

Bruce A. Manzer)	DEPARTMENTAL
Franklin County)	FINDINGS OF FACT AND ORDER
Salem, Maine)	AIR EMISSION LICENSE
A-731-71-H-R/A (SM))	

After review of the air emission license 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:

Bruce A. Manzer, Inc., (Manzer) located in Franklin County, Maine has applied for a renewal of their Air Emission License, permitting the operation of a hot mix asphalt plant and portable rock crushing facility.

Manzer has requested an amendment to their License in order to add the following:

1. A new asphalt plant (AP-2).
2. Two new rock crushers.
3. Add several existing diesel units that were previously unlicensed.
4. Increase the annual fuel limit for AP1, AP2 and the diesel units.

B. Emission Equipment:

Process Equipment

Equipment	Process Rate (tons/hour)	Design Capacity Firing Rate	Control Devices	Stack ID	Date of Manufacture
Asphalt Plant #1 (AP1)	250 ton/hr	92 MMBtu/hr, 687 gal/hr	baghouse	1	1984
Asphalt Plant #2 (AP2)	200 ton/hr	82 MMBtu/hr, 615 gal/hr	baghouse	1	1983
Rock Crusher #1 (RC1)	150	-	Spray Nozzle	-	1992
Rock Crusher #2 (RC2)	150	-	Spray Nozzle	-	2000
Rock Crusher #3 (RC3)	100	-	Spray Nozzle	-	1998

Rock Crusher #4 (RC4)	110	-	Spray Nozzle	-	1989
*Portable Screen	-	-	-	-	-

* The Portable Screen is considered an insignificant activity and is listed for inventory purposes only.

Fuel Burning Equipment

Equipment	Description	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type
*EP-1	Asphalt Heater #1	0.5	4.0	#2 Oil
EP-2	Asphalt Plant #1 GenSet	2.0	16	#2 Oil
EP-3	Jaw Crusher Diesel Drive	1.6	13	Diesel
EP-4	Cone Crusher GenSet	2.0	16	Diesel
*EP-5	Asphalt Heater #2	0.5	4	#2 Oil
EP-6	Asphalt Plant #2 GenSet	2.0	16	Diesel
EP-7	RC-4 Diesel Drive	1.6	13	Diesel
EP-8	RC-3 Diesel Drive	1.6	13	Diesel
EP-9	Portable Screen Diesel Drive	0.5	4	Diesel

* Denotes an insignificant activity and is listed for inventory purposes only.

C. Application Classification:

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as defined in the Department’s regulations. This application is determined to be a license renewal of a synthetic minor source, with a minor modification, and has been processed as such.

II. BEST PRACTICAL TREATMENT

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 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

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 emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Asphalt Plants #1 and #2 (AP1 and AP2):

AP1 and AP2 were manufactured in 1984 and 1983 respectively, and are subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities manufactured after June 11, 1973. Also, AP1 and AP2 are subject to 40 CFR §60.8(a), and §60.7(a)(1), (2), (3), (b) and (f).

To meet the requirements of BPT for AP1 and BACT for AP2, for the control of particulate matter (PM) emissions from the asphalt plants, Manzer shall operate baghouses, each with emissions not to exceed 20% opacity based on a six minute block average. According to 40 CFR, Part 60, Subpart I, the limit for PM emissions is 0.04 grs/dscf, however, BPT and BACT are more stringent. AP1 and AP2 shall each not exceed 0.03 grs/dscf of PM emissions. An initial performance test was conducted on AP1 in July, 1999, per Subpart I. An initial performance test shall be conducted on AP2 in accordance with Subpart I.

AP1 and AP2 shall fire #2 fuel oil which meets the criteria in ASTM D396.

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The performance of the baghouse shall be constantly monitored by either one of the following at all times either AP1 or AP2 is operating:

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Manzer shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt plant is operating with insufficient control and corrective action shall be taken immediately.

General process emissions from AP1 and AP2 shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1), six (6) minute block average in a 1-hour period.

Manzer 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 commissioner 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.

C. Rock Crushers

RC1 through RC4 rock crushers were manufactured in 1992, 2000, 1998, and 1989 respectively. Each is designed as a portable unit with a rated capacities of 150, 150, 100, and 110 ton/hr, respectively. The rock crushers are therefore not subject to EPA New Source Performance Standards (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.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of BPT (RC1 and RC2) or BACT (RC3 and RC4) for control of particulate matter (PM) emissions, Manzer shall maintain water sprays on the rock crushers and operate as needed to control visible emissions. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

D. Diesel Units

The diesel units are utilized to provide power to the rock crushers and asphalt plants.

A summary of BPT (EP2, EP3 and EP4) and BACT (EP6, EP7, EP8, and EP9) is the following:

1. EP2 shares a fuel tank with AP1 and AP2. Therefore, the use of #2 fuel oil that meets the criteria in ASTM D396 shall be considered BPT for EP2.
2. The use of diesel fuel with a sulfur content not to exceed 0.05% shall be considered BPT for EP3 and EP4, and BACT for EP6, EP7, EP8, and EP9.
3. A PM emission limit of 0.12 lb/MMBtu shall be considered BPT and BACT. The PM₁₀ limits are derived from the PM limits.
4. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from the diesel units shall each not exceed 20% opacity on a 6 minute block average, except for no more than two (2), six (6) minute block averages in a continuous 3 hour period.

E. Stock Piles and Roadways

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

F. General Process Emissions

Visible emissions from a general process (including conveyor belts) shall not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

G. Annual Licensed Facility Emissions:

1. Manzer shall be limited to 630,000 gal/yr of #2 fuel oil which meets the criteria in ASTM D396 on a calendar year basis, in AP1 and AP2.
2. EP2 shall be limited to 10,000 gallons of #2 fuel oil which meets the criteria in ASTM D396 per calendar year.
3. The remaining diesel units shall be limited to 35,000 gallons of diesel fuel per calendar year, with a sulfur content not to exceed 0.05%.

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4. Manzer shall be restricted to the following annual emissions, based on a calendar year:

Total Allowable Annual Emissions for the Facility
(used to calculate the annual license fee)
(Tons/Year)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
AP1 and AP2	3.9	3.9	22.2	6.6	15.6	3.8
EP2	0.1	0.1	0.4	3.0	0.7	0.2
Diesel Units	0.3	0.3	0.1	10.6	2.3	0.8
Total	4.3	4.3	22.7	20.2	18.6	4.8

III. AMBIENT AIR QUALITY ANALYSIS

According to the 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Based on the above total facility emissions, Manzer is below the emissions level required for modeling and monitoring.

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-731-71-H-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,

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- 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 Chapter 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]
 - (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]

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- (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]
- (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) AP1 and AP2
- A. Emissions from AP1 and AP2 shall each vent to a baghouse, and all components of the asphalt plants shall be maintained so as to prevent PM leaks. [06-096 CMR 115, BPT, BACT]
- B. The performance of the baghouses shall be constantly monitored by either one of the following at all times the asphalt plants are operating [06-096 CMR 115, BPT, BACT]:
1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Manzer shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
 2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the asphalt plant is operating with insufficient control and corrective action shall be taken immediately.
- C. To document maintenance of the baghouses, the license shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the asphalt plant location. [06-096 CMR 115, BPT, BACT]

- D. Opacity from each baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2), six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]
- E. General process emissions from the asphalt plants shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1), six (6) minute block average in a 1-hour period. [06-096 CMR 101]
- F. The asphalt plants shall be limited to firing 630,000 gallons of #2 fuel oil on a calendar year basis. Fuel use records for the asphalt plants shall be maintained for compliance purposes. [06-096 CMR 115, BPT, BACT]
- G. Emissions from the AP1 baghouse shall not exceed the following [06-096 CMR 115, 06-096 CMR 103, BPT]:

<u>Pollutant</u>	<u>grs/dscf</u>	<u>lb/hr</u>
PM	0.03	8.20
PM ₁₀	-	8.20
SO ₂	-	46.33
NO _x	-	13.75
CO	-	32.50
VOC	-	8.00

- H. Emissions from the AP2 baghouse shall not exceed the following [06-096 CMR 115, 06-096 CMR 103, BACT]:

<u>Pollutant</u>	<u>grs/dscf</u>	<u>lb/hr</u>
PM	0.03	6.59
PM ₁₀	-	6.59
SO ₂	-	41.29
NO _x	-	11.00
CO	-	26.00
VOC	-	6.40

- I. Manzer 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 commissioner 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. [38 MSRA §608-A, and 06-096 CMR 115, BPT, BACT]
- J. Manzer shall not process soils which are classified as hazardous waste or which have unknown contaminants. [06-096 CMR 115, BPT, BACT]

- K. When processing contaminated soils, Manzer 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, Manzer 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, BACT]
- L. Manzer shall notify the Bureau of Air Quality regional inspector at least 7 days prior to processing soil contaminated with anything other than #2 fuel oil or gasoline. [06-096 CMR 115, BPT, BACT]
- M. Manzer shall consult an initial performance test on AP2 in accordance with 40 CFR, Part 60, Subpart I.

(17) Rock Crushers

- A. Manzer shall install and maintain spray nozzles for particulate control each rock crusher and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [06-096 CMR 115, 06-096 CMR 101, BPT, BACT]
- B. Manzer 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, BACT]
- C. Manzer shall maintain a log detailing and quantifying the hours of operation on a daily basis for each rock crusher. The operation log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT, BACT]
- D. The crushers shall not be attached or clamped via cable, chain, turnbuckle, bolt, or other means (except electrical connections) to any anchor, slab, or structure (including bedrock) that must be removed prior to transportation. [06-096 CMR 115, BPT, BACT]

(18) Diesel Units:

- A. Emissions from the Diesel Units shall not exceed: [06-096 CMR 115, BPT, BACT]

	EP2	EP3	EP4	EP6	EP7	EP8	EP9
Pollutant	lb/hr						
PM	0.24	0.19	0.24	0.24	0.19	0.19	0.06
PM ₁₀	0.24	0.19	0.24	0.24	0.19	0.19	0.06
SO ₂	1.03	0.08	0.10	0.10	0.08	0.08	0.03
NO _x	8.82	7.06	8.82	8.82	7.06	7.06	2.21
CO	1.90	1.52	1.90	1.90	1.52	1.52	0.48
VOC	0.70	0.56	0.70	0.70	0.56	0.56	0.18

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- B. Visible emissions from each diesel unit shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2), six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]
- C. Except for EP2, the diesel units shall be limited to firing 35,000 gallons of diesel fuel with a sulfur content not to exceed 0.05% on a calendar year basis. Fuel use records for the diesel units shall be maintained for compliance purposes. [06-096 CMR 115, BPT, BACT]
- D. EP2 shall be limited to firing 10,000 gallons of #2 fuel oil which meets the criteria in ASTM D396 on a calendar year basis. Fuel use records for EP2 shall be maintained for compliance purposes. [06-096 CMR 115, BPT]

(20) Stockpiles and Roadways

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(21) General Process Sources

Visible emissions from any general process source shall (including conveyor belts) not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101 and 06-096 CMR 115, BPT]

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

A. Manzer 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 sent by mail shall be sent to the address below or to a Department Regional Office:

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.

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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.

- (23) Manzer 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, BPT]
- (24) AP1 and AP2 are subject to 40 CFR Part 60 Subparts A, and I and Manzer shall comply with the notification and recordkeeping requirements of 40 CFR Part 60.7.
- (25) Manzer 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 M.R.S.A. §605-C].

DONE AND DATED IN AUGUSTA, MAINE THIS _____ DAY OF _____ 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 3/7/2008

Date of application acceptance: 3/19/2008

Date filed with the Board of Environmental Protection: _____

This Order prepared by Jonathan Voisine, Bureau of Air Quality.