



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

Harry C. Crooker & Sons, Inc.)
Sagadahoc County) Departmental
Topsham, Maine) Findings of Fact and Order
A-187-71-L-R/A (SM)) Air Emission License

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Harry C. Crooker & Sons, Inc. (Crooker) of Topsham, Maine has applied to renew their Air Emission License, permitting the operation of emission sources associated with their Topsham, Maine asphalt batch plant and crushed stone facility.
2. This air emission license renewal includes an amendment to include the seasonal operation of a diesel engine, which is also included on the air emission license for Crooker's Whitefield facility.
3. This air emission license renewal also incorporates conditions established in amendments made subsequently to the facility's previous air emission license that includes the operation of a new portable jaw crusher and associated diesel generator to the facility's licensed equipment inventory list.
4. The physical address of the Crooker facility is 103 Lewiston Road, Topsham, Maine.

B. Emission Equipment

Crooker is authorized to operate the following equipment:

Asphalt Batch Plant

<u>Equipment</u>	<u>Production Rate (tons/hr)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Date of Manufacture</u>	<u>Control Devices</u>	<u>Stack #</u>
Kiln	180	103	1973	baghouse	1

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
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PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

Rock Crushers:

<u>Designation</u>	<u>Power Source</u>	<u>Process Rate (tons/hr)</u>	<u>Control Device</u>
Primary Crusher	Electrical	360	Spray Nozzles
Secondary Crusher	Electrical	340	Spray Nozzles
Tertiary Crusher	Electrical	230	Spray Nozzles
Pegson Crusher	Hydraulic Drive	245	Spray Nozzles
Portable Crusher	Diesel Generator	225	Spray Nozzles

Diesel Unit:

<u>Equipment</u>	<u>Max Capacity (MMBtu/hr)</u>	<u>Power Output (kW)</u>	<u>Fuel Type, % Sulfur</u>	<u>Max Firing Rate (gal/hr)</u>	<u>Stack #</u>
The Portable Diesel	8.8	905	Diesel, 0.05%	62.9	PD #1

C. Application Classification

This air emission license renewal includes the addition of a seasonally operated diesel engine as well as incorporating conditions established in amendments made subsequently to the facility's previous air emission license. Therefore, the license is considered to be a renewal and amendment of current licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). With the fuel limit on the Portable Diesel, the facility is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

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B. Asphalt Batch Plant

Crooker operates an asphalt batch plant for the production of asphalt at their Topsham, Maine asphalt, crushed stone and crushed rock facility. The asphalt batch plant has a maximum designed heat input capacity of 103.0 MMBtu/hr and a maximum design process rate of 180 ton/hr. The asphalt batch plant was manufactured prior to 1973 and is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities.

Crooker is currently permitted to fire #2 fuel oil, specification waste oil and natural gas in the kiln. Crooker is currently limited to an annual heat input restriction for the Asphalt Batch Plant of no greater than 56,000 MMBtu/yr based on a twelve month rolling total. 56,000 MMBtu/yr heat input is the equivalent of 400,000 gallons of a combination of #2 fuel oil and specification waste oil per year or 55,000,000 standard cubic feet (scf) of natural gas per year.

Only waste oil meeting the criteria "specification" waste oil (as defined in the "Waste Oil Management Rules") may be fired in the asphalt batch plant. Crooker shall keep the results of a representative waste oil test on site. If the equipment or operations that produce the on-site waste oil change, then a new representative sample shall be tested. The Department may also request additional testing in the future, if deemed necessary.

Crooker shall maintain a record containing the dates and hours of operation of the asphalt plant. The record shall include the fuel type fired, the MMBtu/hr heat input and the total MMBtu heat input for each operational period. The record shall also include fuel purchase receipts indicating the quantity of the purchased fuel and supplier certification indicating sulfur content of the purchased fuel. Records shall be maintained on a monthly basis as well as the twelve-month rolling total basis. Heat input shall be calculated using the following conversion factors.

1. 140,000 btu per gallon of #2 fuel oil,
2. 1020 btu per scf of natural gas,
3. 140,000 btu per gallon of specification waste oil.

To meet requirements of BPT, the asphalt batch plant vents to a baghouse. The performance of the baghouse shall be constantly monitored by either of the following at all times the batch plant is in operation:

1. PM Detector – when the detector signals excessive PM concentrations in the exhaust stream, Crooker shall take corrective action within 24 hours, or immediately if opacity exceeds 20% based on a 6-minute block average basis.

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2. Personnel with an EPA Method 9 visible emissions certification within the past 6 months – when the opacity exceeds 20%, the hot mix asphalt batch plant is operating with insufficient control and Harry C. Crooker & Sons, Inc. shall take corrective action immediately.

Crooker shall establish a system of maintenance, inspection and repair for the asphalt batch plant baghouse, which shall allow for periodic inspection of the system. Crooker shall document compliance by means of a maintenance, inspection and repair log in which Crooker shall record the date all bag failures and all routine maintenance as well as all inspection dates and findings.

A summary of the BPT analysis for the Asphalt Plant is as follows.

1. BPT for PM is emissions not to exceed 0.03 gr/dscf.
2. For the use of #2 fuel oil, BPT is a sulfur content not to exceed 0.5% sulfur by weight and for the use of specification waste oil, BPT is a sulfur content not to exceed 0.7% sulfur by weight.
3. Sulfur emission limit for firing of natural gas is based upon AP-42 data dated 1/95.
4. NO_x, CO and VOC emission limits are based upon AP-42 data dated 1/95 for #2 fuel and 12/00 for natural gas.
5. Visible Emissions for the Asphalt Batch Plant is limited to no greater than 20% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a continuous 3-hour period

Crooker may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the Bureau of Air Quality at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil.

In addition to the above, Crooker may process up to 5,000 cubic yards per year of soil contaminated with virgin oil, as defined by the Bureau of Air Quality, without prior approval from the Bureau of Air Quality. Virgin oil processing shall be done at a mixture of no greater than 30% contaminated soil to 70% clean aggregate mix. Processing of virgin oil contaminated soils may require a solid waste processing facility license under 06-096 CMR 409. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management.

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Virgin Oil Definition:

Virgin oil means any petroleum derived oil, including petroleum fuels (#2 fuel oil, Diesel Fuel and gas), unused motor oils, hydraulic fluids, lubrication oils and other industrial oils, that are not characterized as waste oil.

Crooker shall not process soils which are classified as hazardous waste or which have unknown contaminants.

When processing contaminated soils, Crooker shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Crooker shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management.

C. Rock Crushing Units

Crooker operates a primary, secondary and tertiary rock crusher at their Topsham facility. The primary, secondary and tertiary rock crushers have maximum design process rates of 360, 340 and 230 tons per hour (ton/hr), respectively.

The three rock crushers were manufactured after 1983, therefore, the facility's crushers are subject to EPA's NSPS Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants and Crooker shall comply with the testing and record keeping requirements of NSPS Subpart OOO. As a requirement of NSPS Subpart OOO, a visible emissions performance test (EPA Method 9) was required to be performed on the facility's crusher units. In 2001, a compliance determination program was undertaken by Crooker, and the environmental consulting firm Air Tox Environmental Company, Inc. Method 9 observations were undertaken on the crusher units at varying times during the week of July 18, 2001. A copy of the compliance report showing compliance with the facility's air emission license was submitted to the Department by Crooker and is on file.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of Best Practical Treatment (BPT) for control of particulate matter (PM) emissions from the rock crushers, Crooker shall maintain and operate water sprays on the rock crushers at the facility in such a manner as to control visible emissions to no greater than 10% opacity on a 6-minute block average basis.

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D. Portable Pegson Crusher

Air Emission License amendment A-187-71-K-A, signed August 4, 2006, included the operation of a new portable jaw crusher, designated the Portable Pegson Crusher. The new crusher was manufactured in 2005 by BL-Pegson Limited and has a maximum process rate of 245 tons per hour (tons/hr).

The Pegson Crusher is subject to EPA NSPS Subpart OOO. As a requirement of NSPS Subpart OOO, a visible emissions performance test (EPA Method 9) is required to be performed on the Portable Pegson Crusher. Method 9 observations were undertaken on the crusher units at varying times during the week of October 11, 2006. A copy of the compliance report showing compliance with the facility's air emission license was submitted to the Department by Crooker and is on file.

The regulated pollutant from the rock crusher equipment is particulate emissions. To meet the requirements of Best Available Control Treatment (BACT) for control of particulate matter (PM) emissions from the rock crusher, Crooker shall maintain and operate water sprays on Portable Crusher #1 in such a manner as to control visible emissions to no greater than 10% opacity on a 6-minute block average basis.

E. Portable Cone Crusher and Associated Portable Diesel

1. Portable Cone Crusher

Crooker utilizes a portable crusher at their Whitefield pit which consists of a primary jaw section and a secondary cone section. This crusher is used for approximately nine months out of the year and then Crooker relocates the cone section to the Topsham facility for the remaining three months during the winter. The cone crusher has a capacity of approximately 225 tons per hour. The Portable Cone Crusher is subject to EPA NSPS Subpart OOO. As a requirement of NSPS Subpart OOO, a visible emissions performance test (EPA Method 9) is required to be performed on the Portable Cone Crusher, this consists of a certified EPA Method 9 visible emissions observation. As discussed in the Crooker Whitefield pit Air Emission License (A-507-71-F-R/A), the secondary crusher at the Crooker Whitefield site underwent Subpart OOO Method 9 visible emissions testing on June 1, 2009 as documented in the application for this Air Emission License renewal.

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2. The Portable Diesel

The Portable Diesel acts as the primary power source for the Portable Cone Crusher. The Portable Diesel is a 905 kW CAT C27 engine with a heat input capacity of 8.8 MMBtu/hr and was manufactured and installed in 2010. The Portable Diesel will be operated seasonally at both the Whitefield (A-507-71-F-R/A) and Topsham (A-187-71-L-R/A) Crooker facilities and will be included on both facilities' air emission licenses.

The Portable Diesel is portable and is transferred (along with the Portable Jaw Crusher) between Crooker's Whitefield pit and Topsham facility through out the year. By virtue of its portable nature, the Portable Diesel is considered a non-road engine, as opposed to a stationary engine. Therefore, Portable Diesel #2 is not subject to 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* or to 40 CFR Part 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. The definition in 40 CFR Part 1068.30 states that a non-road engine is an internal combustion engine that meets certain criteria, including: "Portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform."

40 CFR Part 1068.30 further states that an engine is not a non-road engine if it remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. An engine located at a seasonal source (a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year) is an engine that remains at a seasonal source during the full annual operating period of the seasonal source.

Crooker shall be limited to firing no greater than 27,000 gallons per year(gal/yr) of diesel fuel on a calendar year basis cumulatively in the diesel engines located at Crooker's Topsham facility. BACT/BPT for the diesel fuel fired in the diesel units at the Crooker facility is the use of on-road diesel fuel with a sulfur content of no greater than 0.05% sulfur by weight. To demonstrate compliance with the fuel restrictions, Crooker shall maintain a record of fuel oil purchase, which shall include receipts indicating the amount of fuel delivered and certification from the supplier indicating the sulfur content of the purchased fuel.

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A summary of the BACT analysis for the Portable Diesel is as follows

- a. 06-096 CMR 103 regulates PM emission limits, however in keeping with the BPT analysis established in Crooker's Whitefield pit Air Emission License (A-507-71-E-R) for PM emissions from the Portable Diesel, the Department determined a more stringent limit of 0.12 lb/MMBtu is appropriate. The PM₁₀ limits are derived from the PM limits.
- b. 06-096 CMR 106 regulates fuel sulfur content, however in keeping with the BPT analysis established in Crooker's Whitefield pit A-507-71-E-R for SO₂ emissions from the Portable Diesel, the Department determined a limit of 0.05% sulfur by weight is appropriate.
- c. NO_x, CO, and VOC emission limits are based on previous license limits which were based upon AP-42 data dated 10/96.
- d. Visible emissions from each back-up generator shall each not exceed 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period.

F. Parts Degreasers

Crooker utilizes four parts degreasers in their automotive shop. The degreasers are Safety-Kleen parts degreasers and use Safety-Kleen 105 solvent. Crooker uses approximately 315 gallons of solvent per year in the facility's four parts degreasers. The parts degreasers are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended) and records shall be kept documenting compliance.

G. Brake and Electric Motor Cleaning Process

Crooker had previously made use of Mac's Brake and Electric Motor Cleaner 4700 to spray clean parts in their automotive shop. The facility has replaced this solvent with Brakleen non-chlorinated brake cleaner. The solvent is purchased in 14-ounce cans and is approximately 50% volatile.

Crooker anticipates no increase in the volume of cleaner used annually. Annual VOC emissions from this process will total approximately 0.15 tons of VOC per year. This activity is considered to be insignificant, therefore, will not be considered in determining the total facility potential to emit.

H. Paint Shop

Crooker makes use of a paint room in their automotive shop. Crooker uses approximately 125 gallons of various paints, hardeners and cleaning solvents in their paint room per year. The materials range in percent volatile concentrations from approximately 50% to 100%.

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Using MSDS sheets and paint shop coatings use history supplied by Crooker, VOC emissions from the paint shop calculate out to approximately 0.45 tons per year. This activity is considered to be insignificant, and therefore, will not be considered in determining the total facility potential to emit. To demonstrate that this activity remains below the insignificant threshold, Crooker shall maintain a record of the volume of coatings, hardeners, resins and cleaning solvents used and the VOC and HAP content of the materials based on a calendar year basis.

I. Particulate Matter Control Spray System

Crooker utilizes a chemical flocculent as an additive to the water spray that is sprayed over stock piles and roadways to control fugitive particulate emissions. The flocculent brand name is Compound MR. It has a percent VOC content of 90% and has a weight of approximately 8.4 pounds per gallon. Crooker uses approximately one 55-gallon drum of the material every six years. This gives the facility a VOC emission rate from using Compound MR of approximately 76 lb/yr.

Crooker utilizes a second chemical flocculent as an additive to their water spray system for fugitive particulate matter control of stock piles and roadways. The brand name of the second flocculent is NALCLEAR 8194. The flocculent has a percent VOC content of approximately 6.0% and weighs approximately 8.8 lb/gallon. Crooker uses approximately 165 gallons of the material every year. This gives the facility a VOC emission rate from using NALCLEAR 8164 of approximately 87 lb/yr.

Crooker has a VOC emission rate resulting from the use of chemical flocculent in the water spray for fugitive particulate matter of approximately 163 lb/yr. This activity is considered to be insignificant and will not be considered in determining the total facility potential to emit. To demonstrate that this activity remains below the insignificant threshold, Crooker shall maintain a record of the volume of flocculent additive used and the VOC and HAP content of the materials on a calendar year basis.

J. Other Facility Fuel Burning Activities

1. Crooker makes use of two boilers to maintain the temperature of the asphalt while in the storage silos. The Plant Boiler and The Silo Boiler each have maximum design heat input capacities of 0.94 MMBtu/hr and fire either natural gas or #2 fuel oil. The boilers are below the 1.0 MMBtu/hr threshold and are mentioned for inventory purposes only.

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2. Crooker also makes use of a waste oil fired boiler to burn the waste oil generated at the facility. This boiler has a maximum design heat input capacity of 0.34 MMBtu/hr. This boiler is also below the 1.0 MMBtu/hr licensing threshold and is mentioned only for inventory purposes.

K. Annual Emission Restrictions

Crooker shall be restricted to the following annual emissions, based on a twelve-month rolling total:

- Crooker shall be limited to firing no greater than 27,000 gallons per year(gal/yr) of diesel fuel on a calendar year basis cumulatively in the diesel engines located at Crooker's Topsham facility.
- Crooker shall not exceed an annual heat input in the Asphalt Batch Plant of 56,000 MMBtu/yr based on a twelve month rolling total. Heat input shall be calculated using the following conversion factors:
 1. 140,000 btu per gallon of #2 fuel oil,
 2. 1020 btu per scf of natural gas,
 3. 140,000 btu per gallon of specification waste oil.

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

Pollutant	Tons/Year		
	Asphalt Plant	Diesels	Total
PM	2.7	0.2	2.9
PM ₁₀	2.7	0.2	2.9
SO ₂	19.7	0.1	19.8
NO _x	21.4	6.0	27.4
CO	50.4	1.6	52.0
VOC	5.8	0.2	6.0

- Total facility potential to emit is calculated based on the worst case scenario, which in this case is the use of 400,000 gallons per year of a #2 fuel oil and specification waste oil.

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. Based on the total facility emissions, Crooker is below the emissions level required for modeling and monitoring.

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ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-187-71-L-R/A subject to the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 CMR 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

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- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

- C. submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
[06-096 CMR 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
[06-096 CMR 115]

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- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) Asphalt Plant

- A. The asphalt kiln shall be limited to a maximum of 56,000 MMBtu/yr heat input based on a twelve month rolling total. The kiln may fire either #2 fuel oil, specification waste oil or natural gas. [06-096 CMR 115, BPT]
- B. Crooker shall maintain a record containing the dates and hours of operation of the asphalt plant. The record shall include the fuel type fired and the MMBtu/hr heat input and the total MMBtu heat input for each operational period. Heat input shall be calculated using the following conversion factors. Records shall be maintained on a monthly basis as well as the twelve-month rolling total basis:
1. 140,000 btu per gallon of #2 fuel oil,
 2. 1020 btu per scf of natural gas,
 3. 140,000 btu per gallon of specification waste oil.
- [06-096 CMR 115, BPT]
- C. The #2 fuel oil fired in the asphalt batch plant kiln shall have a sulfur content that does not exceed 0.5% sulfur by weight. Compliance shall be demonstrated by supplier certification indicating sulfur content of the purchased fuel. [06-096 CMR 115, BPT]
- D. Only waste oil meeting the criteria "specification" waste oil (as defined in the "Waste Oil Management Rules") shall be fired in the asphalt kiln. The specification waste oil fired in the asphalt kiln shall have a sulfur content that does not exceed 0.7% sulfur by weight. [06-096 CMR 115, BPT]
- E. Emissions from the asphalt batch plant shall vent to a baghouse and all components of the asphalt batch plant shall be maintained so as to prevent particulate matter leaks. [06-096 CMR 115, BPT]

F. Emissions from the asphalt batch plant baghouse shall be limited to the following:

<u>Pollutant</u>	<u>Grs/dscf</u>	<u>Lb/hr</u>
PM	0.03	9.8
PM ₁₀	-	9.8
SO ₂	-	72.6
NO _x	-	78.8
CO	-	185.4
VOC	-	21.3

[06-096 CMR 115, BPT]

G. Visible Emissions for the asphalt batch plant baghouse are limited to no greater than 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period.

[06-096 CMR 101]

H. The performance of the baghouse shall be constantly monitored by either of the following at all times the batch plant is in operation:

1. PM Detector – when the detector signals excessive PM concentrations in the exhaust stream, Crooker shall take corrective action within 24 hours, or immediately if opacity exceeds 20% based on a 6-minute block average basis.
2. Personnel with an EPA Method 9 visible emissions certification within the past 6 months – when the opacity exceeds 20%, the hot mix asphalt batch plant is operating with insufficient control and Crooker shall take corrective action immediately.

[06-096 CMR 115, BPT]

I. Crooker shall establish a system of maintenance, inspection and repair for the asphalt batch plant baghouse, which shall allow for periodic inspection of the system. Crooker shall document compliance by means of a maintenance, inspection and repair log in which Harry C. Crooker & Sons, Inc. shall record the date of all bag failures and all routine maintenance as well as all inspection dates, findings and corrective actions. [06-096 CMR 115, BPT]

- J. Crooker may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the Bureau of Air Quality at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil. [06-096 CMR 115, BPT]
- K. Crooker may process up to 5,000 cubic yards per year of soil contaminated with virgin oil, as defined by the Bureau of Air Quality, without prior approval from the Bureau of Air Quality. Virgin oil processing shall be done at a mixture of no greater than 30% contaminated soil to 70% clean aggregate mix. Processing of virgin oil contaminated soils may require a solid waste processing facility license under 06-096 CMR 409. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 CMR 115, BPT]
- L. Crooker shall not process soils which are classified as hazardous waste or which have unknown contaminants. [06-096 CMR 115, BPT]
- M. When processing contaminated soils, Crooker shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Crooker shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 CMR 115, BPT]

(17) Rock Crushers

- A. Visible emissions from the crushers shall be limited to no greater than 10% opacity on a 6-minute block average basis. [06-096 CMR 101]
- B. Crooker shall maintain spray nozzles on the Primary, Secondary and Tertiary Rock Crushers as well as the Portable Pegson Crusher and the Portable Cone Crusher and operate the spray nozzles as necessary so as not to exceed visible emissions limits. [06-096 CMR 115, BPT, 06-096 CMR 101]
- C. Crooker shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]

D. Crooker shall maintain a log detailing and quantifying the hours of operation on a daily basis for the Primary, Secondary and Tertiary Rock Crushers, the Portable Pegson Crusher and the Portable Cone Crusher. The operation log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]

E. The Primary, Secondary and Tertiary crushers, the Portable Pegson Crusher and the Portable Cone Crusher are each subject to 40 CFR Part 60 Subparts A and OOO and Crooker shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h). [40 CFR 60, Subpart OOO]

(18) The Portable Diesel

A. Crooker shall be limited to firing no greater than 27,000 gallons per year(gal/yr) of diesel fuel on a calendar year basis cumulatively in the diesel engines at Crooker's Topsham facility. [06-096 CMR 115, BACT/BPT]

B. Crooker shall fire only on-road diesel fuel with a sulfur content of no greater than 0.05% sulfur by weight in the diesel units at the Crooker facility. To demonstrate compliance with the fuel restrictions, Crooker shall maintain a record of fuel oil purchase, which shall include receipts indicating the amount of fuel delivered and certification from the supplier indicating the sulfur content of the purchased fuel. [06-096 CMR 115, BACT/BPT]

C. Emissions from the Portable Diesel shall be limited to the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Portable Diesel #2	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	1.1	1.1	0.4	28.2	7.5	0.9

D. Visible emissions from the diesel stack shall not exceed 20% opacity on a six-minute block average, except for no more than 2 six-minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(19) Parts Degreasers

A. Parts degreasers at the Crooker facility are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).

1. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
 - a. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 - b. Wipe cleaning; and,
 - c. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
2. The following standards apply to cold cleaning machines that are applicable sources under 06-096 CMR 130 [06-096 CMR 130].
 - a. Crooker shall attach a permanent conspicuous label to each unit summarizing the following operational standards:
 - i Waste solvent shall be collected and stored in closed containers.
 - ii Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - iii Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - iv The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - v Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
 - vi When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - vii Spills during solvent transfer shall be cleaned immediately. Sorbent material shall be immediately stored in covered containers.
 - viii. Work area fans shall not blow across the opening of the degreaser unit.
 - ix. The solvent level shall not exceed the fill line

3. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches.
[06-096 CMR 130]
- B. Crooker shall maintain a record of solvent use for the parts degreaser. The record shall include solvent added and removed, the dates when solvent is added and the volume of solvent added and removed and the VOC content of the solvent. If, in the future, Crooker switches to a solvent that contains 1% VOC or less for use in the parts degreaser, to satisfy record keeping requirements Crooker need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at the Crooker facility.
[06-096 CMR 115, 06-096 CMR 130, BPT]
- (20) To demonstrate that paint room activities remain below the significant emissions threshold of 1.0 tons per year of VOC and HAP emissions, Crooker shall maintain a record of the volume of coatings, hardeners, resins and cleaning solvents used and the VOC and HAP content of the paint on a calendar year basis.
[06-096 CMR 115, BPT]
- (21) Stock Piles and Roadways
 - A. Visible emissions from potential sources of fugitive particulate matter emissions, including material stockpiles and unpaved roadways, shall not exceed an opacity of 20 percent, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20 percent in any 1-hour. [06-096 CMR 101]
 - B. In order to demonstrate that the use of any chemical flocculent additives used to control fugitive PM emissions does not result in VOC emissions of a significant level, Crooker shall maintain a log of flocculent use. The log will include the brand of flocculent used, the volume used and the VOC and HAP content of the flocculent. The log shall be maintained on a monthly and a calendar year basis. [06-096 CMR 115, BPT]
- (22) Crooker shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 MRSA §605-C).
- (23) Crooker shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [06-096 CMR 115]

Harry C. Crooker & Sons, Inc.)
Sagadahoc County)
Topsham, Maine)
A-187-71-L-R/A (SM) 20

Departmental
Findings of Fact and Order
Air Emission License

(24) Equipment Relocation [06-096 CMR 115, BPT]

- A. Crooker shall notify the Bureau of Air Quality, by a written notification at least 48 hours prior to relocation of any equipment carried on this license. Written notice may be sent by mail, facsimile (fax), or e-mail. Notification shall be sent to a Department Regional Office or to the address below:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Equipment relocation notification can also be done on-line with e-notice at www.maine.gov/dep/air/compliance/forms/relocation.

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.

DONE AND DATED IN AUGUSTA, MAINE THIS 23rd DAY OF February 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie R. S.
PATRICIA WAHO, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

The term of this Order shall be for five (5) years from the signature above.

Date of initial receipt of application: July 22, 2010

Date of application acceptance: August 13, 2010

Date filed with the Board of Environmental Protection:

This Order prepared by Peter G. Carleton, Bureau of Air Quality

