

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Oldcastle Lawn & Garden, Inc. d/b/a Jolly Gardener Products, Inc. Androscoggin County Poland Spring, Maine A-964-71-F-A Departmental
Findings of Fact and Order
Air Emission License
Amendment #2

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Oldcastle Lawn & Garden, Inc. d/b/a Jolly Gardener Products, Inc. (Jolly Gardener Products) was issued Air Emission License A-964-71-D-R on March 14, 2014, for the operation of emission sources associated with their facility. The license was subsequently amended on May 11, 2017 (A-964-71-E-A).

Jolly Gardener Products has requested an amendment to their license in order to install an Extec Robotrac mobile screener and associated engine. As part of this amendment, Jolly Gardener Products is requesting the removal of the CBI pre-screener from the permit. The CBI pre-screener has been transferred out of state to another Oldcastle location.

As part of this amendment, the Emission Statement requirements were clarified to include the triennial reporting requirements.

The equipment addressed in this license amendment is located at 481 Springwater Road, Poland Spring, Maine.

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B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

Stationary Engine

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Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, <u>% sulfur</u>	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Extec Robotrac Engine	0.67	72	0.0015	4.9	1997	2017

Jolly Gardener Products may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf

C. Definitions

<u>Distillate Fuel</u>. For the purposes of this license, distillate fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- · Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

<u>Portable Engine.</u> For the purposes of this license, <u>portable engine</u> means an internal combustion engine which is 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. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

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D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. To minimize overall emissions increases from changes in the amendment, the CBI pre-screener and engine are being removed and the operational hour restrictions on the existing units shall remain in place. The new Extec Robotrac mobile screener and engine will be restricted to 3200 hours of operation per year.

The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	4.0	3.5	-0.5	100
PM ₁₀	4.0	3.5	-0.5	100
SO ₂	0.1	0.1	0.0	100
NO _x	49.3	46.2	-3.1	100
CO	9.8	9.1	-0.7	100
VOC	3.8	3.6	-0.2	50
CO ₂ e	<100,000	<100,000	<100,000	100,000

This modification is determined to be a minor modification and has been processed as such.

E. Facility Classification

With annual operating limits on the engines, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

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

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Definitions Regulation, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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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 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. New Equipment

Jolly Gardener Products has proposed the installation of an Extec Robotrac mobile screener capable of processing 100 yards per hour. The Extec Robotrac was manufactured in 1997. The screener is powered by a of a 72-kW distillate fired Deutz engine which is classified as a portable compression ignition engine. To ensure the additional emissions from this unit do not result in annual emission totals above the modeling thresholds, Jolly Gardener Products has proposed limiting the operation of the Extec Robotrac Screener Engine to 3,200 operating hours per year. Jolly Gardener Products will continue to limit the operation of the CBI Grinder Engine, Hogzilla Grinder Engine, and the CBI AirMax Screen Engine each to 1,500 hours per year. The Prentice Log Loader Engine, CEC Screen Engine, Phoenix 3300 Screen Engine and the Warrior 1800 Screen Engine will each continue to be restricted to 3,200 operating hours per year.

C. Extec Robotrac Screener and Engine

Jolly Gardener Products plans to operate a Extec Robotrac mobile screener and associated portable 72-kW Deutz Engine. The engine is rated 0.67 MMBtu/hr and fires distillate fuel. The engine was manufactured in 1997.

1. New Source Performance Standards (NSPS)

Due to the date of manufacture of the compression ignition engine listed above, the engine is not subject to the New Source Performance Standards (NSPS) Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE), 40 C.F.R. Part 60, Subpart IIII since the unit was manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

2. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart ZZZZ

The applicability of 40 C.F.R. Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines to engines at the Jolly Gardener Products facility manufactured prior 2006 was

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reviewed during the development of license A-964-71-C-A (issued June 14, 2012) and in the subsequent renewal A-964-71-D-R (issued March 3, 2014).

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Based on the justification as outlined in A-964-71-C-A (6/14/12) and in A-964-71-D-R (3/3/2014), the Extec Robotrac Screener Engine at the Jolly Gardener Products facility is not subject to 40 C.F.R. Part 63, Subpart ZZZZ since it is portable and is moved to various locations within the facility over the course of a year.

3. BACT Findings

The BACT emission limits for the Extec Robotrac Screener Engine are based on the following:

PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 115, BACT

SO₂ - combustion of distillate fuel with a maximum sulfur content not

to exceed 15 ppm (0.0015% sulfur by weight)

NO_x - 4.41 lb/MMBtu from AP-42, Table 3.3-1 dated 10/96 CO - 0.95 lb/MMbtu from AP-42, Table 3.3-1 dated 10/96 VOC - 0.35 lb/MMbtu from AP-42, Table 3.3-1 dated 10/96

7 OC - 0.55 10/191010 HOIII AI -72, 1 abic 5.5-1 dated

Visible - 06-096 C.M.R. ch. 115, BACT Emissions

The BACT emission limits for the Extec Robotrac Screener Engine is the following:

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
<u>Unit</u>	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Extec Robotrac Screener	0.08	0.08	0.01	2.96	0.64	0.23
Engine						
(0.67 MMBtu/hr), Distillate fuel						

Visible emissions from the Extec Robotrac Screener Engine shall not exceed 20% opacity on a six-minute block average basis.

D. Emission Statements

Jolly Gardener Products is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. Jolly Gardener Products shall maintain the following records in order to comply with this rule:

- 1. The amount of distillate fuel fired in the licensed engines. Document the amount of distillate fuel fired in each engine on a monthly basis;
- 2. The sulfur content of the distillate fuel fired in the licensed engines.
- 3. Hours of operation for each emission unit on a monthly basis.

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In reporting year 2020 and every third year thereafter, Jolly Gardener Products shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Jolly Gardener Products shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

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E. Annual Emissions

1. Total Annual Emissions

Jolly Gardener Products shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on the CBI Grinder Engine, Hogzilla Grinder Engine, and the CBI AirMax Screen Engines each operating 1,500 hours per year and the Prentice Log Loader Engine, CEC Screen Engine, Phoenix 3300 Screen Engine, the Warrior 1800 Screen Engine and the Extec Robotrac Screener Engine operating 3,200 operating hours per year.

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	<u>PM</u>	<u>PM₁₀</u>	SO ₂	NO _x	<u>CO</u>	<u>voc</u>
CBI Grinder	0.6	0.6	0.01	9.8	1.7	0.5
Engine						
Hogzilla Grinder	0.6	0.6	0.01	8.4	1.4	0.4
Engine						
Prentice Log	0.6	0.6	0.01	2.5	0.5	0.7
Loader Engine						
CEC Screen	0.4	0.4	0.01	5.6	1.2	0.5
Engine						
Phoenix 3300	0.5	0.5	0.01	7.1	1.5	0.6
Screen Engine						
Warrior 1800	0.4	0.4	0.01	4.9	1.1	0.4
Screen Engine						
CBI AirMax	0.3	0.3	0.01	3.2	0.7	0.1
Screen Engine						
Extec Robotrac	0.1	0.1	0.01	4.7	1.0	0.4
Total TPY	3.5	3.5	0.1	46.2	9.1	3.6

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

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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 C.F.R. Part 52, Subpart A, § 52.21, Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

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The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

<u>Pollutant</u>	Tons/Year
PM ₁₀	25
SO_2	50
NO _x	50
СО	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

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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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-964-71-F-A subject to the conditions found in Air Emission License A-964-71-D-R, in amendment A-964-71-E-A, and the following conditions.

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

SPECIFIC CONDITIONS

The following condition replaces Condition (16) A. in A-964-71-D-R (3/3/2014) and in A-964-71-E-A (5/11/2017):

(16) Engines

A. Jolly Gardener Products shall limit the CBI Grinder Engine, the Hogzilla Grinder Engine, and the CBI AirMax Screen Engine to 1,500 hr/yr of operation each, based on a 12-month rolling total. The Prentice Log Loader Engine, CEC Screen Engine, Phoenix 3300 Screen Engine, the Warrior 1800 Screen Engine, and the Extec Robotrac Engine shall each be limited to 3,200 hours/year of operation based on a 12-month rolling total. An hour meter shall be maintained and operated on each Jolly Gardener Products engine. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [06-096 CMR 115, BPT]

The following shall be added to Condition (16) in A-964-71-D-R (3/3/2014) and in A-964-71-E-A (5/11/2017):

H. Extec Robotrac Engine

1. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
<u>Unit</u>	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Extec Robotrac Engine	0.08	0.08	0.01	2.96	0.64	0.23

2. Visible emissions from the Extec Robotrac Engine shall each not exceed 20% opacity on a six (6) minute block average. [06-096 CMR 115]

The following shall replace Condition (21) in A-964-71-D-R (3/3/2014):

(21) Emission Statements

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Jolly Gardener Products shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.
- B. Jolly Gardener Products shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 - 1. The amount of distillate fuel fired in the licensed engines. Document the amount of distillate fuel fired in each engine on a monthly basis;
 - 2. The sulfur content of the distillate fuel fired in the licensed engines.
 - 3. Hours of operation for each emission unit on a monthly basis.

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C. In reporting year 2020 and every third year thereafter, Jolly Gardener Products shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). Jolly Gardener Products shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

DONE AND DATED IN AUGUSTA, MAINE THIS 3/ DAY OF Hugust

DEPARTMENT OF ENVIRONMENTAL PROTECTION

The term of this amendment shall be concurrent with the term of Air Emission License A-964-71-D-R. (3/3/2014)

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: July 19, 2018 Date of application acceptance: July 20, 2018

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

