

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

### **DEPARTMENT ORDER**

Sunday River Skiway Corporation Oxford County Newry, Maine A-634-71-K-R/A Departmental
Findings of Fact and Order
Air Emission License
Renewal and
After-the-Fact Amendment

### FINDINGS OF FACT

After review of the air emission license renewal and 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

Sunday River Skiway Corporation (Sunday River) has applied to renew their Air Emission License for the operation of emission sources associated with their ski resort. Sunday River has requested an after-the-fact minor modification to their license in order to replace two back-up ski lift engines, add a back-up ski lift engine, and add references to two back-up ski lift engines which qualify as insignificant activities.

The equipment addressed in this license is located at 15 South Ridge Road, Newry, Maine.

# B. Emission Equipment

The following equipment is addressed in this air emission license:

### **Back-up Ski Lift Engines**

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (HP)	Fuel Type	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Lift Engine #1 (new)*	1.81	320	Distillate Fuel	13.1	2022	2023
Lift Engine #2	1.07	152	Distillate Fuel	7.8	Pre-2005	1993
Lift Engine #6	2.81	400	Distillate Fuel	20.5	Pre-2005	1997
Lift Engine #7	5.63	800	Distillate Fuel	40.8	2008	2008
Lift Engine #7 Aux	4.02	571	Distillate Fuel	29.1	2008	2008
Lift Engine #8*	1.81	320	Distillate Fuel	13.1	2017	2017
Lift Engine #9	1.07	152	Distillate Fuel	7.8	Pre-2005	1987
Lift Engine #10	2.35	335	Distillate Fuel	17.1	Pre-2005	1988
Lift Engine #11	1.24	177	Distillate Fuel	9	Pre-2005	1988

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	Max. Input	Rated Output		Firing		
	Capacity	Capacity		Rate	Date of	Date of
Equipment	(MMBtu/hr)	(HP)	Fuel Type	(gal/hr)	Manuf.	Install.
Lift Engine #12	3.16	450	Distillate Fuel	23	Pre-2005	1991
Lift Engine #14 (new)*	2.03	248	Distillate Fuel	14.8	2022	2022
Lift Engine #15	1.24	177	Distillate Fuel	9	Pre-2005	1995
Lift Engine #1 (old)**	1.96	280	Distillate Fuel		Pre-2005	
Lift Engine #14 (old)**	2.03	290	Distillate Fuel		Pre-2005	

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Sunday River was previously licensed to install eight prime-power distillate-fired generators. These units were never installed and will no longer be addressed in this license.

Sunday River 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

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.

*Records* or *Logs* mean either hardcopy or electronic records.

# D. Application Classification

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

Sunday River has applied to renew currently licensed emission units as well as modify their license as addressed in Section I(A) above.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emissions" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.)

<sup>\*</sup> New to license

<sup>\*\*</sup> Removed from license

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ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

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D. W	Current License	Future License	Net Change	Significant
Pollutant	(tpy)	(tpy)	(tpy)	<b>Emissions Levels</b>
PM	0.5	0.2	-0.3	100
$PM_{10}$	0.5	0.2	-0.3	100
PM <sub>2.5</sub>	0.5	0.2	-0.3	100
$SO_2$	0.1	0.1	1	100
$NO_x$	46.1	5.9	-40.2	100
CO	42.0	1.3	-40.7	100
VOC	2.5	0.4	-2.1	100

Therefore, this license is considered to be both a renewal and a minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules C.M.R. ch. 115.

# E. Facility Classification

With the operating hours restriction on the emergency generators, the facility is licensed as follows:

- · As a synthetic minor source of air emissions for criteria pollutants, because Sunday River is subject to license restrictions that keep facility emissions below major source thresholds for NO<sub>x</sub> and CO; 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 *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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.

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

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- 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. Back-up Ski Lift Engines

Sunday River operates 12 emergency back-up ski lift engines (Lift Engines #1, #2, #6, #7, #7 Aux, #8, #9, #10, #11, #12, #14, and #15). The back-up ski lift engines are generator sets with each gen set consisting of an engine and an electrical generator. They have engines rated between 1.07 MMBtu/hr and 5.63 MMBtu/hr and each fire distillate fuel. Lift Engines #2, #6, #9, #10, #11, #12, and #15 were manufactured prior to 2005. The remaining lift engines were manufactured in 2008 or later.

# 1. BPT/BACT Findings

Lift Engines #2, #6, #7, #7 Aux, #9, #10, #11, #12, and #15 were previously licensed and are subject to BPT. The following is a summary of a BACT analysis for control of emissions from Generators #1, #8, and #14.

# a. Particulate Matter (PM, PM<sub>10</sub>, PM<sub>2.5</sub>)

Sunday River fires only low-ash content fuel, distillate fuel, in the boilers and optimizes combustion conditions by following maintenance practices recommended by the manufacturer. Additional add-on pollution controls are not economically feasible.

BACT for PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions from Generators #1, #8, and #14 is the use of low-ash content fuel and the emission limits listed in the tables below.

# b. Sulfur Dioxide (SO<sub>2</sub>)

Sunday River fires only distillate fuel with a sulfur content not to exceed 0.0015% by weight. The use of this fuel results in minimal emissions of SO<sub>2</sub>, and additional add-on pollution controls are not economically feasible.

BACT for SO<sub>2</sub> emissions from Generators #1, #8, and #14 is the use of ultra-low-sulfur distillate fuel and the emission limits listed in the tables below.

## c. Nitrogen Oxides (NO<sub>x</sub>)

There are several control strategies for the control of NO<sub>x</sub> from distillate fuel-fired engines including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), and proper operation and maintenance of the engine.

Both SCR and SNCR are technically feasible control technologies for minimizing NO<sub>x</sub>. Both methods include injection of a NO<sub>x</sub> reducing agent, typically ammonia

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or urea, into the boiler combustion gases, where the reagent reacts with  $NO_x$  to form nitrogen and water. Each technology is effective within a specific temperature range, 500-1,200 °F for SCR and 1,400-1,600 °F for SNCR. However, both SCR and SNCR have the negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units larger than Generators #1, #8, and #14.

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BACT for NO<sub>x</sub> emissions from Generators #1, #8, and #14 is proper maintenance and operation of the unit and the emission limits listed in the tables below.

# d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

There are several control strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of an oxygen trim system.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the generators in question. These controls were determined to be economically infeasible.

BACT for CO and VOC emissions from Generators #1, #8, and #14 is the emission limits listed in the tables below.

# e. Emission Limits

The BPT emission limits for Lift Engine #7 are based on the following:

PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.12 lb/MMBtu, 06-096 C.M.R. ch. 103

SO<sub>2</sub> – Combustion of distillate fuel with a maximum sulfur content

not to exceed 15 ppm (0.0015% sulfur by weight)

NO<sub>x</sub> - 3.2 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25 CO - 0.85 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25 VOC - 0.09 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25

Visible Emissions – 06-096 C.M.R. ch. 101

The BPT/BACT emission limits for Lift Engines #1, #2, #6, #7 Aux, #8, #9, #10, #11, #12, #14, and #15 are based on the following:

PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.12 lb/MMBtu, 06-096 C.M.R. ch. 115, BPT

SO<sub>2</sub> - Combustion of distillate fuel with a maximum sulfur

content not to exceed 15 ppm (0.0015% sulfur by weight)

 NOx
 - 4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25

 CO
 - 0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25

 VOC
 - 0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25

Visible Emissions – 06-096 C.M.R. ch. 101

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The BPT/BACT emission limits for the generators are the following:

Unit	Pollutant	lb/MMBtu
Lift Engine #7	PM	0.12
Lift Engine #7 Aux	PM	0.12
Lift Engine #12	PM	0.12

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Lift Engine #1	0.22	0.22	0.22	-	7.98	1.72	0.65
Lift Engine #2	0.13	0.13	0.13	-	4.72	1.02	0.39
Lift Engine #6	0.34	0.34	0.34	-	12.39	2.67	1.01
Lift Engine #7	0.68	0.68	0.68	-	18.02	4.79	0.51
Lift Engine #7 Aux	0.48	0.48	0.48	ı	17.73	3.82	1.45
Lift Engine #8	0.22	0.22	0.22	ı	7.98	1.72	0.65
Lift Engine #9	0.13	0.13	0.13	-	4.72	1.02	0.39
Lift Engine #10	0.28	0.28	0.28	-	10.36	2.23	0.85
Lift Engine #11	0.15	0.15	0.15	-	5.47	1.18	0.45
Lift Engine #12	0.38	0.38	0.38	-	13.94	3.00	1.14
Lift Engine #14	0.24	0.24	0.24	ı	8.95	1.93	0.73
Lift Engine #15	0.15	0.15	0.15	-	5.47	1.18	0.45

Visible emissions from each of the back-up ski lift engines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Sunday River shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- a. The duration of the startup shall not exceed 30 minutes per event;
- b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- c. Sunday River shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

Each of the emergency generators shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. Each emergency generator shall be equipped with a non-resettable hour-meter to record operating time. To demonstrate compliance with the

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operating hours limit, Sunday River shall keep records of the total hours of operation and the hours of emergency operation for each unit.

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Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

# 2. Chapter 169

Stationary Generators, 06-096 C.M.R. ch. 169 (Chapter 169), is applicable to Lift Engines #1 and #14; the other engines were installed prior to the applicability date of this chapter. Lift Engines #1 and #14 are emergency generators powered by engines with a rated output of less than 1,000 brake horsepower (747 kW). Chapter 169 identifies emission standards for generator engines subject to this chapter and stack height requirements for certain generator engines subject to this chapter.

# a. Chapter 169 Emission Standards Requirements

For Lift Engines #1 and #14, Sunday River shall comply with the emission standards for emergency generators by complying with the applicable standards contained in 40 C.F.R. Part 60, Subpart IIII. [06-096 C.M.R. ch. 169, § 4(B)(1)]

# b. Chapter 169 Stack Height Requirements

Chapter 169 identifies stack height requirements for any stack used to exhaust a generator engine or combination of generator engines with a combined rated output equal to or greater than 1,000 brake horsepower (747 kW). Individual generator engines with a maximum power capacity of less than 300 kW are not included in the assessment of the combined generator power capacity exhausted through a common stack. [06-096 C.M.R. ch. 169, § 6]

There are no stack height requirements in Chapter 169 applicable to these back-up ski lift engines because they exhaust through their own stacks and their rated output is less than 1,000 brake horsepower (747 kilowatts). [06-096 C.M.R. ch. 169, § 6]

## 3. New Source Performance Standards (NSPS)

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to Lift Engines #1, #7, #7 Aux, #8, and #14 since these units were ordered after July 11, 2005, and manufactured after

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April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the units also meet the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

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A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart IIII requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

# (2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if

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the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.

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(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§ 60.4211(f) and 60.4219]

# b. 40 C.F.R. Part 60, Subpart IIII Requirements

- (1) Manufacturer Certification Requirement Lift Engines #1, #7, #7 Aux, #8, and #14 shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]
- (2) Ultra-Low Sulfur Fuel Requirement
  The fuel fired in Lift Engines #1, #7, #7 Aux, #8, and #14 shall not exceed
  15 ppm sulfur (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]
- (3) Non-Resettable Hour Meter Requirement A non-resettable hour meter shall be installed and operated on Lift Engines #1, #7, #7 Aux, #8, and #14. [40 C.F.R. § 60.4209(a)]
- (4) Operation and Maintenance Requirements
  Lift Engines #1, #7, #7 Aux, #8, and #14 shall be operated and maintained according to the manufacturer's emission-related written instructions. Sunday River may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

Sunday River shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(5) Annual Time Limit for Maintenance and Testing Lift Engines #1, #7, #7 Aux, #8, and #14 shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include

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peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]

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# (6) Initial Notification Requirement No initial notification is required under 40 C.F.R. Part 60, Subpart IIII for emergency engines. [40 C.F.R. § 60.4214(b)]

# (7) Recordkeeping

Sunday River shall keep records that include the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time.

[40 C.F.R. § 60.4214(b)]

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

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is not applicable to any of the engines at Sunday River. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source. However, they are considered exempt from the requirements of 40 C.F.R. Part 63, Subpart ZZZZ since they are categorized as residential, commercial, or institutional emergency engines and they do not operate or are not contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part arrangement another financial with entity as specified 40 C.F.R. § 63.6640(f)(4)(ii).

Operation of any emergency engine in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a nonemergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 63.6640(f)(4)(ii), would cause the engine to be subject to 40 C.F.R. Part 63, Subpart ZZZZ and require compliance with all applicable requirements.

## C. Fugitive Emissions

Sunday River shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

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Sunday River shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

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# D. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

# E. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on operating each of the licensed back-up ski lift engines for 100 hrs/yr of non-emergency operation.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

# Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	CO	VOC
Lift Engine #1	0.01	0.01	0.01	0.00	0.40	0.09	0.03
Lift Engine #2	0.01	0.01	0.01	0.00	0.24	0.05	0.02
Lift Engine #6	0.02	0.02	0.02	0.00	0.62	0.13	0.05
Lift Engine #7	0.03	0.03	0.03	0.00	0.90	0.24	0.03
Lift Engine #7 Aux	0.02	0.02	0.02	0.00	0.89	0.19	0.07
Lift Engine #8	0.01	0.01	0.01	0.00	0.40	0.09	0.03
Lift Engine #9	0.01	0.01	0.01	0.00	0.24	0.05	0.02
Lift Engine #10	0.01	0.01	0.01	0.00	0.52	0.11	0.04
Lift Engine #11	0.01	0.01	0.01	0.00	0.27	0.06	0.02
Lift Engine #12	0.02	0.02	0.02	0.00	0.70	0.15	0.06
Lift Engine #14	0.01	0.01	0.01	0.00	0.45	0.10	0.04
Lift Engine #15	0.01	0.01	0.01	0.00	0.27	0.06	0.02
Total TPY	0.2	0.2	0.2	0.1*	5.9	1.3	0.4

<sup>\*</sup> Because the estimated emission is small but not zero, this value is rounded to the nearest tenth of a ton.

Pollutant	Tons/year
Single HAP	7.9
Total HAP	19.9

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# 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:

Pollutant	Tons/Year
$PM_{10}$	25
PM <sub>2.5</sub>	15
$SO_2$	50
$NO_x$	50
CO	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.

This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Sunday River to submit additional information and may require an ambient air quality impact analysis at that time.

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

The Department hereby grants Air Emission License A-634-71-K-R/A subject to the following conditions.

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<u>Severability</u>. The invalidity or unenforceability of any provision of this License or part thereof 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.

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### 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. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115] Payment of the annual air emission license fee for Sunday River is due by the end of August of each year. [38 M.R.S. § 353-A(3)]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 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 C.M.R. ch. 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

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of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 the written test report by the Department, or another alternative timeframe approved by the Department, 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

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emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and

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- 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 C.M.R. ch. 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 license requirement. [06-096 C.M.R. ch. 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 emissions 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (16) The licensee 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. § 605). [06-096 C.M.R. ch. 115]

#### **SPECIFIC CONDITIONS**

(17) Back-up Ski Lift Engines #2, #6, #9, #10, #11, #12, and #15

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A. Each of the back-up ski lift engines shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]

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- B. Sunday River shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [06-096 C.M.R. ch. 115, BPT]
- C. The fuel sulfur content for lift engines #2, #6, #9, #10, #11, #12, and #15 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]
- D. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Lift Engine #12	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

E. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Lift Engine #2	0.13	0.13	0.13	neg.	4.72	1.02	0.39
Lift Engine #6	0.34	0.34	0.34	neg.	12.39	2.67	1.01
Lift Engine #9	0.13	0.13	0.13	neg.	4.72	1.02	0.39
Lift Engine #10	0.28	0.28	0.28	neg.	10.36	2.23	0.85
Lift Engine #11	0.15	0.15	0.15	neg.	5.47	1.18	0.45
Lift Engine #12	0.38	0.38	0.38	neg.	13.94	3.00	1.14
Lift Engine #15	0.15	0.15	0.15	neg.	5.47	1.18	0.45

F. Visible Emissions [06-096 C.M.R. ch. 101, § 4(A)(4)]

Visible emissions from each of the back-up ski left engines #2, #6, #9, #10, #11, #12, and #15 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Sunday River shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- 1. The duration of the startup shall not exceed 30 minutes per event;
- 2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and

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3. Sunday River shall keep records of the date, time, and duration of each startup.

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Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

G. Back-up ski lift engines are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators and/or fire pumps are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

# (18) Back-up Ski Lift Engines #1, #7, #7 Aux, #8, and #14

A. Each of the back-up ski lift engines shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT/BACT]

Sunday River shall keep records of all maintenance conducted on the engines associated with back-up ski lift engines #1, #7, #7 Aux, #8, and #14. [06-096 C.M.R. ch. 115, BPT/BACT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Lift Engine #7	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)
Lift Engine #7 Aux	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT/BACT]:

	PM	$PM_{10}$	$PM_{2.5}$	$SO_2$	$NO_x$	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Lift Engine #1	0.22	0.22	0.22	neg.	7.98	1.72	0.65
Lift Engine #7	0.68	0.68	0.68	neg.	18.02	4.79	0.51
Lift Engine #7 Aux	0.48	0.48	0.48	neg.	17.73	3.82	1.45
Lift Engine #8	0.22	0.22	0.22	neg.	7.98	1.72	0.65
Lift Engine #14	0.24	0.24	0.24	neg.	8.95	1.93	0.73

D. Visible Emissions

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Visible emissions from each of the lift engines #1, #7, #7 Aux, #8, and #14 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(4)]

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E. The back-up ski lift engines shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following: [incorporated under 06-096 C.M.R. ch. 115, BPT and 169]

### 1. Manufacturer Certification

The engines shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202. [40 C.F.R. § 60.4205(b)]

#### 2. Ultra-Low Sulfur Fuel

The fuel fired in the engines shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115, BPT]

### 3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 60.4209(a)]

# 4. Annual Time Limit for Maintenance and Testing

- a. As back-up ski lift engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115, BPT]
- b. Sunday River shall keep records that include the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

# 5. Operation and Maintenance

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions. Sunday River may only change those

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emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

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Sunday River shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

# (19) General Process Sources

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

# (20) **Fugitive Emissions** [06-096 C.M.R. ch. 101, § 4(C)]

- A. Sunday River shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.
- B. Sunday River shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

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(21) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, Sunday River may be required to submit additional information. Upon written request from the Department, Sunday River shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter.

[06-096 C.M.R. ch. 115, § 2(O)]

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DONE AND DATED IN AUGUSTA, MAINE THIS 18th DAY OF AUGUST, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:\_

MELANIE LOYZIM, COMMISSIONER

for

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 28, 2025

Date of application acceptance: March 6, 2025

This Order prepared by Zac Hicks, Bureau of Air Quality.