



Puget Sound Clean Air Agency

Notice of
Construction No.

11328

HEREBY ISSUES AN ORDER OF APPROVAL
TO CONSTRUCT, INSTALL, OR ESTABLISH

Registration No. 21300
Date

DRAFT

Add and replace equipment at an existing Asphalt Plant. Addition of three 200 ton asphaltic concrete silos and one 500 barrel mineral silo. Replacement of the drum dryer at an existing continuous/batch Asphalt Plant consisting of: one new 300XL Gencor Rotary UltraDrum (375 TPH, Gencor Equinox -100, 100 MMBtu/hr gas-fired burner) equipped with a Recycle Asphalt Package (up to 50% RAP) and Ultrafoam GX2 warm mix package venting to an existing cyclone and existing Gencor CFS-151 (74,000 cfm baghouse) rated at 70,000 cfm @ 160F; two existing vertical 25,000-gallon (11'x35') Gencor Hot Asphalt Oil Tanks (300F), one existing 150-ton and one existing 120-ton Gencor Asphalt Storage Silos vented to the Rotary Drum; and an existing horizontal MC-250 Tank.

APPLICANT

**Icon Materials Inc #2604
1508 Valentine Ave SE
Pacific, WA 98047**

OWNER

**Icon Materials Inc #2604
1508 Valentine Ave SE
Pacific, WA 98047**

INSTALLATION ADDRESS

Icon Materials Inc #2604, 1115 S 96th St, Seattle, WA 98108

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND CONDITIONS

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the INSTALLATION ADDRESS in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.
2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.

NSPS

3. The hot mix asphalt facility is an affected facility under 40 CFR Part 60, Subparts I and A.

BACT

4. The 300XL Gencor Rotary UltraDrum dryer shall be fired only on natural gas. The existing Gencor Ultradrum rotary mixer shall be removed from service prior to the first operation of the 300XL Gencor Rotary Ultradrum Dryer. A record of the date of the last operation of the existing Gencor Ultradrum rotary mixer shall be kept on file for Agency inspection.
5. The following emission limitations are set on the dryer/mixer stack:
 - a. Total particulate matter emissions shall not exceed 0.027 gr/dscf (corrected to 7% O₂) as measured by U.S. EPA Method 5 as modified by Puget Sound Clean Air Agency Board Resolution 540 dated August 11, 1983.

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- b. Filterable particulate matter emissions shall not exceed 0.014 gr/dscf (corrected to 7% O₂) as measured by U.S. EPA Method 5 as modified by Puget Sound Clean Air Agency Board Resolution 540 dated August 11, 1983.
- c. Opacity shall not exceed 5% opacity for a period or periods aggregating more than 3 minutes during any one hour as measured by WDOE Method 9A.
- d. Emissions of oxides of nitrogen shall not exceed 32.0 ppmvd (corrected to 7% O₂) as determined in accordance with Section 3.07 of PSCAA Regulation I using USEPA reference methods 1, 3A, 4, and 7E from Appendix A of 40 CFR Part 60 by the average of three 60-minute test runs.
- e. Emissions of carbon monoxide shall not exceed 311.0 ppmvd (corrected to 7% O₂) as determined in accordance with Section 3.07 of PSCAA Regulation I using USEPA reference methods 1, 3A, 4, and 10 from Appendix A of 40 CFR Part 60 by the average of three 60-minute test runs.
- f. Emissions of Non-Methane/Non-Ethane VOC (NMNEVOC) shall not exceed 0.032 lb NMNEVOC per ton of hot mixed asphaltic concrete produced as determined in accordance with Section 3.07 of PSCAA Regulation I using EPA reference methods 1, 3A, 4, and 25A (using either an FID with a methane “cutter”, OR using EPA Method 320 or EPA Method 18 to analyze for methane and ethane, and subtracting the methane and ethane results from the total VOC measured by the FID analyzer) from Appendix A of 40 CFR Part 60 by the average of three 60-minute test runs. NMNEVOC shall be expressed as propane. Other equivalent test methods may be used with the approval of the Agency. If other test methods are desired, the owner or operator must submit a test plan for Agency approval at least 30 days prior to the test which describes the test methods proposed for use.”
- g. There shall be no visible emissions from the Recycled Asphalt (RA) collar.

6. There shall be no visible emissions from each of the hot mix asphaltic concrete storage silos, drag conveyor(s), and mineral silo.
7. The temperature of the asphaltic concrete mix exiting the dryer shall not exceed the optimum mix temperature +25F for each product specification as set out in the product’s WSDOT Mix Design Evaluation Report. Documentation of each product’s WSDOT Mix Design Evaluation Report including optimum mix temperature shall be kept on file and incorporated into the Operations and Maintenance plan required by Agency Regulation I, Section 5.05(c).
8. The combined total recycled asphalt (RAP) added to the drum shall not exceed on a 3-hour average hourly basis the greatest total RAP percentage by weight used in a passing source test of both conditions 5.a, 5.b., and 5.c until a new test is conducted.
9. Icon shall not include Recycled Asphalt Shingles in the produced asphaltic concrete.

SOURCE TESTING

10. During production of hot mix asphalt, Icon shall have emissions tested for compliance with Conditions 5.a, 5.b, 5.c, 5.d, 5.e, 5.f of this Order within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility. The emission tests listed in this requirement shall be repeated at an interval no less than once every five years. Note: the initial tests demonstrating compliance with Conditions 5.b and 5.c can also be used to demonstrate compliance with the NSPS (Condition 3) emission limits provided the Department of Ecology Method 9a test data is collected for three one-hour test runs. Tests shall be conducted with a mix temperature of 275F or greater. Icon shall submit a compliance test plan with the test notification

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submitted under Regulation I, Section 3.07(b).

11. During production of warm mix asphalt, Icon shall have emissions tested for compliance with Conditions 5.a, 5.b, 5.c, 5.d, 5.e, 5.f of this Order within 90 days after receiving an order for warm mix of 1,000 tons or greater. Warm Mix Asphalt production shall be defined as a mix temperature of less than 275F. The emission tests listed in this requirement shall be repeated at an interval no less than once every five years. If, after the initial tests are conducted, the Warm Mix VOC emission rates in pounds per ton are less than the Hot Mix VOC emission rates then the periodic testing of Warm Mix Asphalt operation is not required. Icon shall submit a compliance test plan with the test notification submitted under Regulation I, Section 3.07(b).
12. Icon may conduct an emission test as set out in Condition 10 at any time (given notification as required in Regulation I, Section 3.07(b)) for the purposes of setting the RAP limit in Condition 8. Icon shall submit a compliance test plan with the test notification submitted under Regulation I, Section 3.07(b).
13. During the emission tests required by conditions 10, 11, and 12 the following operation data shall be collected during each test run and reported in the source test report:
 - a. Tons of production of asphaltic concrete;
 - b. standard cubic feet of fuel combusted;
 - c. tons of RAP included in the mix;
 - d. Maximum temperature of mix as it exits the dryer;
 - e. aggregate moisture percentage (as measured by the Quality Control lab for a representative sample taken the day of the test);
 - f. asphalt cement content percentage;
 - g. baghouse pressure drop;
 - h. baghouse fan speed (as a percentage of full speed);
 - i. baghouse pulse cycle time;
 - j. burner water injection nozzle pressure (psig) ; and
 - k. flue gas damper setting (as a percentage of maximum opening);
 - l. Product specification produced during the run, a copy of the specification and maximum temperature allowed by the specification.

PLANT MAINTENANCE

14. The baghouse shall be equipped with a gauge measuring the pressure drop across the baghouse. The pressure gauge shall be in operation whenever the baghouse is in operation. The pressure gauge shall be marked with the acceptable pressure drop range. The maximum acceptable pressure drop shall be determined from manufacturer specifications for the bags used in the baghouse. The minimum acceptable pressure drop shall be determined from manufacturer specifications for the bags used in the baghouse. The pressure drop observed during the most recent compliance source test shall fall within the defined acceptable range of pressure drop. The acceptable range and the basis for the range shall be included in the facility Operations and Maintenance plan required by Agency Regulation I, Section 5.05(c).

OPERATIONS AND MAINTENANCE PLAN

15. When operating, Icon Materials shall monitor and record the following information:

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- (a) one daily pressure drop across the baghouse;
- (b) one daily inspection for visible emissions and particulate fallout for the baghouse, silos, conveyors, RA collar, and asphalt storage tanks;
- (c) hourly weight of RAP used, plus the hourly weight of asphalt produced;
- (d) calculated 3-hour average RAP total percent by weight usage;
- (e) annual (12 consecutive months rolling total) asphalt production; and
- (f) Daily fuel use.
- (g) one mix temperature reading recorded for each hour in which the mixer operates.
- (h) the product specification produced and the hour it was produced.
- (i) the time (in hours) the mixer operated.

ANNUAL PRODUCTION LIMITATION

- 16. Annual asphalt production from the rotary dryer plant shall not exceed either 2,720 hours of total operation or 1,020,184 tons production per year as a 12 consecutive months rolling total.
- 17. A notification of a violation of Condition 15 shall be sent to Puget Sound Clean Air Agency within 30 days following any month when either the dryer hours of operation exceed 2,720 hours or the 12 consecutive months rolling total exceeds 1,020,184 tons per year of asphalt production.

EMISSION LIMITATION

- 18. Facility-wide emissions of carbon monoxide shall not exceed 99.0 tons during any during any 12 consecutive months after the date of this Order.
- 19. Within 30 days of the end of each month, Icon Materials shall calculate the facility-wide carbon monoxide emissions for the previous 12 months using the monthly natural gas usage and either the BACT emission limit in Condition 5.e or the results of the most recent carbon monoxide emission test that shows compliance with the BACT emission limit of Condition 5.e. For the purposes of this calculation, the BACT limit in Condition 5.e or the source test results shall be converted to into terms of pounds of carbon monoxide per million Btu of fuel used using EPA Method 19.
- 20. Icon Materials shall notify the Puget Sound Clean Air Agency in writing, within 30 days after the end of each 12-month period if, during that period, emissions of CO exceed 90 tons. The report shall include emissions data for the time period for which these thresholds were exceeded.

COMPLAINTS

- 21. Icon Materials shall establish a complaint response program as part of the O&M Plan. The program shall include a complaint phone line, criteria and methods for establishing whether Icon may be the source of emissions related to the complaint, and a format for communicating results of investigation and advising complainants of Icon corrective actions.
 - (a) Icon Materials shall record and investigate complaints received regarding air quality as soon as possible, but no later than one working day after receipt.
 - (b) Icon Materials shall correct any problems identified by these complaint investigations within 24 hours of identification.
 - (c) Records of all complaints received regarding air quality issues shall include information regarding date and time of complaint; name and address of complainant (if known); nature of the complaint; investigation efforts completed and basis for conclusion reached; and date, time, and nature of any corrective action taken.

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RECORDS

22. Icon Materials shall maintain records required by this Order of Approval, as well as the records identified in the Operation and Maintenance Plan required by Regulation I, Section 5.05, for two years and make them available to Puget Sound Clean Air Agency personnel upon request.
23. Upon startup of the equipment reviewed under this Order of Approval, this Order supersedes and cancels Order of Approval No. 10954 dated August 1, 2016.

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

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Brian Renninger
Reviewing Engineer

Carole Cenci
Compliance Manager