



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

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COMMISSIONER

Hyponex Corporation)	Departmental
Penobscot County)	Findings of Fact and Order
Medway, Maine)	Air Emission License
A-682-71-E-N)	After-The-Fact Renewal

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. Hyponex Corporation (Hyponex) of Medway, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their Medway, Maine bark processing and bagging facility.
2. The equipment addressed in this license is located at 264 Nicatou Industrial Lane, Medway, Maine.

B. Emission Equipment

Hyponex is authorized to operate the following equipment:

Electrical Generation Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Power Output (HP)</u>	<u>Power Output (KW)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Diesel #1	5.2	37.9	800	532	Diesel fuel, 0.0015%	1
Diesel #2	0.8	5.6	109	78.6	Diesel fuel, 0.0015%	2

C. Application Classification

The previous air emission license for Hyponex expired on March 5, 2012. A complete application was not submitted prior to the expiration date, therefore, Hyponex is considered to be an existing source applying for an after-the-fact renewal. The application for Hyponex does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended).

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II. FACILITY DESCRIPTION

The Hyponex facility in Medway, ME consists of soil blending and bagging and bark processing and bagging. For soils, the facility blends raw materials (bark fines, topsoil, sand, peat moss, coir, Perlite, Osmocote, etc.), bags, palletizes, wraps, and stores the finished goods. Bark processing consists of a grinding (equipment part of Air Emission License renewal) and coloring operations. The finished mulch is bagged on the same equipment as the soils and is also wrapped and stored onsite until sale. The facility receives the bark primarily through the truck dump (equipment listed in Air Emission License renewal). The bark and other raw materials are transported about the facility primarily by front end loaders. The site has 4 bagging lines (3 large and 1 small). Due to the seasonal nature of the sales (most lawn and garden products are purchased in April-June) the site builds inventory starting in the late summer and fall and the majority of shipping of the finished goods is in the spring.

III. 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 those 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.

B. Existing Emissions Units

Hyponex operates two diesel units, Diesel #1 and Diesel #2, as power sources for their bark processing facility in Medway, Maine. Diesel #1 is an 800 HP Caterpillar Diesel with a maximum firing rate of 37.9 gal/hr, manufactured and installed in 1996. Diesel #2 is a 109 HP John Deere Diesel with a maximum firing rate of 5.6 gal/hr, manufactured in 1993 and installed in 1996. Diesel #1 is the prime mover of a CBI Grinder and Diesel #2 is the power source for a Truck Dump.

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Diesels #1 and #2 were manufactured in 1996 and 1993, respectively, and are not subject to EPA New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. However, Diesel #1 and Diesel #2 are subject to 40 CFR Part 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, including initial notification. Hyponex shall provide the Department with a written compliance plan for Subpart ZZZZ prior to April 30, 2013.

Hyponex was formerly licensed to fire diesel fuel with a sulfur content of no greater than 0.05% sulfur by weight. The Department has since determined that BPT is the firing of diesel fuel oil with a maximum sulfur content of no greater than 15 ppm (0.0015% by weight) in Diesels #1 and #2.

The total facility potential emissions were previously calculated based on maximum firing rates over 8760 hours (one year). Hyponex has requested to establish an annual fuel limit for the diesel engines at their facility of no greater than 90,000 gallons per year (gal/yr) on a twelve-month rolling total basis. The reduction of the facility's annual fuel limit reduces the potential annual NO_x emissions to below the applicability threshold of Maine's rule *EMISSIONS STATEMENTS*, 06-096 CMR 137.

Compliance with the fuel and sulfur content restrictions shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Fuel use records shall be maintained on a monthly basis, in addition to the twelve-month rolling total.

A summary of the BPT analysis for Diesel #1 (5.2 MMBtu/hr) and Diesel #2 (0.8 MMBtu/hr) is as follows:

1. 06-096 CMR 103, *Fuel Burning Equipment Particulate Emission Standards*, PM emission limits. 06-096 CMR 103 establishes an emission restriction of no greater than 0.12 lb/MMBtu. The PM₁₀ limits are derived from the PM limits.
2. 06-096 CMR 106, *Low Sulfur Fuel*, regulates fuel sulfur content, however, the Department has determined that BPT for diesel fuel fired in diesel engines shall be diesel fuel with a maximum sulfur content no greater than 15 ppm.
3. NO_x, CO and VOC emission limit calculations are based upon AP-42 data dated 10/96.
4. Visible emissions from Stacks #1 and #2 are subject to *Visible Emissions Regulation*, 06-096 CMR 101 (as amended). Visible emissions from each diesel unit shall 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.

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- C. As established in 06-096 CMR 101, visible emissions from any general process source, including the Grinder and the Truck Dump, shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.
- D. As established in 06-096 CMR 101, 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.
- E. Annual Emission Restrictions
1. Hyponex shall be restricted to the following annual emissions, based on a twelve-month rolling total:
 - Hyponex shall be restricted annually to the firing of no greater than 90,000 gal/yr of diesel fuel.
 - Hyponex shall burn diesel fuel with a sulfur content of no greater than 15 ppm (0.0015% by weight).

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

Pollutant	Diesels
PM	0.6
PM ₁₀	0.6
SO ₂	0.01
NO _x	19.8
CO	5.2
VOC	2.2

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011 through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. "Greenhouse gases" as defined in 06-096 CMR 100 (as amended) means the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Greenhouse gases (GHG) for purposes of licensing are calculated and reported as carbon dioxide equivalents (CO₂e).

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Based on the facility's fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, Hyponex is below the major source threshold of 100,000 tons of CO₂ e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

IV. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor new 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.

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-682-71-E-N 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]

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- (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]
- (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:

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- 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]

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- (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) Diesels #1 and #2
- A. Hyponex shall be restricted annually to the firing of no greater than 90,000 gal/yr of diesel fuel in Diesels #1 and #2. Hyponex shall fire only diesel fuel with a maximum sulfur content of no greater than 15 ppm (0.0015% by weight) in Diesels #1 and #2. [06-096 CMR 115, BPT]
- B. Compliance with the facility's fuel annual fuel use limit and sulfur content restrictions shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Fuel use records shall be maintained on a monthly basis, in addition to the twelve-month rolling total. [06-096 CMR 115, BPT]
- C. Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
	lb/MMBtu	0.12	-	-	-	-	-
Diesel #1	lb/hr	0.6	0.6	0.01	16.6	4.4	1.8
Diesel #2	lb/hr	0.09	0.09	0.04	3.4	0.7	0.3

[06-096 CMR 115, BPT]

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- D. Hyponex shall provide the Department with a written compliance plan for Subpart ZZZZ prior to April 30, 2013. [06-096 CMR 115, BACT, 40 CFR Part 60, Subpart ZZZZ]
- E. Visible emissions from each diesel stack shall not exceed 20% opacity on a 6-minute block average except, for no more than 2 six-minute block averages in a 3-hour period. [06-096 CMR 101]
- (17) Visible emissions from any general process source, including the Grinder and the Truck Dump, shall not exceed an opacity of 20% on a 6-minute block average basis, except for no more than 1 six-minute block average in a 1-hour period. [06-096 CMR 101]
- (18) 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]
- (19) Hyponex 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 (Title 38 MRSA §605-C).

DONE AND DATED IN AUGUSTA, MAINE THIS 19th DAY OF June 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie R. [Signature]
PATRICIA W. ALLO, 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: April 26, 2012

Date of application acceptance: May 3, 2012

Date filed with the Board of Environmental Protection: _____

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



