendments to it;

b. Fails to comply with the conditions of this permit;

c. Fails to comply with any emission standards applicable to a permitted an emissions unit, included in this permit;

d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or

e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9 VAC 5-80-1210 F)

35. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

    a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

    b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

    c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and

    d. To sample or test at reasonable times.

    For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
    (9 VAC 5-170-130 and 9 VAC 5-80-1180)

36. **Maintenance/Operating Procedures** – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such

equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

37. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9VAC 5-20-180 J and 9 VAC 5-80-1180 D)

38. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 25) of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO in writing.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

39. **Notification for Control Equipment Maintenance** - The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 25) of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least twenty-four hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

    a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;

    b. The expected length of time that the air pollution control equipment will be out of service;

    c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;

    d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

    (9 VAC 5-20-180 B)

40. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I and 9 VAC 5-80-1180)

41. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Regional Air Compliance Manager of the DEQ's NRO at the address referenced in Condition 25 of the change of ownership within thirty days of the transfer.
(9 VAC 5-80-1240)

42. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)

SOURCE TESTING REPORT FORMAT

Report Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Test Dates.
4. Tester; name, address and report date

Certification

1. Signed by team leader/certified observer (include certification date)
2. Signed by responsible company official
3. *Signed by reviewer

Copy of approved test protocol

Summary

1. Reason for testing
2. Test dates
3. Identification of unit tested & the maximum rated capacity
4. *For each emission unit, a table showing:
   a. Operating rate
   b. Test Methods
   c. Pollutants tested
   d. Test results for each run and the run average
   e. Pollutant standard or limit
5. Summarized process and control equipment data for each run and the average, as required by the test protocol
6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
7. Any other important information

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results

1. Detailed test results for each run
2. *Sample calculations
3. *Description of collected samples, to include audits when applicable

Appendix

1. *Raw production data
2. *Raw field data
3. *Laboratory reports
4. *Chain of custody records for lab samples
5. *Calibration procedures and results
6. Project participants and titles
7. Observers' names (industry and agency)
8. Related correspondence
9. Standard procedures

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* Not applicable to visible emission evaluations