



Puget Sound Clean Air Agency

Notice of
Construction No.

11861

Clean Air Agency

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

Registration No. 16101
Date

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Replacement of and changes to equipment at an existing Hot Mix Asphalt Plant. New equipment include: a drum dryer and related natural gas-fired burner (200 TPH Capacity, 100 MMBtu/hr), changes to the associated baghouse (68,600 acfm), and replacement of condensers on two hot asphaltic cement tanks (25,000 gal & 10,000 gal, 300 gpm). Existing equipment includes: a pugmill/weigh hopper for mixing dried aggregate with asphaltic cement, and a hot rock conveyor. Other existing equipment ducted to the baghouse include: the flight conveyor for loading two silos (150 ton each) for storing asphaltic concrete, and the truck loadout.

OWNER

Cadman Materials, Inc. (Cadman)
7554 185 Ave NE, Suite 100
Redmond, WA 98052

INSTALLATION ADDRESS

Cadman Materials, Inc. (Cadman)
6431 NE 175th St
Kenmore, WA 98028

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.
3. This asphalt facility is subject to the federal Standards of Performance for Asphalt Concrete Plants under 40 CFR Part 60, Subpart I, and General Provisions under 40 CFR Part 60, Subpart A, as required by Conditions 4, 5, and 6 of this Order of Approval.
4. The owner or operator subject to the provisions of this subpart shall not discharge or cause the discharge into the atmosphere from any affected facility any gases which:
 - a) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).
 - b) Exhibit 20 percent opacity, or greater.
5. The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a monitoring device is inoperative.
6. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

EMISSION LIMITS

7. Total particulate matter emissions from the plant exhaust stack shall not exceed 0.0052 gr/dscf (corrected to 7% O₂) as measured by U.S. EPA Method 5 as modified by Puget Sound Clean Air Agency Board

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Resolution 540 dated August 11, 1983.

8. Filterable particulate matter emissions from the plant exhaust stack shall not exceed 0.0026 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.
9. Opacity from the plant exhaust stack 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.
10. Emissions of Non-Methane/Non-Ethane VOC (NMNEVOC) shall not exceed 0.032 lb NMNEVOC per ton of hot mixed asphaltic concrete produced. Compliance with this limit shall be determined by the average of three 60-minute test runs performed in accordance with Section 3.07 of PSCAA Regulation I and 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. NMNEVOC shall be expressed as propane. Other equivalent test methods may be used with prior written approval of the Agency.
11. Emissions of carbon monoxide shall not exceed 311.0 ppmvd (corrected to 7% O₂) as determined by the average of three 60-minute test runs performed in accordance with Section 3.07 of PSCAA Regulation I and using USEPA reference methods 1, 3A, 4, and 10 from Appendix A of 40 CFR Part 60.
12. Emissions of oxides of nitrogen shall not exceed 32.0 ppmvd (corrected to 7% O₂) as determined by the average of three 60-minute test runs performed 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.
13. Emissions from the asphalt cement storage tanks shall not exceed 0% opacity as determined by WDOE Method 9A, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. Record the date and time period of any asphalt transfer line blowing. During asphalt transfer line blowing the storage tanks shall not exceed 20% opacity for a period or periods aggregating more than 3 minutes during any one hour as measured by WDOE Method 9A.

FACILITY-WIDE EMISSION LIMIT

14. Facility-wide emissions of carbon monoxide shall not exceed 59.2 tons during any 12 consecutive months after the date of this Order.
15. Within 30 days of the end of each month, the owner or operator 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 11 or the results of the most recent carbon monoxide emission test that shows compliance with the BACT emission limit in Condition 11. For the purposes of this calculation, the BACT limit in Condition 11 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.
16. The owner or operator 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 55 tons. The report shall include emissions data for the time period for which these thresholds were exceeded.
17. By June 30th of each calendar year, the owner or operator must report to PSCAA the total emissions of carbon monoxide for the previous calendar year. The owner or operator must also report the emissions of any pollutant that exceeded the thresholds in PSCAA Regulation I, Section 5.05(b) for the previous calendar year. These emission reports must be submitted via email to EmissionReporting@pscleanair.gov

or in the most current method in which PSCAA is receiving electronic submittal.

PRODUCTION LIMIT

18. The owner or operator shall record and limit the total production of asphalt to no more than 200,000 tons for any 12 consecutive months.
19. A notification of a violation of Condition 18 shall be sent to Puget Sound Clean Air Agency within 30 days following any month when the 12 consecutive month rolling total exceeds 200,000 tons per year of asphalt production.
20. The two hot oil (asphaltic cement) tanks shall not be used to store asphalt that has been blended with more than 7% petroleum distillates by weight. Records shall be kept of the dates any materials are loaded in the tanks, the amount loaded, and the type of material loaded.

OPERATING REQUIREMENTS

21. The dryer 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)

SOURCE TESTING

22. The owner or operator shall test emissions for compliance with Conditions 7 through 13 of this Order within 90 days after issuance of this permit. The owner or operator shall also test emissions for compliance with Conditions 7, 8, 10, 11, and 12 at least once every 36 months. Additionally, the owner or operator shall test emissions for compliance with Conditions 9 and 13 at least once every 12 months. The owner or operator shall submit a compliance test plan with the test notification submitted under Regulation I, Section 3.07(b) at least 30 days prior to each compliance test. The test plan shall detail the test methods used for each pollutant, the operational data that will be collected during the test, and any other relevant information about the test.
23. During the emission tests required by Condition 22, the following operational data shall be collected during each test run and reported in the source test report:
 - a) standard cubic feet of fuel combusted;
 - b) aggregate moisture percentage (as measured by the Quality Control lab for a representative sample taken the day of the test);
 - c) asphalt cement content percentage;
 - d) baghouse pressure drop;
 - e) baghouse fan speed (as a percentage of full speed);
 - f) baghouse pulse cycle time;
 - g) flue gas damper setting (as a percentage of maximum opening); and

- h) product specification produced during the run, a copy of the specification, and maximum temperature allowed by the specification.

MONITORING

- 24. When operating, the owner or operator shall monitor and record the following information:
 - a) one daily pressure drop across the baghouse;
 - b) one daily inspection for visible emissions and particulate fallout for the baghouse;
 - c) the hourly weight of asphalt produced;
 - d) annual (12 consecutive months rolling total) asphalt production;
 - e) monthly fuel use;
 - f) the product specification produced and the hour it was produced; and
 - g) the time (in hours) the drum dryer operated.
- 25. If the Control Officer or a duly authorized representative communicates to the owner or operator that he or she has detected an odor at level 2 or greater as defined in Agency's Regulation I, Section 9.11(b), beyond the property line that the Agency has documented to be attributable to or partially attributable to emissions from drum dryer, baghouse, or asphalt cement tanks, the owner or operator must comply with Condition 27. For the purposes of this condition documentation to be communicated includes: the nature of the odor, the assessed level of the odor (using the odor scale in Agency Regulation I, Section 9.11), the location of the detected odor, and the basis for the odors attribution to the listed equipment type(s).
- 26. If required by Condition 26, the owner or operator must immediately implement an odor response program that includes the following:
 - a. Upon receipt of a communication from the Control Officer or a duly authorized representative regarding an odor per Condition 25, initiate an investigation of the reported odor incident.
 - b. Take corrective action to reduce odors beyond the property line to Level 1 or lower (see Agency Regulation I, Section 9.11(b)) as soon as possible, but within 24 hours after receipt of the complaint.
 - c. Develop a report for each investigation that results from a communication by an Agency representative. The report must include the following:
 - i. The date and time of when the communication was received.
 - ii. The date and time of when the investigation was initiated.
 - iii. Location of communicated odor and area investigated (including information provided by the Agency and any other areas the investigated identified).
 - iv. The weather conditions during the event and investigation.
 - v. Description of whether the odor observation communicated was confirmed, steps taken during the investigation.
 - vi. Actions taken in response to the complaint.
 - vii. The date and time odors are no longer detected at the location of the complaint and any other odorous area identified during the investigation.
- 27. The owner or operator shall monitor for detectable odors that are attributable to emissions from drum dryer, baghouse, or asphalt cement tanks once each calendar week during dryer operation. No odor monitoring is required during calendar weeks the dryer does not operate. Locations to be monitored include accessible downwind segments: along the Burke-Gilman Trail parallel with the facility property

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line; between 62nd and 65th/66th avenues NE on NE Bothell Highway, 181st St, 182nd St, 183rd St, and 184th St; and the Kenmore Library parking lot. For at least one hour immediately prior to monitoring, the person performing the monitoring must remain in an atmosphere free of facility-related odors. Records of the monitoring shall be kept of the date, the time, the monitoring location, the wind direction at the time of the observation, and whether or not any odors were detected and, if so, the character of the odor. If any odors attributable to emissions from drum dryer, baghouse, or asphalt cement tanks of level 2 or greater are detected during monitoring or at any other time, the owner or operator shall immediately initiate corrective action to reduce the odor to Level 1 or less (as defined in Agency Regulation I, Section 9.11(b)) and record the nature of any corrective actions taken.

COMPLAINTS

28. The owner or operator 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 Cadman Materials, Inc. is the source of emissions related to the complaint, and a format for communicating results of investigation and advising complainants of Cadman Materials, Inc. corrective actions.
 - a) The owner or operator shall record and investigate complaints received regarding air quality as soon as possible, but no later than one working day after receipt.
 - b) The owner or operator shall correct any problems identified by these complaint investigations within 24 hours of identification or cease operation of the equipment until the problem is resolved;
 - 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.

RECORDS

29. The owner or operator 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.
30. Upon issuance of this Order of Approval, this Order supersedes and cancels Order of Approval No. 939 dated April 4, 1973, Order of Approval 1938 issued July 16, 1998, and Order of Approval 3536 issued January 20, 2006.

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.

Brian Renninger
Reviewing Engineer

John Dawson
Engineering Manager