DES
DEPARTMENT OF ENVIRONMENT AND SUSTAINABILITY
air quality | desert conservation PROGRAM | sustainability

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PART 70 OPERATING PERMIT

SOURCE ID: 00825

MGM Resorts International

MGM Grand, 3799 S. Las Vegas Boulevard
City Center, 3730 S. Las Vegas Boulevard
T-Mobile Arena, 3780 S. Las Vegas Boulevard
Excalibur, 3850 S. Las Vegas Boulevard
Mandalay Bay, 3950 S. Las Vegas Boulevard
The Signature at MGM Grand, 145 E. Harmon Ave.
Bellagio, 3600 S. Las Vegas Boulevard
Park MGM, 3770 S. Las Vegas Boulevard
New York-New York, 3790 S. Las Vegas Boulevard
Luxor, 3900 S. Las Vegas Boulevard
The Four Seasons, 3960 S. Las Vegas Boulevard
The Cosmopolitan of Las Vegas, 3708 S. Las Vegas Blvd.

ISSUED ON: May 19, 2022 **EXPIRES ON: May 18, 2027**

Revised on: October 2, 2024

Current action: Minor Revision

Issued to:

MGM Resorts International
3600 South Las Vegas Boulevard
Las Vegas, Nevada 89109

Responsible Official:

Anthony Williams
Senior Vice President, Facility Operations
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NATURE OF BUSINESS:
SIC 7011, "Hotels and Motels"
SIC 7999, "Amusement and Recreation Services, Not Elsewhere Classified"
NAICS 721120, "Casino Hotels"
NAICS 711310, "Promoters of Performing Arts, Sports, and Similar Events with Facilities"

Issued by the Clark County Department of Environment and Sustainability/Division of Air Quality in accordance with Section 12.5 of the Clark County Air Quality Regulations.

Santosh Mathew, Permitting Manager

EXECUTIVE SUMMARY

MGM Resorts International (MGMRI) operates under SIC Codes 7011, "Hotels and Motels," and 7999, "Amusement and Recreation Services, Not Elsewhere Classified" and NAICS codes 721120, "Casino Hotels" and 7113310, "Promoters of Performing Arts, Sports, and Similar Events with Facilities." MGMRI is located in Clark County, Nevada, on South Las Vegas Boulevard. The permittee is a major source located in Hydrographic Area (HA) 212, the Las Vegas Valley. HA 212 is in attainment for all regulated air pollutants except ozone; effective January 5, 2023, HA 212 was designated as moderate nonattainment for the 2015 ozone National Ambient Air Quality Standard (NAAQS).

MGMRI has been permitted under the New Source Review (NSR) regulations as a Prevention of Significant Deterioration (PSD) major stationary source of NO_x and CO, and a minor source for all other regulated pollutants. MGMRI is a source of greenhouse gasses (GHG). The emission units and activities at the MGMRI properties are divided among 12 properties. Emission units present at this source include natural gas boilers and water heaters, diesel-powered emergency generators and fire pumps, cooling towers, woodworking and surface coating operations, gasoline storage and dispensing equipment, two natural gas turbines, and pyrotechnic equipment. The source operates a combination of fossil-fuel boilers with a cumulative heat-input rating exceeding 250 million Btu, which classifies it as a categorical source under AQR 12.2.2(j).

The following table identifies the source's status based on the potential to emit (PTE) each regulated air pollutant.

Source PTE (tons per year)

PM_{10}	$PM_{2.5}$	NO_X	CO	SO_2	VOC	HAP	GHG[1]
84.46	80.97	802.03	375.90	4.06	76.89	22.03	605,686.05

[1]In units of CO_2e

DAQ will continue to require the permittees to estimate their GHG PTE in terms of each individual pollutant (CO_2, CH_4, N_2O, SF_6, etc.) during subsequent permitting actions, and the corresponding TSDs will include these PTEs for informational purposes.

Pursuant to AQR 12.5.2, all terms and conditions in Sections 1 through 10 and the attachments in this permit are federally enforceable unless explicitly denoted otherwise.

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Common Acronyms and Abbreviations

(These terms may be seen in the permit)

Acronym	Term
AQR	Clark County Air Quality Regulation
AST	aboveground storage tank
ATC	Authority to Construct
Avgas	aviation gasoline
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2	carbon dioxide
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
DOM	date of manufacture
EPA	U.S. Environmental Protection Agency
EU	emission unit
GDO	gasoline dispensing operation
GHG	greenhouse gas
HAP	hazardous air pollutant
hp	horsepower
kW	kilowatts
MMBtu/hr	Millions of British Thermal Units per Hour
MSP	Minor Source Permit
NAC	Nevada Administrative Code
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	nitrogen oxides
NRS	Nevada Revised Statutes
NSPS	New Source Performance Standard
NTTR	Nevada Test and Training Range
OP	Operating Permit
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTE	potential to emit
RICE	reciprocating internal combustion engine
SDS	Safety Data Sheet
SIP	State Implementation Plan
SIC	Standard Industrial Classification
SM80	Synthetic Minor – one or more pollutants exceed 80% of major source threshold
SO_2	sulfur dioxide
UST	underground storage tank
VMT	vehicle miles traveled
VEE	Visible Emissions Evaluation
VOC	volatile organic compound

1.0 EMISSION UNITS AND APPLICABLE REQUIREMENTS

1.1 MGM GRAND

1.1.1 Emission Units

The stationary source activities at MGM Grand covered by this Part 70 OP consist of the emission units (EUs) and associated appurtenances summarized in Table 1-1. *[825 NSR ATC/OP, Modification 5 (7/18/00); 825 NSR ATC/OP, Modification 6 (11/29/04); 825 ATC, Modification 13 (12/31/09); 737 ATC, Modification 3 (01/10/03); 737 ATC, Modification 4 (04/29/04); Title V OP (10/21/13, 12/26/14, 09/16/16, 09/14/17, 08/28/18, 06/25/19, and 01/25/21); Title V Revisions (00825_20210524_APP and 00825_20210916_APP); and Prior Notifications (06/21/21 and 03/10/22) incorporated into the Title V]*

Table 1-1: Summary of EUs – MGM Grand

EU	Rating	Description	Make	Model No.	Serial No.
MG01	2.0 MMBtu/hr	Boiler	Envirotech	50-119	1109
MG02	2.0 MMBtu/hr	Boiler	Envirotech	50-119	1110
MG05	4.0 MMBtu/hr	Boiler	Unilux	ZF400	2000
MG06	4.0 MMBtu/hr	Boiler	Unilux	ZF400	2013
MG13	32.66 MMBtu/hr	Boiler	Cleaver Brooks	CBLE700-800-200	OL097510
MG14	32.66 MMBtu/hr	Boiler	Cleaver Brooks	CBLE700-800-200	OL096895
MG16	16.33 MMBtu/hr	Boiler	Cleaver Brooks	CBLE700-800-200	OL096897
MG17	2,520 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02910
MG18	2,520 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02931
MG19	2,520 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02927
MG20	2,520 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02913
MG21	2,520 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02929

EU	Rating	Description	Make	Model No.	Serial No.
MG22	2,520 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02932
MG23	2,520 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02916
MG24	208 hp	Diesel Fire Pump DOM: 1993	Cummins	6BTA5.9-F1	44802838
MG26	412 hp	Diesel Fire Pump DOM: 1993	Detroit Allison	DDFP-06FA-8175	6VF-199592
MG27	196 hp	Diesel Fire Pump DOM: 1993	Caterpillar	3208DIT	03Z16779
MG28	185 hp	Diesel Fire Pump DOM: 1993	Detroit Allison	PDFP-06YR2531F	U719491F
MG29	15'x25'	Spray Booth	Goldwest	2450	1568
MG31	18,000 gpm	Cooling Tower	EvapTech	EC330-424M	21004685
MG32	18,000 gpm	Cooling Tower	Baltimore Aircoil	4469-20-3W	92-46-6393
MG34	2.0 MMBtu/hr	Boiler	Patterson-Kelley	NM-2000	CR46-05-28834
MG35	2.0 MMBtu/hr	Boiler	Patterson-Kelley	NM-2000	CR46-05-28833
MG39	98" x 120" x 110"	Spray Booth	McMaster-Carr	7899T96	
MG40	74" x 41" x 38"	Spray Booth	McMaster-Carr	7866T83	
MG43		Pyrotechnics			
MG46	3,000 gallons	Aboveground Storage Tank	Ace Tank & Equipment		
MG51	149 hp	Diesel Fire Pump DOM: 1996	Clarke	JU6H-UF68	PF6068T701042
MG53	20.0 MMBtu/hr	Boiler	Unilux	ZF2000W	2810
MG111	18,000 gpm	Cooling Tower	Evap Tech	EC-330-424M	13000530
MG113	488 bhp	Emergency Fire Pump DOM: 2017	Clarke Fire Protection Services	JX6H-UFADF0	RG6135L031159
MG114	6.00 MMBtu/hr	Boiler	Lochinvar	FBN6000	1811 109539954
MG115	6.00 MMBtu/hr	Boiler	Lochinvar	FBN6000	1811 109539941
MG116	6.00 MMBtu/hr	Boiler	Lochinvar	FBN6000	1810 109453539
MG117	6.00 MMBtu/hr	Boiler	Lochinvar	FBN6001	1846 112528432
MG118	6.00 MMBtu/hr	Boiler	Lochinvar	FBN6001	1849 112752966
MG119	6.00 MMBtu/hr	Boiler	Lochinvar	FBN6001	1839 112032695
MG120	6.00 MMBtu/hr	Boiler	Lochinvar	FBN6001	1908 113718475

EU	Rating	Description	Make	Model No.	Serial No.
MG121	3.00 MMBtu/hr	Boiler	RBI	Futura XLF 3000	012084743
MG122	3.00 MMBtu/hr	Boiler	RBI	Futura XLF 3000	012084725
MG123	3.00 MMBtu/hr	Boiler	RBI	Futura XLF 3000	121984697
MG124	3.00 MMBtu/hr	Boiler	RBI	Futura XLF 3000	121984712
MG125	3.00 MMBtu/hr	Boiler	RBI	Futura XLF 3000	012084763
MG126	3.00 MMBtu/hr	Boiler	RBI	Futura XLF 3000	121984684
MG129	8.76 MMBtu/hr	Boilers/Water Heaters <1.00 MMBtu/hr	Various	Various	Various

1.1.2 Controls

1.1.2.1 Control Devices

No add-on controls are identified.

1.1.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in all boilers and water heaters. *[825 NSR ATC/OP, Modification 5 (07/18/00), Condition III-B-1]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's operations and maintenance (O&M) manual for emissions-related components and good combustion practices. *[825 NSR ATC/OP, Modification 5 (07/18/00), Condition III-B-2]*

3. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 40 ppmv NO_x, corrected to 3% oxygen (EUs: MG01, MG02, MG05, MG06, MG13, MG14, and MG16). *[Title V OP (10/21/13)]*

4. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 111 ppmv CO, corrected to 3% oxygen (EUs: MG01, MG02, MG05, MG06, MG13, MG14, and MG16). *[Title V OP (10/21/13)]*

5. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 30 ppmv NO_x, corrected to 3% oxygen (EUs: MG34 and MG35). *[825 NSR ATC Modification 13 (11/30/2009) Condition IV-A-2-c]*

6. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 100 ppmv CO, corrected to 3% oxygen (EUs: MG34 and MG35). *[825 NSR ATC Modification 13 (11/30/2009) Condition IV-A-2-c]*

7. The permittee shall operate and maintain the 20.0 MMBtu/hr boiler with burners that have a manufacturer's maximum emission concentration of 30 ppmv NO_x, corrected to 3% oxygen (EU: MG53). *[Title V OP (10/21/13)]*

8. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: MG53). *[Title V OP (10/21/13)]*

9. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EUs: MG114 through MG116). *[Title V OP (06/25/19)]*

10. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EUs: MG114 through MG116). *[Title V OP (06/25/19)]*

11. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv CO, corrected to 3% oxygen (EUs: MG117 through MG120). *[Title V OP (01/25/21)]*

12. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 9 ppmv NO_x, corrected to 3% oxygen (EUs: MG121 through MG126). *[Title V OP (01/25/21)]*

13. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EUs: MG117 through MG126). *[Title V OP (01/25/21)]*

Diesel Generators/Fire Pumps

14. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators (EUs: MG17 through MG23 and MG113). *[40 CFR 60.4207(b) and 40 CFR 63.6604(b)]*

15. The permittee shall operate and maintain all diesel generators and fire pumps in accordance with the manufacturer's O&M manual for emissions-related components (EUs: MG17 through MG24, MG26 through MG28, MG51, and MG113). *[825 NSR ATC/OP, Modification 5, Condition III-B-4; 825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-9; & Title V OP (10/21/13 and 08/28/18)]*

16. The permittee shall combust only diesel fuel in the diesel generators and fire pumps (EUs: MG17 through MG24, MG26 through MG28, MG51, and MG113). *[AQR 12.5.2.6]*

Cooling Towers

17. The permittee shall operate and maintain each of the cooling towers in accordance with the manufacturer's O&M manual for emissions-related components (EUs: MG31, MG32, and MG111). *[AQR 12.5.2.6]*

18. The permittee shall operate the cooling tower with a drift eliminator that has a manufacturer's drift rate of 0.001% (EU: MG31). *[Prior Notification (06/21/21) incorporated into the Title V]*

19. The permittee shall operate the cooling tower with a drift eliminator that has a manufacturer's drift rate of 0.002% (EU: MG32). *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-10]*

20. The permittee shall operate the cooling tower with a drift eliminator that has a manufacturer's drift rate of 0.001% (EU: MG111). *[Title V OP (09/14/17)]*

21. The permittee shall limit the total dissolved solids (TDS) content of each cooling tower's circulation water to 5,000 ppm (EUs: MG31, MG32, and MG111). *[Title V OP (08/28/18) and Prior Notification (06/21/21) incorporated into the Title V]*

Surface Coating

22. The permittee shall not operate spray booths unless all exhaust air passes through appropriate filter media having a particulate capture efficiency of at least 99.0%. This is accomplished with tacky filter material at least 2 inches thick. The dry filter media must cover all openings in the spray booth. *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-14]*

23. The permittee shall use only closed containers for storage or disposal of VOC- or HAP-containing cloth or paper (excluding masking tape) used for surface preparation and cleanup. *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-15]*

24. The permittee shall use a manometer (or equivalent) to monitor the pressure drop across the spray booth filters. *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-19]*

25. The permittee shall follow the manufacturer's O&M manual for use and operation of exhaust filters. *[AQR 12.5.2.6(a)]*

26. The differential pressure drop shall not exceed 0.25 inches (6.35 millimeters) of water column unless the O&M manual indicates a different pressure drop value. *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-19]*

27. Exhaust filters must be replaced prior to exceeding 0.25 inches (6.35 millimeters) of water column or, if the O&M manual indicates a different pressure drop value, prior to exceeding the different pressure drop value cited in the O&M manual. *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-19]*

28. The permittee shall clean surface coating application equipment in an enclosed container to minimize VOC volatilization into the ambient air. *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-20]*

29. All containers with VOC-containing products shall remain securely closed except during product transfer. Containers shall be inspected regularly for leakage, and the contents of any leaking container must be immediately transferred to an appropriately labeled container that has been specifically designed for storage of the compound. *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-21]*

30. The permittee shall employ good housekeeping practices to prevent the accumulation and/or dispersal of particulate matter from sanding, blasting, surface preparation, etc. carried out in conjunction with surface coating operations. No more than 0.25 inches of particulate matter shall accumulate on surrounding surfaces at any time. *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-B-17]*

Gasoline Storage/Dispensing

31. The permittee shall implement control technology requirements on gasoline dispensing equipment (EU: MG46). *[40 CFR Part 63, Subpart CCCCCC]*

32. The permittee shall install and operate all Phase I vapor recovery equipment according to certifications specified by the manufacturer, and shall maintain the equipment to be leak-free, vapor-tight, and in proper working order. *[AQR 12.5.2.6]*

33. From October 1 to March 31 every year in the Las Vegas Valley, the Eldorado Valley, the Ivanpah Valley, the Boulder City limits, and any area within three miles of these areas, no gasoline intended as a final product for fueling motor vehicles shall be supplied or sold by any person; sold at retail; sold to a private or a municipal fleet for consumption; or introduced into any motor vehicle by any person unless the gasoline has at least 3.5 percent oxygen content by weight. *[AQR 53.1.1 & 53.2.1]*

34. If a gasoline storage tank in the Las Vegas Valley, the Eldorado Valley, the Ivanpah Valley, the Boulder City limits, and any area within three miles of these areas, receives its last gasoline delivery with less than 3.5 percent oxygen content by weight before September 15, gasoline dispensed from that tank will be exempt from enforcement of Section 53.2.1 until the first delivery date after October 1. *[AQR 53.5.1.1]*

35. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Preventative measures to be taken include, but are not limited to, the following: *[40 CFR Parts 63.11116 and 63.11117]*

    a. Minimize gasoline spills;

    b. Clean up spills as expeditiously as practicable;

    c. Cover all open gasoline containers and all gasoline storage tank fill pipes with a gasketed seal when not in use; and

    d. Only load gasoline into storage tanks using a submerged fill tube where the greatest distance from the bottom of the storage tank to the point of the fill tube opening is no more than six inches.

36. The permittee shall install, maintain, and operate a Phase I vapor recovery system on all gasoline storage tanks (EU: MG46) that meets the following requirements: *[AQR 12.5.2.6]*

    a. The Phase I vapor recovery system shall be rated with at least 90.0 percent control efficiency when in operation. This system shall be certified by an industry-recognized certification body, i.e., California Resources Air Board (CARB) or equivalent.

b. The Phase I vapor recovery system shall be a dual-point vapor balance system, as defined by 40 CFR Part 63.11132, in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

c. All Phase I vapor recovery equipment shall be installed and operated in accordance with manufacturer specifications and certification requirements.

d. All Phase I vapor recovery equipment, including the vapor line from the gasoline storage tanks to the gasoline cargo tank, shall be maintained in good working order and vapor-tight, as defined in 40 CFR Part 63.11132.

e. All vapor connections and lines on storage tanks shall be equipped with closures that seal upon disconnect.

37. The vapor balance system shall be designed so that the pressure in the cargo tank does not exceed 18 inches of water pressure or 5.9 inches of water vacuum during product transfer.

38. Liquid fill and vapor return adapters for all systems shall be equipped and secured with vapor-tight caps after each delivery. *[AQR 12.5.2.6]*

39. A pressure/vacuum (PV) vent valve on each gasoline storage tank system (EU: MG46) shall be installed, maintained, and operated in accordance with manufacturer's specifications.

a. The pressure specifications for PV vent valves shall be a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water.

b. The total leak rate of all PV vent valves at the affected facility, including connections, shall not exceed 0.17 ft^3 per hour at a pressure of 2.0 inches of water and 0.63 ft^3 per hour at a vacuum of 4 inches of water. *[AQR 12.5.2.6]*

40. The vapor balance system shall be capable of meeting the static pressure performance requirement in 40 CFR Part 63, Subpart CCCCCC. *[AQR 12.5.2.6]*

41. The permittee shall comply with good management practices during the unloading of gasoline cargo tanks, as follows: *[AQR 12.5.2.6]*

a. All hoses in the vapor balance system shall be properly connected.

b. The adapters or couplers that attach to the vapor line on the storage tank shall have closures that seal upon disconnect.

c. All vapor return hoses, couplers, and adapters used in the gasoline delivery shall be vapor-tight.

d. All tank truck vapor return equipment shall be compatible in size and form a vapor-tight connection with the vapor balance equipment on the gasoline storage tank.

e. All hatches on the tank truck shall be closed and securely fastened.

f. The filling of storage tanks shall be limited to unloading from vapor-tight gasoline cargo tanks carrying documentation onboard that the cargo tank has met the specifications of EPA Test Method 27.

Other

42. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.1.3 Limitations and Standards

1.1.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generators (EUs: MG17 through MG23) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generators cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 60.4211 and 40 CFR Part 63.6640]*

    a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

    b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

    c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

    d. The power is provided only to the facility itself or to support the local transmission and distribution system.

    e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

2. The permittee shall limit the operation of the fire pumps (EUs: MG24, MG26 through MG28, MG51, and MG113) for testing and maintenance purposes to 100 hours/year. The permittee may operate the fire pumps up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. *[40 CFR Part 63.6640]*

3. The permittee shall limit the consumption of VOC-containing paint strippers, paints, basecoats, primers, reducers, thinners, solvents, etc., to 480 gallons per any consecutive 12 months, based on a weighted average VOC content of 5.00 pounds per gallon, in the spray booth (EU: MG29). *[825 NSR ATC/OP, Modification 6 (11/29/04), Condition III-A-7]*

4. The permittee shall limit the consumption of VOC-containing paint strippers, paints, basecoats, primers, reducers, thinners, solvents, etc., to 2,000 gallons per any consecutive 12 months, based on a weighted average VOC content of 6.84 pounds per gallon, in the spray booth (EU: MG39). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-A-3-a]*

5. The permittee shall limit the consumption of VOC-containing paint strippers, paints, basecoats, primers, reducers, thinners, solvents, etc., to 600 gallons per any consecutive 12 months, based on a weighted average VOC content of 6.84 pounds per gallon, in the spray booth (EU: MG40). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-A-3-b]*

6. The permittee shall limit the use of pyrotechnics to 3,191.3 pounds per any consecutive 12 months (EU: MG43). *[825 NSR ATC, Modification 13 (12/31/09) Condition IV-A-3-c]*

7. The permittee shall limit the amount of throughput (aggregate of all gasoline products) to 125,000 gallons per any consecutive 12 months (EU: MG46). *[Title V OP (01/25/21)]*

8. The permittee shall limit the operation of the boilers/water heaters that are rated less than 1.00 MMBtu/hr to a total of 8.76 MMBtu/hr at any one time (EU: MG129). *[AQR 12.5.2.6]*

1.1.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-2. *[825 NSR ATC/OP, Modification 5 (7/18/00); 825 NSR ATC/OP, Modification 6 (11/29/04); 825 ATC, Modification 13 (12/31/09); 737 ATC, Modification 3 (01/10/03); 737 ATC, Modification 4 (04/29/04); and Title V OP (10/21/13, 12/26/14, 09/16/16, 09/14/17, 08/28/18, 06/25/19, and 01/25/2021); and Title V Revision (00825_20210916_APP) incorporated into the Title V]*

Table 1-2: PTE (tons per year) – MGM Grand

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
MG01	8,760 hr/yr	0.07	0.07	0.43	0.72	0.01	0.05	0.02
MG02	8,760 hr/yr	0.07	0.07	0.43	0.72	0.01	0.05	0.02
MG05	8,760 hr/yr	0.13	0.13	0.86	1.44	0.01	0.09	0.03
MG06	8,760 hr/yr	0.13	0.13	0.86	1.44	0.01	0.09	0.03
MG13	8,760 hr/yr	1.07	1.07	6.95	11.74	0.09	0.77	0.26
MG14	8,760 hr/yr	1.07	1.07	6.95	11.74	0.09	0.77	0.26
MG16	8,760 hr/yr	0.53	0.53	3.47	5.87	0.04	0.39	0.13
MG17	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
MG18	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
MG19	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
MG20	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
MG21	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
MG22	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
MG23	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
MG24	500 hr/yr	0.11	0.11	1.61	0.35	0.01	0.13	0.01
MG26	500 hr/yr	0.23	0.23	3.19	0.69	0.01	0.26	0.01
MG27	500 hr/yr	0.11	0.11	1.52	0.33	0.01	0.12	0.01

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
MG28	500 hr/yr	0.10	0.10	1.43	0.31	0.01	0.12	0.01
MG29	480 gal/yr	0.01	0.01	0.00	0.00	0.00	1.20	0.56
MG31	8,760 hr/yr	0.93	0.93	0.00	0.00	0.00	0.00	0.00
MG32	8,760 hr/yr	1.86	1.86	0.00	0.00	0.00	0.00	0.00
MG34	8,760 hr/yr	0.07	0.07	0.32	0.65	0.01	0.05	0.02
MG35	8,760 hr/yr	0.07	0.07	0.32	0.65	0.01	0.05	0.02
MG39	2,000 gal/yr	0.01	0.01	0.00	0.00	0.00	6.84	3.21
MG40	600 gal/yr	0.01	0.01	0.00	0.00	0.00	2.05	0.96
MG43	3,191.3 lb/yr	0.18	0.18	0.00	0.14	0.00	0.00	0.02
MG46	125,000 gal/yr	0.00	0.00	0.00	0.00	0.00	1.96	0.01
MG51	500 hr/yr	0.08	0.08	1.15	0.25	0.01	0.09	0.01
MG53	8,760 hr/yr	0.65	0.65	3.19	3.24	0.05	0.47	0.17
MG111	8,760 hr/yr	0.93	0.93	0.00	0.00	0.00	0.00	0.00
MG113	500 hr/yr	0.02	0.02	0.66	0.16	0.01	0.05	0.01
MG114	8,760 hr/yr	0.20	0.20	0.64	0.97	0.02	0.14	0.05
MG115	8,760 hr/yr	0.20	0.20	0.64	0.97	0.02	0.14	0.05
MG116	8,760 hr/yr	0.20	0.20	0.64	0.97	0.02	0.14	0.05
MG117	8,760 hr/yr	0.20	0.20	0.64	0.97	0.02	0.14	0.05
MG118	8,760 hr/yr	0.20	0.20	0.64	0.97	0.02	0.14	0.05
MG119	8,760 hr/yr	0.20	0.20	0.64	0.97	0.02	0.14	0.05
MG120	8,760 hr/yr	0.20	0.20	0.64	0.97	0.02	0.14	0.05
MG121	8,760 hr/yr	0.10	0.10	0.14	0.49	0.01	0.07	0.02
MG122	8,760 hr/yr	0.10	0.10	0.14	0.49	0.01	0.07	0.02
MG123	8,760 hr/yr	0.10	0.10	0.14	0.49	0.01	0.07	0.02
MG124	8,760 hr/yr	0.10	0.10	0.14	0.49	0.01	0.07	0.02
MG125	8,760 hr/yr	0.10	0.10	0.14	0.49	0.01	0.07	0.02
MG126	8,760 hr/yr	0.10	0.10	0.14	0.49	0.01	0.07	0.02
MG129	8,760 hr/yr	0.29	0.29	3.76	3.16	0.02	0.21	0.07

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall limit the actual emissions from each emission unit to the emission rate listed in Table 1-3. *[825 NSR ATC/OP, Modification 5 (07/18/00) and 825 NSR ATC, Modification 13 (12/31/09)]*

Table 1-3: Emission Rates (pounds per hour) – MGM Grand

EU	Rating	NO_x	CO
MG13	32.6 MMBtu/hr	1.59	2.68
MG14	32.6 MMBtu/hr	1.59	2.68
MG16	16.33 MMBtu/hr	0.79	1.34
MG53	20.0 MMBtu/hr	0.73	0.74

3. The permittee shall not discharge into the atmosphere, from any emission unit in this section, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.1.4 Compliance Demonstration Requirements

1.1.4.1 Monitoring

Visible Emissions

See Section 2.0.

Boilers/Water Heaters

1. The permittee shall install and utilize nonresettable hour meters such that the monthly consumption of natural gas can be established for each applicable boiler (EUs: MG13, MG14, MG16, and MG53). *[AQR 12.5.2.6(d) & 40 CFR Part 60, Subpart Dc]*

2. The permittee shall demonstrate compliance with the combined heat rate (MMBtu/hr) limit for the boilers/water heaters (EU: MG129) by maintaining a monthly log of each boiler/heater heat rate, along with the total heat rate for all boilers/heaters less than 1.00 MMBtu/hr. *[AQR 12.5.2.6(d)]*

Burner Efficiency Tests

3. The permittee shall conduct burner efficiency tests in accordance with the manufacturer's O&M manual and good combustion practices. Alternative methods may be used upon Control Officer approval (EUs: MG05, MG06, MG13, MG14, MG16, and MG53, and MG114 through MG120). *[AQR 12.5.2.6(d)]*

4. The permittee shall perform a burner efficiency test once each calendar year (EUs: MG05, MG06, and MG114 through MG120). *[AQR 12.5.2.6(d)]*

5. The permittee shall not have to perform a burner efficiency test if the actual hours of operation are 0. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: MG05, MG06, and MG114 through MG120). *[AQR 12.5.2.6(d)]*

6. The permittee shall perform a burner efficiency test twice each calendar year, at least five months apart but no more than seven (EUs: MG13, MG14, MG16, and MG53). *[AQR 12.5.2.6(d)]*

7. The permittee may perform a burner efficiency test once each calendar year if the actual hours of operation are less than 50. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: MG13, MG14, MG16, and MG53). *[AQR 12.5.2.6(d)]*

8. The permittee may replace one contemporaneously required burner efficiency test with a performance test that has acceptable results (EUs: MG13, MG14, MG16, and MG53). *[AQR 12.5.2.6(d)]*

9. A performance test may replace a required burner efficiency test with Control Officer approval. *[AQR 12.5.2.6(d)]*

10. The results from burner efficiency testing shall not be used to determine an emission unit's compliance status with its corresponding emission limit(s). *[AQR 12.5.2.6]*

Diesel Generators/Fire Pumps

11. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators (EUs: MG17 through MG23 and MG113) by retaining a copy of vendor fuel specifications. *[40 CFR 60.4207(b)]*

12. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: MG17 through MG24, MG26 through MG28, MG51, and MG113). *[AQR 12.5.2.6(d)]*

Surface Coating

13. The permittee shall inspect spray paint booths and all ancillary equipment for leaks, malfunctions, and proper operation of gauges and pressure drops each month the booth is operated, and perform appropriate maintenance as needed. A log must be kept of all inspections, as well as any corrective actions taken to repair the equipment (EUs: MG29, MG39, and MG40). *[AQR 12.5.2.6(d)]*

Gasoline Storage/Dispensing

14. The permittee shall monitor the combined throughput of gasoline each month (EU: MG46). *[AQR 12.5.2.6(d)]*

15. The permittee shall monitor the fuel storage and dispensing system (EU: MG46) to determine if components of the system are in compliance with the control requirements of this permit. The monitoring shall consist of, but not be limited to, the following: *[AQR 12.5.2.6(d)]*

    a. The permittee shall inspect daily for gasoline spills, and record the times and dates the source became aware of a spill and cleaned it up.

    b. The permittee shall inspect covers on gasoline containers and fill-pipes after each delivery, and record the dates of fuel deliveries and corresponding inspections.

    c. The permittee shall record the date and approximate volume of gasoline sent to open waste collection systems that collect recyclable gasoline.

Cooling Towers

16. The permittee shall monitor the TDS of each cooling tower's recirculation water monthly, using a conductivity meter or other device approved in advance by the Control Officer (EUs: MG31, MG32, and MG111). *[AQR 12.5.2.6(d)]*

1.1.4.2 Testing

Boiler/ Water Heater Performance Tests

1. Performance testing is subject to 40 CFR Part 60.8 (as amended), Subpart A, and the department's Guidelines for Source Testing (9/19/2019). Performance testing shall be the instrument for determining compliance with the emission limitations set forth in this permit for all boilers that have a heat input rating equal to or greater than 10.0 MMBtu/hr (EUs: MG13, MG14, MG16, and MG53). *[AQR 12.5.2.6(d)]*

2. Subsequent performance testing shall be conducted at a frequency of no later than once every five years, and no later than 90 days after the anniversary date of the last performance test on that boiler. Subsequent performance testing shall be conducted on emission units MG13, MG14, MG16, and MG53. *[AQR 12.5.2.6(d)]*

3. Performance testing for the applicable boilers shall comply with the testing protocol requirements identified in Table 1-4. *[AQR 12.5.2.6(d)]*

Table 1-4: Performance Testing Protocol Requirements

Test Point	Pollutant	Method
Boiler Exhaust Outlet Stack	NO_x	EPA Method 7E
Boiler Exhaust Outlet Stack	CO	EPA Method 10 analyzer
Stack Gas Parameters	—	EPA Methods 1, 2, 3A, and 4

Note: 40 CFR Part 60, Subpart Dc applies to specific combustion units at this facility.

Gasoline Storage/Dispensing

4. The permittee shall conduct Phase I vapor recovery tests in accordance with the CARB-approved vapor recovery test procedures (as revised) listed in Table 1-5, as applicable. *[AQR 12.5.2.8(a)]*

Table 1-5: Vapor Recovery System Testing Procedures and Schedules

Type of Vapor Recovery System	Test Procedure	Frequency
Phase I Vapor Balance System	Pressure Decay/Leak test: TP201.3B (as revised for AST)	Initial and every three years thereafter
	Static Torque of Rotatable Phase I Adaptors CARB procedure TP-201.1B (With swivel adapters only)	Initial and every three years thereafter
	Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves: CARB procedure TP-201.1E (as revised)	Initial and every three years thereafter
	Flow rate Test: CC_VRTP_1	Initial and every three years thereafter

5. The permittee shall submit, by mail, fax, or hand delivery, a DAQ-approved vapor recovery test notification form (available on the DAQ website) to schedule each vapor recovery test with the Stationary Sources Section supervisor at least 30 calendar days before the anticipated date of testing, unless otherwise specified in this permit. *[AQR 12.5.2.8(a)]*

6. Any prior approved scheduled vapor recovery system test cannot be canceled and/or rescheduled without the Control Officer's prior approval. *[AQR 12.5.2.8(a)]*

7. The permittee shall conduct Phase I vapor recovery system testing on affected gasoline dispensing equipment according to the following requirements: *[AQR 12.5.2.8(a)]*

    a. The permittee shall conduct and pass an initial vapor recovery system test within 180 days of startup of new equipment, or within 90 days after completion of repairs or reconstruction where the integrity of the vapor recovery system has been affected by the repair or reconstruction. Routine maintenance, including the replacement of hoses, nozzles, and efficiency compliance devices (e.g., bellows, face shield, splash guard, etc.), does not require an initial vapor recovery system test.

    b. The permittee shall conduct and pass subsequent Phase I vapor recovery system tests on or before the anniversary date of the previous successful test at the frequency specified in Table 1-5.

    c. Each vapor recovery system test may be witnessed by a DAQ inspector.

8. The permittee shall submit a Gasoline Dispensing Operation Certification of Vapor Recovery System Test Results Submittal Form (available on the DAQ website), along with associated test results, to the Control Officer after each vapor recovery system test. The submittal form shall be: *[AQR 12.5.2.8(a)]*

    a. Complete and signed by the Responsible Official for the equipment being tested. The Responsible Official must certify that the test results are true, accurate, and complete.

    b. Submitted by mail, by fax, or in person.

    c. Submitted by the source, or by the permittee's testing company or consultant. However, the source is the responsible party and must ensure that the test report is delivered to DAQ within the applicable time frame.

9. If the source passes or fails the vapor recovery system test, the permittee shall submit the test results report to the Control Officer within 60 days of the date of the vapor recovery system test.

    a. If the source fails a vapor recovery system test: *[Clark County Department of Air Quality Source Testing Guidelines (9/19/2019)]*

        i. The permittee shall notify the Control Officer, by email or phone, within 24 hours of equipment test failure. If repairs can be made within five working days of the original scheduled test date, the permittee shall make the repairs and pass the required test(s).

        ii. If the equipment cannot be repaired in five working days, the permittee shall make all necessary repairs and schedule a retest of the affected facility by submitting a new Test Notification Form to the Control Officer by mail, fax, or hand delivery no later than three business days before the new test date.

iii. After retesting (pass/fail), the owner/operator shall submit a Test Results Submittal Form (available on the DAQ website) and supporting test documents to the Control Officer within 15 days of completion.

iv. The permittee shall continue retesting until the affected facility successfully passes all aspects of the vapor recovery system test.

10. The Control Officer may require the permittee to conduct any test after a failed vapor recovery system test in the presence of a DAQ representative. *[AQR 12.5.2.8(a)]*

1.1.4.3 Recordkeeping

1. The permittee shall create and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

c. SDS or records demonstrating the VOC content for each compound used for surface coating activities;

Cooling Towers

d. Monthly TDS content measurements of cooling tower circulation water (EUs: MG31, MG32, and MG111);

Boilers/Water Heater

e. Monthly natural gas fuel consumed by each boiler (EUs: MG13, MG14, MG16, and MG53) (reported semiannually);

f. Log of boilers rated less than 1.00 MMBtu/hr heat input demonstrating compliance with rating limit (EU: MG129). This log shall include the following:

i. rating, make, model, and serial number of each unit;

ii. cumulative MMBtu ratings of all active units; and

iii. date each unit is installed and removed (when applicable);

g. Monthly, consecutive 12-month total MMBtu/hr of all boilers/heaters (EU: MG129) less than 1.00 MMBtu/hr (reported semiannually);

h. Burner efficiency test results (EUs: MG05, MG06, MG13, MG14, MG16, and MG53, and MG114 through MG120);

Emergency Engines

i. Date and duration total of operation of each diesel-fired emergency generator and each fire pump for testing, maintenance, and nonemergency use (EUs: MG17 through MG24, MG26 through MG28, MG51, and MG113) (reported semiannually);

j. Monthly total of operating hours of each emergency generator and fire pump for emergency use, including documentation justifying use during the emergency (EUs: MG17 through MG24, MG26 through MG28, MG51, and MG113) (reported semiannually);

k. Sulfur content and cetane index or aromatic content of diesel fuel used to power the emergency generators (EUs: MG17 through MG23 and MG113), as certified by the supplier;

Gasoline Dispensing

l. Monthly, consecutive 12-month total of gasoline throughput (EU: MG46) (reported semiannually) *[40 CFR Part 63.11116(b)]*;

m. A record of any maintenance on any part of the Phase I equipment, including a general description of the maintenance;

n. The date and time the equipment was taken out of service;

o. The date of repair or replacement;

p. A general description of the part location (e.g., pump, tank, nozzle number);

q. A description of the problem;

r. The results of the monthly inspections;

s. Equipment inspections, including findings and corrective actions;

t. Maintenance on storage and distribution equipment, including a general description of location(s) and part(s);

Surface Coating

u. Monthly, consecutive 12-month total consumption (in gallons) of each VOC-containing compound (paints, basecoats, primers, reducers, thinners, solvents, etc.) related to surface coating activities (EUs: MG29 and MG40) (reported semiannually);

Pyrotechnics

v. Monthly, consecutive 12-month total of pounds of pyrotechnics used (EU: MG43) (reported semiannually);

Nonroad Engines.

w. Records of location changes for nonroad engines, if applicable;

Emissions

x. Performance test results, if applicable (reported as required by Section 1.1.4.2 of this permit);

y. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

z. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

aa. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.2 NEW YORK-NEW YORK

1.2.1 Emission Units

The stationary source activities at New York-New York, covered by this Part 70 OP, consist of the emission units and associated appurtenances summarized in Table 1-6. *[369 NSR ATC/OP, Modification 1 (09/11/02); 737 NSR ATC/OP, Modification 3 (01/10/03); 737 NSR ATC/OP, Modification 4 (04/29/04); 825 NSR ATC/OP, Modification 6 (11/29/04); 825 NSR ATC/OP, Modification 9 (09/06/06); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 12/26/14, 08/28/18, 06/25/19, and 01/25/21); Title V Revision (00825_20210308_APP) incorporated into the Title V; and Prior Notification (07/14/21) incorporated into the Title V]*

Table 1-6: Summary of EUs – New York-New York

EU	Rating	Description	Manufacturer	Model No.	Serial No.
NY27	1,818 hp	Diesel Emergency Generator DOM: 1997	Caterpillar	3512TA	24Z06937
NY28	1,818 hp	Diesel Emergency Generator DOM: 1997	Caterpillar	3512TA	24Z06932
NY29	1,818 hp	Diesel Emergency Generator DOM: 1997	Caterpillar	3512TA	24Z06931
NY42	2.00 MMBtu/hr	Boiler	Lochinvar	PFN2001	2132 125400866
NY43	2.00 MMBtu/hr	Boiler	Lochinvar	PFN2001	2132 125581600
NY44	2.00 MMBtu/hr	Boiler	Lochinvar	PFN2001	2132 125400867
NY46	2.00 MMBtu/hr	Pool Heater	Lochinvar	FBN2001	1811109539935
NY47	0.3325 MMBtu/hr	Spa Heater	Raypak	C-R336A-EN-X ASME	1305358126

EU	Rating	Description	Manufacturer	Model No.	Serial No.
NY48	2.00 MMBtu/hr	Boiler	Lochinvar	PFN2001PM	1949 117235594
NY49	2.00 MMBtu/hr	Boiler	Lochinvar	PFN2001PM	1949 117235595

1.2.2 Controls

1.2.2.1 Control Devices

No add-on controls are identified.

1.2.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in all boilers/heaters. *[369 NSR ATC/OP, Modification 1 (09/11/02), Condition III-B-1; 825 NSR ATC/OP, Modification 9 (09/06/06), Condition III-B-1; & 737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-11]*

2. The permittee shall operate and maintain all boilers/heaters in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[369 NSR ATC/OP, Modification 1 (09/11/02), Condition III-B-31; 825 NSR ATC/OP, Modification 9 (09/06/06), Condition III-B-2; & 737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-11]*

3. The permittee shall operate and maintain the each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.0225 lb/MMBtu of NO_x, corrected to 3% oxygen (EUs: NY42 through NY44). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-B-2-d]*

4. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.0325 lb/MMBtu CO, corrected to 3% oxygen (EUs: NY42 through NY44). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-B-2-d]*

5. The permittee shall operate and maintain the pool heater with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EU: NY46). *[Title V OP (06/25/19)]*

6. The permittee shall operate and maintain the boilers with burners that have a manufacturer's maximum emission concentration of 0.0225 lb/MMBtu of NO_x (EUs: NY48 and NY49). *[Title V OP (01/25/21)]*

7. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.0325 lb/MMBtu of CO (EUs: NY48 and NY49). *[Title V OP (01/25/21)]*

Diesel Generators

8. The permittee shall operate and maintain all diesel generators (EUs: NY27 through NY29) in accordance with the manufacturer's O&M manual for emissions-related components. *[369 NSR ATC/OP, Modification 1 (09/11/02), Condition III-B-7]*

9. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators (EUs: NY27 through NY29). *[40 CFR 63.6604(b)]*

Other

10. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.2.3 Limitations and Standards

1.2.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generators (EUs: NY27 through NY29) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generators cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 63.6640]*

    a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

    b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

    c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

    d. The power is provided only to the facility itself or to support the local transmission and distribution system.

    e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

1.2.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-7. *[369 NSR ATC/OP, Modification 1 (09/11/02); 737 NSR ATC/OP, Modification 3 (01/10/03); 737 NSR ATC/OP, Modification 4 (04/29/04); 825 NSR ATC/OP, Modification 6 (11/29/04); 825 NSR ATC/OP, Modification 9 (09/06/06); 825 NSR ATC, Modification 13 (12/31/09); and Title V OP (10/21/13, 12/26/14, 08/28/18, 06/25/19, and 01/25/21)]*

Table 1-7: PTE (tons per year) – New York-New York

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
NY27	500 hr/yr	0.32	0.32	10.91	2.50	0.01	0.32	0.01
NY28	500 hr/yr	0.32	0.32	10.91	2.50	0.01	0.32	0.01
NY29	500 hr/yr	0.32	0.32	10.91	2.50	0.01	0.32	0.01
NY42	8,760 hr/yr	0.07	0.07	0.20	0.28	0.01	0.05	0.02
NY43	8,760 hr/yr	0.07	0.07	0.20	0.28	0.01	0.05	0.02
NY44	8,760 hr/yr	0.07	0.07	0.20	0.28	0.01	0.05	0.02
NY46	8,760 hr/yr	0.07	0.07	0.21	1.30	0.01	0.05	0.02
NY47	8,760 hr/yr	0.01	0.01	0.14	0.12	0.01	0.01	0.01
NY48	8,760 hr/yr	0.07	0.07	0.20	0.28	0.01	0.05	0.02
NY49	8,760 hr/yr	0.07	0.07	0.20	0.28	0.01	0.05	0.02

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not discharge into the atmosphere, from any external combustion unit in this section, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.2.4 Compliance Demonstration Requirements

1.2.4.1 Monitoring

Visible Emissions

See Section 2.0.

Diesel Generators/Fire Pumps

1. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: NY27 through NY29). *[AQR 12.5.2.6(d)]*

2. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators/fire pump (EUs: NY27 through NY29) by retaining a copy of vendor fuel specifications. *[40 CFR 63.6604(b)]*

1.2.4.2 Testing

No performance testing requirements have been identified for emission units at New York-New York. *[AQR 12.5.2.6(d)]*

1.2.4.3 Recordkeeping

1. The permittee shall create and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

Emergency Engines

c. Date and duration of operation of each diesel-fired emergency generator for testing, maintenance, and nonemergency use (EUs: NY27 through NY29) (reported semiannually);

d. Monthly duration of operation of each emergency generator and fire pump for emergency use, including documentation justifying use during the emergency (EUs: NY27 through NY29) (reported semiannually);

e. Sulfur content and cetane index or aromatic content of diesel fuel used to power the emergency generators (EUs: NY27 through NY29), as certified by the supplier;

Nonroad Engines.

f. Records of location changes for nonroad engines, if applicable;

Emissions

g. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

h. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

i. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.3 PARK MGM

1.3.1 Emission Units

The stationary source activities at Park MGM, covered by this Part 70 OP, consist of the emission units and associated appurtenances summarized in Table 1-8. *[74 NSR ATC/OP, Modification 1 (11/15/04) and Title V OP (10/21/13, 12/26/14, and 08/28/18)]*

Table 1-8: Summary of EUs – Park MGM

EU	Rating	Description	Manufacturer	Model No.	Serial No.
MC001	12.6 MMBtu/hr	Boiler	Universal Energy	BF300L	248-EG
MC002	12.6 MMBtu/hr	Boiler	Universal Energy	BF300L	249-EG
MC003	12.6 MMBtu/hr	Boiler	Universal Energy	BF300L	250-EG
MC004	12.6 MMBtu/hr	Boiler	Universal Energy	BF300L	251-EG
MC014	3,393 gpm	Cooling Tower	Baltimore Air Coil	31213A-RM	U053137701MAD
MC015	3,393 gpm	Cooling Tower	Baltimore Air Coil	31213A-RM	U053137702MAD
MC016	3,393 gpm	Cooling Tower	Baltimore Air Coil	31213A-RM	U053137703MAD
MC017	3,393 gpm	Cooling Tower	Baltimore Air Coil	31213A-RM	U053137704MAD
MC018	3,393 gpm	Cooling Tower	Baltimore Air Coil	31213A-RM	U053137705MAD
MC019	2,172 hp	Diesel Emergency Generator DOM: 1996	Caterpillar	3512	6WN00081
MC020	2,172 hp	Diesel Emergency Generator DOM: 1996	Caterpillar	3512	6WN00082
MC022	343 hp	Diesel Emergency Generator DOM: 1996	Caterpillar	3306	9NR02273
MC025	376 bhp	Emergency Fire Pump DOM: 2017	Clarke Fire Protection Services	JW6H-UFAD70	RG6090L128059
MC026	376 bhp	Emergency Fire Pump DOM: 2017	Clarke Fire Protection Services	JW6H-UFAD70	RG6090L128042

1.3.2 Controls

1.3.2.1 Control Devices

No add-on control devices have been identified.

1.3.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in all boilers/heaters. *[74 NSR ATC/OP, Modification 1 (11/15/04) Condition III-B-1 & Title V OP (10/21/13)]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[74 NSR ATC/OP, Modification 1 (11/15/04), Condition III-B-2 & Title V OP (10/21/13)]*

3. The permittee shall operate and maintain each of the boilers with flue gas recirculation and burners that have a manufacturer's maximum emission concentration of 30 ppmv NO_x, corrected to 3% oxygen (EUs: MC001 through MC004). *[Title V OP (10/21/13)]*

4. The permittee shall operate and maintain each of the boilers with flue gas recirculation and burners that have a manufacturer's maximum emission concentration of 100 ppmv CO, corrected to 3% oxygen (EUs: MC001 through MC004). *[Title V OP (10/21/13)]*

Diesel Generators/Fire Pumps

5. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators (EUs: MC019, MC020, MC022, MC025, and MC026). *[40 CFR 60.4207(b)]*

6. The permittee shall operate and maintain all diesel generators and fire pumps in accordance with the manufacturer's O&M manual for emissions-related components. *[74 NSR ATC/OP, Modification 1 (11/15/04), Condition III-B-8]*

7. The permittee shall only combust only diesel fuel in each diesel generator. *[AQR 12.5.2.6]*

Cooling Towers

8. The permittee shall operate and maintain each of the cooling towers in accordance with the manufacturer's O&M manual for emissions-related components (EUs: MC014 through MC018). *[AQR 12.5.2.6]*

9. The permittee shall operate each of the cooling towers with drift eliminators that have a manufacturer's drift rate of 0.005% (EUs: MC014 through MC018). *[Title V OP (10/21/13)]*

10. The permittee shall limit the TDS content of each cooling tower's circulation water to 4,500 ppm (EUs: MC014 through MC018). *[Title V OP (01/25/21)]*

Other

11. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.3.3 Limitations and Standards

1.3.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generators (EUs: MC019, MC020, and MC022) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generators cannot be used for peak shavings or

nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 63.6640]*

a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

d. The power is provided only to the facility itself or to support the local transmission and distribution system.

e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

2. The permittee shall limit the operation of the fire pumps (EUs: MC025 and MC026) for testing and maintenance purposes to 100 hours/year. The permittee may operate the fire pumps up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. *[40 CFR Part 60.4211]*

1.3.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-9. *[74 NSR ATC/OP, Modification 1 (11/15/04); and Title V OP (10/21/13, 09/16/16, 08/28/18, and 01/25/21)]*

Table 1-9: PTE (tons per year) – Park MGM

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
MC001	8,760 hr/yr	0.41	0.41	2.02	4.09	0.03	0.30	0.10
MC002	8,760 hr/yr	0.41	0.41	2.02	4.09	0.03	0.30	0.10
MC003	8,760 hr/yr	0.41	0.41	2.02	4.09	0.03	0.30	0.10
MC004	8,760 hr/yr	0.41	0.41	2.02	4.09	0.03	0.30	0.10
MC014	8,760 hr/yr	0.79	0.79	0.00	0.00	0.00	0.00	0.00
MC015	8,760 hr/yr	0.79	0.79	0.00	0.00	0.00	0.00	0.00
MC016	8,760 hr/yr	0.79	0.79	0.00	0.00	0.00	0.00	0.00
MC017	8,760 hr/yr	0.79	0.79	0.00	0.00	0.00	0.00	0.00
MC018	8,760 hr/yr	0.79	0.79	0.00	0.00	0.00	0.00	0.00
MC019	500 hr/yr	0.38	0.38	13.03	2.99	0.01	0.38	0.02
MC020	500 hr/yr	0.38	0.38	13.03	2.99	0.01	0.38	0.02

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
MC022	500 hr/yr	0.19	0.19	2.66	0.57	0.01	0.22	0.01
MC025	500 hr/yr	0.02	0.02	0.55	0.14	0.01	0.02	0.01
MC026	500 hr/yr	0.02	0.02	0.55	0.14	0.01	0.02	0.01

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not allow actual emissions from the individual emission units to exceed the emission rates and emission concentrations listed in Table 1-10. *[74 NSR ATC/OP, Modification 1 (11/15/04), Condition II-B & Title V OP (09/16/16)]*

Table 1-10: Emission Rates (pounds per hour) – Park MGM

EU	Rating	NO_x	CO
MC001	12.6 MMBtu/hr	0.46	0.93
MC002	12.6 MMBtu/hr	0.46	0.93
MC003	12.6 MMBtu/hr	0.46	0.93
MC004	12.6 MMBtu/hr	0.46	0.93

[1]Corrected to 3% oxygen.

3. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.3.4 Compliance Demonstration Requirements

1.3.4.1 Monitoring

Visible Emissions

See Section 2.0.

Boilers/Water Heaters

1. The permittee shall install and utilize nonresettable hour meters such that the monthly consumption of natural gas can be established for each applicable boiler (EUs: MC001 through MC004). *[AQR 12.5.2.6(d) & 40 CFR Part 60, Subpart Dc]*

Burner Efficiency Tests

2. The permittee shall conduct burner efficiency tests in accordance with the manufacturer's O&M manual and good combustion practices. Alternative methods may be used upon Control Officer approval (EUs: MC001 through MC004). *[AQR 12.5.2.6(d)]*

3. The permittee shall perform a burner efficiency test twice each calendar year, at least five months apart but no more than seven (EUs: MC001 through MC004). *[AQR 12.5.2.6(d)]*

4. The permittee may perform a burner efficiency test once each calendar year if the actual hours of operation are less than 50. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: MC001 through MC004). *[AQR 12.5.2.6(d)]*

5. The permittee may replace one contemporaneously-required burner efficiency test with a performance test that has acceptable results (EUs: MC001 through MC004). *[AQR 12.5.2.6(d)]*

6. A performance test may replace a required burner efficiency test with Control Officer approval. *[AQR 12.5.2.6(d)]*

7. The results from burner efficiency testing shall not be used to determine an emission unit's compliance status with its corresponding emission limit(s). *[AQR 12.5.2.6(d)]*

Diesel Generators/Fire Pumps

8. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators (EUs: MC019, MC020, MC022, MC025, and MC026) by retaining a copy of vendor fuel specifications. *[40 CFR 60.4207(b)]*

9. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: MC019, MC020, MC022, MC025, and MC026). *[AQR 12.5.2.6(d)]*

Cooling Towers

10. The permittee shall monitor the TDS in the cooling tower circulation water monthly. The permittee may use a conductivity meter or an equivalent method approved in advance by the Control Officer to determine TDS. *[AQR 12.5.2.6(d)]*

1.3.4.2 Testing

1. Performance testing is subject to 40 CFR Part 60.8 (as amended), Subpart A, and the department's Guidelines for Source Testing (9/19/2019). Performance testing shall be the instrument for determining compliance with emission limitations set forth in this permit for all boilers that have a heat input rating equal to or greater than 10.0 MMBtu/hr (EUs: MC001 through MC004). *[AQR 12.5.2.6(d)]*

2. Subsequent performance testing shall be conducted at a frequency of no later than once every five years, and no later than 90 days after the anniversary date of the last performance test on that boiler. Subsequent performance testing shall be conducted on emission units MC001 through MC004. *[AQR 12.5.2.6(d)]*

3. Performance testing for the applicable boilers shall comply with the testing protocol requirements identified in Table 1-11. *[AQR 12.5.2.6(d)]*

Table 1-11: Performance Testing Protocol Requirements

Test Point	Pollutant	Method
Boiler Exhaust Outlet Stack	NO_x	EPA Method 7E
Boiler Exhaust Outlet Stack	CO	EPA Method 10 analyzer
Stack Gas Parameters	—	EPA Methods 1, 2, 3A, and 4

Note: 40 CFR Part 60, Subpart Dc applies to specific combustion units at this facility.

1.3.4.3 Recordkeeping

1. The permittee shall create and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

Cooling Towers

c. Monthly TDS content measurements of cooling tower circulation water (EUs: MC014 through MC018);

Boilers/Water Heater

d. Monthly natural gas fuel consumed by each boiler (EUs: MC001 through MC004) (reported semiannually);

e. Burner efficiency test results (EUs: MC001 through MC004);

Emergency Engines

f. Date and duration of operation of each diesel-fired emergency generator and each fire pump for testing, maintenance, and nonemergency use (EUs: MC019, MC020, MC022, MC025, and MC026) (reported semiannually);

g. Monthly duration of operation of each emergency generator and fire pump for emergency use, including documentation justifying use during the emergency (EUs: MC019, MC020, MC022, MC025, and MC026) (reported semiannually);

h. Sulfur content and cetane index or aromatic content of diesel fuel used to power the of each emergency generator and fire pump, as certified by the supplier (EUs: MC019, MC020, MC022, MC025, and MC026);

Nonroad Engines.

i. Records of location changes for nonroad engines, if applicable;

Emissions

j. Performance test results, if applicable (reported as required by Section 1.3.4.2 of this permit);

k. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

l. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

m. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.4 THE SIGNATURE AT MGM

1.4.1 Emission Units

The stationary source activities at The Signature at MGM Grand, covered by this Part 70 OP consist of the emission units and associated appurtenances summarized in Table 1-12. *[15615 NSR ATC/OP, Modification 1 (08/15/05); Title V OP (10/21/13 and 06/25/19); and Title V Application (00825_20220823_APP) incorporated into the Title V]*

Table 1-12: Summary of EUs – The Signature at MGM Grand

EU	Rating	Description	Manufacturer	Model No.	Serial No.
TBA15	1,180 hp	Diesel Emergency Generator DOM: 2006	Caterpillar	3412CTA	1EZ07104
TBA18	1.0 MMBtu/hr	Boiler	Lochinvar	FBN1001	1834111641298
TBA19	1.0 MMBtu/hr	Boiler	Lochinvar	FBN1001	1834111641299
TBB01	1.0 MMBtu/hr	Boiler	Lochinvar	PBN-1001	H0500178777
TBB15	2,520 hp	Diesel Emergency Generator DOM: 2006	Caterpillar	3516 BTA	GZR00237
TBB16	3,600 gpm	Cooling Tower	Baltimore Aircoil	31213A	U053430901VAD
TBB17	3,600 gpm	Cooling Tower	Baltimore Aircoil	31213A	U053430902VAD
TBB18	3,600 gpm	Cooling Tower	Baltimore Aircoil	31213A	U053430903VAD
TBB19	3,600 gpm	Cooling Tower	Baltimore Aircoil	31213A	U065367301VAD
TBC01	1.0 MMBtu/hr	Boiler	Lochinvar	PBN-1000	B06H00184073
TBC02	1.0 MMBtu/hr	Boiler	Lochinvar	PBN-1000	BH6H00184074
TBC15	1.0 MMBtu/hr	Boiler	Lochinvar	PBN-1002	2214128991853
TBC17[1]	26.51 MMBtu/hr	Boilers/Water Heaters <1.00 MMBtu/hr	Various	Various	Various

[1]Combined total for all units with a heat input rating of less than 1.0 MMBtu/hr, plus 10%.

1.4.2 Controls

1.4.2.1 Control Devices

No add-on controls have been identified.

1.4.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in all boilers and water heaters. *[15615 NSR ATC/OP, Modification 1 (08/15/05), Condition III-B-1]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[15615 NSR ATC/OP, Modification 1 (08/15/05), Condition III-B-1]*

3. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 30 ppmv NO_x, corrected to 3% oxygen (EUs: TBB01, & TBC01, and TBC02). *[15615 NSR ATC/OP, Modification 1 (08/15/05), Conditions III-B-3 & III-B-4]*

4. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 100 ppmv CO, corrected to 3% oxygen (EUs: TBB01, TBC01, and TBC02). *[15615 NSR ATC/OP, Modification 1 (08/15/05), Conditions III-B-3 & III-B-4]*

5. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EU: TBC15). *[Title V Application (00825_20220823_APP) incorporated into the Title V]*

Diesel Generators

6. The permittee shall operate and maintain all diesel generators in accordance with the manufacturer's O&M manual for emissions-related components. *[15615 NSR ATC/OP, Modification 1 (08/15/05), Conditions III-B-3 and III-B-8]*

7. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators (EUs: TBA15 and TBB15). *[40 CFR 63.6604(b)]*

Cooling Towers

8. The permittee shall operate and maintain each of the cooling towers in accordance with the manufacturer's O&M manual for emissions-related components (EUs: TBB16 through TBB19). *[AQR 12.5.2.6]*

9. The permittee shall operate each of the cooling towers with drift eliminators that have a manufacturer's drift rate of 0.001% (EUs: TBB16 through TBB19). *[15615 NSR ATC/OP, Modification 1 (08/15/05), Condition III-B-10]*

10. The permittee shall limit the TDS content of each cooling tower's circulation water to 4,500 ppm (EUs: TBB16 through TBB19). *[Title V OP (01/25/21)]*

Other

11. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.4.3 Limitations and Standards

1.4.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generators (EUs: TBA15 and TBB15) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generators cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 63.6640]*

    a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

    b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

    c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

    d. The power is provided only to the facility itself or to support the local transmission and distribution system.

    e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

2. The permittee shall limit the operation of the boilers/water heaters that are rated less than 1.00 MMBtu/hr (EU: TBC17) to a total of 26.51 MMBtu/hr at any one time. *[AQR 12.5.2.6]*

1.4.3.2 Emission Limits

The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-13. *[15615 NSR ATC/OP, Modification 1 (08/15/05); Title V OP (10/21/13, 8/28/18, 06/25/19, and 01/25/21); and Title V Application (00825_20220823_APP) incorporated into the Title V]*

Table 1-13: PTE (tons per year) – The Signature at MGM Grand

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
TBA15	500 hr/yr	0.21	0.21	7.08	1.62	0.01	0.21	0.01
TBA18	8,760 hr/yr	0.03	0.03	0.43	0.36	0.01	0.02	0.01
TBA19	8,760 hr/yr	0.03	0.03	0.43	0.36	0.01	0.02	0.01
TBB01	8,760 hr/yr	0.03	0.03	0.16	0.32	0.01	0.02	0.01
TBB15	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
TBB16	8,760 hr/yr	0.17	0.17	0.00	0.00	0.00	0.00	0.00
TBB17	8,760 hr/yr	0.17	0.17	0.00	0.00	0.00	0.00	0.00
TBB18	8,760 hr/yr	0.17	0.17	0.00	0.00	0.00	0.00	0.00
TBB19	8,760 hr/yr	0.17	0.17	0.00	0.00	0.00	0.00	0.00
TBC01	8,760 hr/yr	0.03	0.03	0.16	0.32	0.01	0.02	0.01
TBC02	8,760 hr/yr	0.03	0.03	0.16	0.32	0.01	0.02	0.01
TBC15	8,760 hr/yr	0.03	0.03	0.11	0.36	0.01	0.02	0.01
TBC17	8,760 hr/yr	0.87	0.87	11.38	9.57	0.07	0.63	0.22

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

1. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.4.4 Compliance Demonstration Requirements

1.4.4.1 Monitoring

Visible Emissions

See Section 2.0.

Boilers/Water Heaters

1. The permittee shall demonstrate compliance with the combined heat rate (MMBtu/hr) limit for the boilers/water heaters (EU: TBC17) by maintaining a monthly log of each boiler/heater heat rate, along with the total heat rate for all boilers/heaters less than 1.00 MMBtu/hr. *[AQR 12.5.2.6(d)]*

Diesel Generators

2. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: TBA15 and TBB15). *[AQR 12.5.2.6(d)]*

3. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators (EUs: TBA15 and TBB15) by retaining a copy of vendor fuel specifications. *[40 CFR 63.6604(b)]*

Cooling Towers

4. The permittee shall monitor the TDS of the recirculation water for each cooling tower monthly, using a conductivity meter or other device approved in advance by the Control Officer. *[AQR 12.5.2.6(d)]*

1.4.4.2 Testing

No performance testing requirements have been identified for emission units at The Signature at MGM Grand. *[AQR 12.5.2.6(d)]*

1.4.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

Boilers/Water Heaters

c. Log of boilers rated less than 1.00 MMBtu/hr heat input demonstrating compliance with rating limit (EU: TBC17). This log shall include the following:

i. rating, make, model, and serial number of each unit;

ii. cumulative MMBtu ratings of all active units; and

iii. date each unit is installed and removed (when applicable);

d. Monthly, consecutive 12-month total MMBtu/hr of all boilers/heaters (EU: TBC17) less than 1.00 MMBtu/hr (reported semiannually);

Cooling Towers

e. Monthly TDS content measurements of cooling tower circulation water (EUs: TBB16 through TBB19);

Emergency Engines

f. Date and duration of operation of each diesel-fired emergency generator for testing, maintenance, and nonemergency use (EUs: TBA15 and TBB15) (reported semiannually);

g. Monthly duration of operation of each emergency generator emergency use, including documentation justifying use during the emergency (EUs: TBA15 and TBB15) (reported semiannually);

h. Sulfur content and cetane index or aromatic content of diesel fuel used to power the emergency generators (EUs: TBA15 and TBB15), as certified by the supplier;

Nonroad Engines.

i. Records of location changes for nonroad engines, if applicable;

Emissions

j. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

k. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

l. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.5 MANDALAY BAY

1.5.1 Emission Units

The stationary source activities at Mandalay Bay covered by this Part 70 OP consist of the emission units and associated appurtenances summarized in Table 1-14. *[737 NSR ATC/OP, Modification 3 (01/10/03); 737 NSR ATC/OP, Modification 4 (04/29/04); 825 NSR, Modification 11 (11/16/06); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 12/26/14, 09/16/16, 09/14/17, 08/28/18, 06/25/19, and 01/25/21); Title V Revisions (00825_20210524_APP, 00825_20220523_APP, 00825 APP 20230330, and 00825_20231025_APP) incorporated into the Title V; and Prior Notification (03/10/22) incorporated into the Title V;]*

Table 1-14: Summary of EUs – Mandalay Bay

EU	Rating	Description	Manufacturer	Model No.	Serial No.
MB004	20.0 MMBtu/hr	Boiler	Unilux	ZF2000W	2215
MB009	5.0 MMBtu/hr	Boiler	Bryan	RV500	81771
MB012	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-43-97-8360
MB013	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-43-97-8357

EU	Rating	Description	Manufacturer	Model No.	Serial No.
MB014	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-43-97-8356
MB023	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-43-97-8361
MB030	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-43-97-8354
MB031	1.90 MMBtu/hr	Boiler	Patterson-Kelley	N1900-2	CJ-43-97-8396
MB033	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-37-98-9504
MB034	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-39-98-9612
MB036	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-08-98-8615
MB037	1.90 MMBtu/hr	Boiler	Patterson-Kelley	D1900-2	CJ-08-98-8613
MB040	1.75 MMBtu/hr	Boiler	RBI	FH 1950S	109918043
MB042	1.8 MMBtu/hr	Boiler	Lochinvar	CFN-1800	D028018
MB043	1.8 MMBtu/hr	Boiler	Lochinvar	CFN-1800	D028019
MB044	2.75 MMBtu/hr	Boiler	Unilux	ZF250HS	2804
MB045	2.75 MMBtu/hr	Boiler	Unilux	ZF250HS	2805
MB051	20.0 MMBtu/hr	Boiler	Unilux	ZF2000W	2807
MB055	1.8 MMBtu/hr	Water Heater	Raypak	WH9-1802	303206423
MB056	1.8 MMBtu/hr	Water Heater	Raypak	WH9-1802	303206419
MB057	1.8 MMBtu/hr	Water Heater	Raypak	WH9-1802	303206421
MB058	1.8 MMBtu/hr	Water Heater	Raypak	WH9-1802	303206420
MB059	1.8 MMBtu/hr	Water Heater	Raypak	WH9-1802	303206422
MB061	2,168 hp	Diesel-Powered Emergency Generator DOM: 1999	Caterpillar	3516 DITA	25Z06027
MB062	2,168 hp	Diesel-Powered Emergency Generator DOM: 1999	Caterpillar	3516 DITA	25Z02994
MB063	2,168 hp	Diesel-Powered Emergency Generator DOM: 1999	Caterpillar	3516 DITA	25Z03002
MB064	240 hp	Diesel-Powered Fire Pump DOM: 1999	Cummins	413	45574278
MB065	208 hp	Diesel-Powered Fire Pump DOM: 1999	Cummins	403	45593028
MB066	2,518 hp	Diesel-Powered Emergency Generator DOM: 1999	Caterpillar	3516 DITA	3NS00234
MB067	2,220 hp	Diesel-Powered Emergency Generator DOM: 2003	Cummins	KTA50-G9	33146939
MB068	3,200 gpm	Cooling Tower	Evapco	AT-228-4Q24	18-841454

EU	Rating	Description	Manufacturer	Model No.	Serial No.
MB069	3,200 gpm	Cooling Tower	Evapco	AT-228-4Q24	
MB070	3,200 gpm	Cooling Tower	Evapco	AT-228-4Q24	18-841455
MB071	3,200 gpm	Cooling Tower	Evapco	AT-228-4Q24	
MB072	3,200 gpm	Cooling Tower	Evapco	AT-114-4Q24	18-841453
MB078	2,500 gpm	Cooling Tower	Evapco	AT 228-4O24	22P118322-A
MB079	2,500 gpm	Cooling Tower	Evapco	AT 228-4O24	22P118322-B
MB080	2,500 gpm	Cooling Tower	Evapco	AT 228-4O24	22P118323-A
MB081	2,500 gpm	Cooling Tower	Evapco	AT 228-4O24	22P118323-B
MB082	2,500 gpm	Cooling Tower	Evapco	AT 228-4O24	22P118320-A
MB083	2,500 gpm	Cooling Tower	Evapco	AT 228-4O24	22P118320-B
MB084	2,500 gpm	Cooling Tower	Evapco	AT 228-4O24	22P118321-A
MB085	2,500 gpm	Cooling Tower	Evapco	AT 228-4O24	22P118321-B
MB086	600 gpm	Cooling Tower	Baltimore Aircoil		
MB087		Spray Booth	Binks	Semi-Custom	27'x21'x10'
MB089	2,000 Gallons	Aboveground Storage Tank (1,000 gal Gasoline/1,000 gal Diesel)	Convault	RNE1000 3SF	M734031
MB090	5.4 MMBtu/hr	Boiler	Unilux	ZF500HS	3140
MB091	1.95 MMBtu/hr	Water Heater	RBI Futera II	FB1950NE2ACSS	30331380
MB092	1.95 MMBtu/hr	Water Heater	RBI Futera II	FB1950NE2ACSS	30331381
MB093	2,172 hp	Diesel Emergency Generator DOM: 2004	Caterpillar	3512	1GZ01339
MB100	3,200 gpm	Cooling Tower	Evapco	AT-228-0924	11-454672
MB101	3,200 gpm	Cooling Tower	Evapco	AT-228-0924	11-454674
MB102	3,200 gpm	Cooling Tower	Evapco	AT-228-0924	
MB103	3,200 gpm	Cooling Tower	Evapco	AT-228-0924	
MB104		Spray Booth	Col-Met	IB-06-07-05	
MB105		Spray Booth	Col-Met	IBB-04-07-02	
MB107	1.95 MMBtu/hr	Boiler	RBI	FW1950	51055846
MB108	1.95 MMBtu/hr	Boiler	RBI	FW1950	51055845
MB109	5.00 MMBtu/hr	Boiler	Camus	DynaForce 5000	41724542
MB110	5.00 MMBtu/hr	Boiler	Camus	DynaForce 5000	41724540
MB111	5.00 MMBtu/hr	Boiler	Camus	DynaForce 5000	41724543
MB112	5.00 MMBtu/hr	Boiler	Camus	DynaForce 5000	41724541
MB113	2.00 MMBtu/hr	Boiler	Camus	DynaForce 2000	091725347
MB114	2.00 MMBtu/hr	Boiler	Camus	DynaForce 2000	091725346
MB115	2.00 MMBtu/hr	Boiler	Camus	DynaForce 2000	091725344
MB116	2.00 MMBtu/hr	Boiler	Camus	DynaForce 2000	091725345
MB117	3,200 gpm	Cooling Tower	Evapco	AT-228-0924	16-777037
MB118	2.00 MMBtu/hr	Boiler	Camus	DynaForce 2000	091725342
MB119	2.00 MMBtu/hr	Boiler	Camus	DynaForce 2000	091725343

EU	Rating	Description	Manufacturer	Model No.	Serial No.
MB120	1.50 MMBtu/hr	Boiler	Camus	DFNH-1502-MGT	091725348
MB121	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	111928912
MB122	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	111928913
MB123	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	111928914
MB124	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	111928915
MB125	1.99 MMBtu/hr	Boiler	RBI	MB2000	032290620
MB134	1.95 MMBtu/hr	Boiler	RBI	FB1950	082291874
MB135	1.95 MMBtu/hr	Boiler	RBI	FB1950	072291553
MB136	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	082232572
MB137	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	082232574
MB138	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	082232575
MB139	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	082232573
MB140	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	112334152
MB141	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	112334153
MB142	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	112334150
MB143	4.99 MMBtu/hr	Boiler	Camus	Dynaflame DFNH-5004	112334151
MB144	6.25 MMBtu/hr	Boiler	Unilux	600HS	A4024

1.5.2 Controls

1.5.2.1 Control Devices

No add-on controls have been identified.

1.5.2.2 Control Requirements

Boilers/Water Heaters [AQR 12.5.2.12]

1. The permittee shall combust only natural gas in all boilers and water heaters. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-11]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[825 NSR ATC/OP, Modification 11 (11/16/06), Condition III-B-2]*

3. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 29 ppmv NO_x, corrected to 3% oxygen (EUs: MB004, and MB009). *[Title V OP (10/21/13)]*

4. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv CO, corrected to 3% oxygen (EU: MB004). *[Title V OP (10/21/13)]*

5. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 182 ppmv CO, corrected to 3% oxygen (EU: MB009). *[Title V OP (10/21/13)]*

6. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 40 ppmv NO_x, corrected to 3% oxygen (EUs: MB012 through MB014, MB023, MB030, MB031, MB033, MB034, MB036, MB037, MB040, MB042, MB043, and MB090). *[Title V OP (10/21/13)]*

7. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 111 ppmv CO, corrected to 3% oxygen (EUs: MB012 through MB014, MB023, MB030, MB031, MB033, MB034, MB036, and MB037, MB042, and MB043). *[Title V OP (10/21/13)]*

8. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 102 ppmv CO, corrected to 3% oxygen (EU: MB040). *[Title V OP (10/21/13)]*

9. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 30 ppmv NO_x, corrected to 3% oxygen (EUs: MB044, MB045, and MB051). *[Title V OP (10/21/13)]*

10. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EUs: MB044 and MB045). *[Title V OP (10/21/13)]*

11. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 100 ppmv CO, corrected to 3% oxygen (EU: MB051). *[Title V OP (10/21/13)]*

12. The permittee shall operate and maintain each of the water heaters with burners that have a manufacturer's maximum emission concentration of 28 ppmv NO_x, corrected to 3% oxygen (EUs: MB055 through MB059). *[Title V OP (10/21/13)]*

13. The permittee shall operate and maintain each of the water heaters with burners that have a manufacturer's maximum emission concentration of 48 ppmv CO, corrected to 3% oxygen (EUs: MB055 through MB059). *[Title V OP (10/21/13)]*

14. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 89 ppmv CO, corrected to 3% oxygen (EU: MB090). *[Title V OP (10/21/13)]*

15. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 19 ppmv NO_x, corrected to 3% oxygen (EUs: MB091 through MB092). *[Title V OP (10/21/13)]*

16. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 53 ppmv CO, corrected to 3% oxygen (EUs: MB091 and MB092). *[Title V OP (10/21/13)]*

17. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EUs: MB107 and MB108). *[Title V OP (09/14/17)]*

18. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.01456 lb/MMBtu NO_x (EUs: MB109 through MB116). *[Title V OP (08/28/18)]*

19. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.036 lb/MMBtu CO (EUs: MB109 through MB116). *[Title V OP (08/28/18)]*

20. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.0115 lb/MMBtu of NO_x (EUs: MB121 through MB124). *[Title V OP (01/25/21)]*

21. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.01755 lb/MMBtu of CO (EUs: MB121 through MB124). *[Title V OP (01/25/21)]*

22. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 9 ppmv NO_x, corrected to 3% oxygen (EU: MB125). *[Title V OP (07/06/23)]*

23. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: MB125). *[Title V OP (07/06/23)]*

24. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 10 ppmv NO_x, corrected to 3% oxygen (EUs: MB134 and MB135). *[Title V OP (03/25/24)]*

25. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 9 ppmv NO_x, corrected to 3% oxygen (EUs: MB136 through MB143). *[Title V OP (03/25/24)]*

26. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EUs: MB136 through MB143). *[Title V OP (03/25/24)]*

27. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 12 ppmv NO_x, corrected to 3% oxygen (EU: MB144). *[Title V Minor Revision Application (10/25/2023)]*

28. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: MB144). *[Title V OP (03/25/24)]*

Diesel Generators/Fire Pumps

29. The permittee shall operate and maintain all diesel generators and fire pumps in accordance with the manufacturer's O&M manual for emissions-related components. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-12]*

30. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators (EUs: MB061 through MB063, MB066, MB067, and MB093). *[40 CFR 63.6604(b)]*

Cooling Towers

31. The permittee shall operate and maintain each of the cooling towers in accordance with the manufacturer's O&M manual for emissions-related components (EUs: MB068 through MB070, MB078 through MB086, MB100 through MB103, and MB117). *[AQR 12.5.2.6]*

32. The permittee shall operate the cooling towers with drift eliminators that have a manufacturer's drift rate of 0.001% (EUs: MB068 through MB072). *[Title V OP (06/25/19)]*

33. The permittee shall operate the cooling towers with drift eliminators that have a manufacturer's drift rate of 0.001% (EUs: MB078 through MB085). *[737 NSR ATC/OP, Modification 4 (04/29/04), Condition III-B-16]*

34. The permittee shall operate the cooling towers with drift eliminators that have a manufacturer's drift rate of 0.002% (EUs: MB086, MB100 through MB103 and MB117). *[Title V OP (10/21/13 and 08/28/18)]*

35. The permittee shall limit the TDS content of each cooling tower's circulation water to 4,500 ppm (EUs: MB068 through MB070, MB078 through MB085, MB100 through MB103, and MB117). *[Title V OP (10/21/13 and 08/28/18)]*

36. The permittee shall limit the TDS content of each cooling tower's circulation water to 3,000 ppm (EU: MB086). *[Title V OP (10/21/13)]*

Surface Coating

37. The permittee shall not operate the spray booths (EUs: MB087, MB104, and MB105) unless all exhaust air passes through appropriate filter media with a particulate capture efficiency of at least 99.0%. (This is usually accomplished with tacky filter material that is at least 2 inches thick.) The dry filter media must cover all openings in the spray booth. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-1, and Title V OP (12/26/14)]*

38. The permittee shall use covered containers for storage or disposal of VOC- or HAP-containing cloth or paper (excluding masking tape) used for surface preparation and cleanup. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-2, and Title V OP (12/26/14)]*

39. All filters or other control equipment associated with surface coating operations shall follow the manufacturer's specifications for use and operation. Dry filters must be changed at sufficient intervals to prevent clogging and decreased effectiveness. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-5, and Title V OP (12/26/14)]*

40. The permittee shall use a manometer (or equivalent) to monitor the pressure drop across the spray booth filters. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-6, and Title V OP (12/26/14)]*

41. The permittee shall follow the manufacturer's O&M manual for use and operation of exhaust filters. *[AQR 12.5.2.6(a)]*

42. The differential pressure drop shall not exceed 0.25 inches (6.35 millimeters) of water column unless the O&M manual indicates a different pressure drop value. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-6, and Title V OP (12/26/14)]*

43. Exhaust filters must be replaced prior to exceeding 0.25 inches (6.35 millimeters) of water column or, if the O&M manual indicates a different pressure drop value, prior to exceeding the different pressure drop value cited in the O&M manual. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-6, and Title V OP (12/26/14)]*

44. The permittee shall clean surface coating application equipment in an enclosed container to minimize VOC volatilization into the ambient air. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-7, and Title V OP (12/26/14)]*

45. All containers with VOC-containing products shall remain securely closed except during product transfer. Containers shall be inspected regularly for leakage, and the contents of any leaking container must be immediately transferred to an appropriately labeled container that has been specifically designed for storage of the compound. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-8, and Title V OP (12/26/14)]*

46. The permittee shall employ good housekeeping practices to prevent the accumulation and/or dispersal of particulate matter from sanding, blasting, surface preparation, etc. carried out in conjunction with surface coating operations. No more than 0.25 inches of particulate matter shall accumulate on surrounding surfaces at any time. *[737 NSR ATC/OP, Modification 3 (01/10/03), Condition III-B-4, and Title V OP (12/26/14)]*

Gasoline Storage/Dispensing

47. The permittee shall implement control technology requirements on gasoline dispensing equipment (EU: MB089). *[40 CFR Part 63, Subpart CCCCCC]*

48. The permittee shall install and operate all Phase I vapor recovery equipment according to certifications specified by the manufacturer, and shall maintain the equipment to be leak-free, vapor-tight, and in proper working order. *[AQR 12.5.2.6]*

49. From October 1 to March 31 every year in the Las Vegas Valley, the Eldorado Valley, the Ivanpah Valley, the Boulder City limits, and any area within three miles of these areas, no gasoline intended as a final product for fueling motor vehicles shall be supplied or sold by any person; sold at retail; sold to a private or a municipal fleet for consumption; or introduced into any motor vehicle by any person unless the gasoline has at least 3.5 percent oxygen content by weight. *[AQR 53.1.1 & 53.2.1]*

50. If a gasoline storage tank in the Las Vegas Valley, the Eldorado Valley, the Ivanpah Valley, the Boulder City limits, and any area within three miles of these areas, receives its last gasoline delivery with less than 3.5 percent oxygen content by weight before September 15, gasoline dispensed from that tank will be exempt from enforcement of Section 53.2.1 until the first delivery date after October 1. *[AQR 53.5.1.1]*

51. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Preventative measures to be taken include, but are not limited to, the following: *[40 CFR Parts 63.11116 and 63.11117]*

    a. Minimize gasoline spills;

    b. Clean up spills as expeditiously as practicable;

    c. Cover all open gasoline containers and all gasoline storage tank fill pipes with a gasketed seal when not in use; and

    d. Only load gasoline into storage tanks using a submerged fill tube where the greatest distance from the bottom of the storage tank to the point of the fill tube opening is no more than six inches.

52. The permittee shall install, maintain, and operate a Phase I vapor recovery system on all gasoline storage tanks (EU: MB089) that meets the following requirements: *[AQR 12.5.2.6]*

    a. The Phase I vapor recovery system shall be rated with at least 90.0 percent control efficiency when in operation. This system shall be certified by an industry-recognized certification body, i.e., California Resources Air Board (CARB) or equivalent.

    b. The Phase I vapor recovery system shall be a dual-point vapor balance system, as defined by 40 CFR Part 63.11132, in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

    c. All Phase I vapor recovery equipment shall be installed and operated in accordance with manufacturer specifications and certification requirements.

    d. All Phase I vapor recovery equipment, including the vapor line from the gasoline storage tanks to the gasoline cargo tank, shall be maintained in good working order and vapor-tight, as defined in 40 CFR Part 63.11132.

    e. All vapor connections and lines on storage tanks shall be equipped with closures that seal upon disconnect.

53. The vapor balance system shall be designed so that the pressure in the cargo tank does not exceed 18 inches of water pressure or 5.9 inches of water vacuum during product transfer.

54. Liquid fill and vapor return adapters for all systems shall be equipped and secured with vapor-tight caps after each delivery. *[AQR 12.5.2.6]*

55. A pressure/vacuum (PV) vent valve on each gasoline storage tank system (EU: MB089) shall be installed, maintained, and operated in accordance with manufacturer's specifications.

    a. The pressure specifications for PV vent valves shall be a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water.

    b. The total leak rate of all PV vent valves at the affected facility, including connections, shall not exceed 0.17 ft^3 per hour at a pressure of 2.0 inches of water and 0.63 ft^3 per hour at a vacuum of 4 inches of water. *[AQR 12.5.2.6]*

56. The vapor balance system shall be capable of meeting the static pressure performance requirement in 40 CFR Part 63, Subpart CCCCCC. *[AQR 12.5.2.6]*

57. The permittee shall comply with good management practices during the unloading of gasoline cargo tanks, as follows: *[AQR 12.5.2.6]*

    a. All hoses in the vapor balance system shall be properly connected.

    b. The adapters or couplers that attach to the vapor line on the storage tank shall have closures that seal upon disconnect.

    c. All vapor return hoses, couplers, and adapters used in the gasoline delivery shall be vapor-tight.

    d. All tank truck vapor return equipment shall be compatible in size and form a vapor-tight connection with the vapor balance equipment on the gasoline storage tank.

    e. All hatches on the tank truck shall be closed and securely fastened.

    f. The filling of storage tanks shall be limited to unloading from vapor-tight gasoline cargo tanks carrying documentation onboard that the cargo tank has met the specifications of EPA Test Method 27.

Other

58. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.5.3 Limitations and Standards

1.5.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generators (EUs: MB061 through MB063, MB066, MB067, and MB093) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generators

cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 63.6640]*

a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

d. The power is provided only to the facility itself or to support the local transmission and distribution system.

e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

2. The permittee shall limit the operation of the fire pumps (EUs: MB064 and MB065) for testing and maintenance purposes to 100 hours/year. The permittee may operate the fire pumps up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. *[40 CFR Part 63.6640]*

3. The permittee shall limit the consumption of VOC-containing paints, basecoats, primers, reducers, inks, thinners, solvents, etc., in the spray booth (EU: MB087), to 3,839 gallons per any consecutive 12 months, based on an average VOC content of 2.59 pounds per gallon and 20% HAP content. *[737 NSR ATC/OP, Modification 4 (04/29/04), Condition III-A-40]*

4. The permittee shall limit the throughput (aggregate of all gasoline products) to 20,000 gallons per any consecutive 12 months (EU: MB089). *[Title V OP (10/21/13)]*

5. The permittee shall limit the consumption of VOC-containing paints, basecoats, primers, reducers, inks, thinners, solvents, etc., in the spray booth (EU: MB104), to 780 gallons per any consecutive 12 months, based on an average VOC content of 5.0 pounds per gallon and 47% HAP content. *[Title V OP (12/26/14)]*

6. The permittee shall limit the consumption of VOC-containing paints, basecoats, primers, reducers, inks, thinners, solvents, etc., in the spray booth (EU: MB105), to 780 gallons per any consecutive 12 months, based on an average VOC content of 0.56 pounds per gallon and 47% HAP content. *[Title V OP (12/26/14)]*

1.5.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-15. *[737 NSR ATC/OP, Modification 3 (01/10/03); 737 NSR ATC/OP, Modification 4 (04/29/04); 825 NSR, Modification 11 (11/16/06); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 12/26/14, 09/16/16, 09/14/17, 08/28/18, 06/25/19, 01/25/21, 07/06/23, and 03/25/24); and Prior Notification (03/10/22) incorporated into the Title V]*

Table 1-15: PTE (tons per year) – Mandalay Bay

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
MB004	8,760 hr/yr	0.65	0.65	3.09	1.30	0.05	0.47	0.16
MB009	8,760 hr/yr	0.16	0.16	0.77	2.96	0.01	0.12	0.04
MB012	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB013	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB014	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB023	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB030	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB031	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB033	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB034	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB036	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB037	8,760 hr/yr	0.06	0.06	0.40	0.68	0.01	0.04	0.02
MB040	8,760 hr/yr	0.06	0.06	0.37	0.58	0.01	0.04	0.01
MB042	8,760 hr/yr	0.06	0.06	0.38	0.65	0.01	0.04	0.01
MB043	8,760 hr/yr	0.06	0.06	0.38	0.65	0.01	0.04	0.01
MB044	8,760 hr/yr	0.09	0.09	0.44	0.45	0.01	0.06	0.02
MB045	8,760 hr/yr	0.09	0.09	0.44	0.45	0.01	0.06	0.02
MB051	8,760 hr/yr	0.65	0.65	3.19	6.48	0.05	0.47	0.16
MB055	8,760 hr/yr	0.06	0.06	0.27	0.28	0.01	0.04	0.01
MB056	8,760 hr/yr	0.06	0.06	0.27	0.28	0.01	0.04	0.01
MB057	8,760 hr/yr	0.06	0.06	0.27	0.28	0.01	0.04	0.01
MB058	8,760 hr/yr	0.06	0.06	0.27	0.28	0.01	0.04	0.01
MB059	8,760 hr/yr	0.06	0.06	0.27	0.28	0.01	0.04	0.01
MB061	500 hr/yr	0.38	0.38	13.01	2.98	0.01	0.38	0.02
MB062	500 hr/yr	0.38	0.38	13.01	2.98	0.01	0.38	0.02
MB063	500 hr/yr	0.38	0.38	13.01	2.98	0.01	0.38	0.02
MB064	500 hr/yr	0.13	0.13	1.86	0.40	0.01	0.15	0.01
MB065	500 hr/yr	0.11	0.11	1.61	0.35	0.01	0.13	0.01
MB066	500 hr/yr	0.44	0.44	15.11	3.46	0.01	0.44	0.02
MB067	500 hr/yr	0.39	0.39	13.32	3.05	0.01	0.39	0.02
MB068	8,760 hr/yr	0.15	0.15	0.00	0.00	0.00	0.00	0.00
MB069	8,760 hr/yr	0.15	0.15	0.00	0.00	0.00	0.00	0.00

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
MB070	8,760 hr/yr	0.15	0.15	0.00	0.00	0.00	0.00	0.00
MB071	8,760 hr/yr	0.15	0.15	0.00	0.00	0.00	0.00	0.00
MB072	8,760 hr/yr	0.15	0.15	0.00	0.00	0.00	0.00	0.00
MB078	8,760 hr/yr	0.12	0.12	0.00	0.00	0.00	0.00	0.00
MB079	8,760 hr/yr	0.12	0.12	0.00	0.00	0.00	0.00	0.00
MB080	8,760 hr/yr	0.12	0.12	0.00	0.00	0.00	0.00	0.00
MB081	8,760 hr/yr	0.12	0.12	0.00	0.00	0.00	0.00	0.00
MB082	8,760 hr/yr	0.12	0.12	0.00	0.00	0.00	0.00	0.00
MB083	8,760 hr/yr	0.12	0.12	0.00	0.00	0.00	0.00	0.00
MB084	8,760 hr/yr	0.12	0.12	0.00	0.00	0.00	0.00	0.00
MB085	8,760 hr/yr	0.12	0.12	0.00	0.00	0.00	0.00	0.00
MB086	8,760 hr/yr	0.04	0.04	0.00	0.00	0.00	0.00	0.00
MB087	3,839 gal/yr	0.01	0.01	0.00	0.00	0.00	4.97	0.99
MB089	20,000 gal/yr	0.00	0.00	0.00	0.00	0.00	0.84	0.01
MB090	8,760 hr/yr	0.18	0.18	1.16	1.56	0.01	0.13	0.04
MB091	8,760 hr/yr	0.03	0.03	0.20	0.34	0.01	0.02	0.01
MB092	8,760 hr/yr	0.03	0.03	0.20	0.34	0.01	0.02	0.01
MB093	500 hr/yr	0.38	0.38	13.03	2.99	0.01	0.38	0.02
MB100	8,760 hr/yr	0.21	0.21	0.00	0.00	0.00	0.00	0.00
MB101	8,760 hr/yr	0.21	0.21	0.00	0.00	0.00	0.00	0.00
MB102	8,760 hr/yr	0.21	0.21	0.00	0.00	0.00	0.00	0.00
MB103	8,760 hr/yr	0.21	0.21	0.00	0.00	0.00	0.00	0.00
MB104	780 gal/yr	0.00	0.00	0.00	0.00	0.00	1.95	0.92
MB105	780 gal/yr	0.00	0.00	0.00	0.00	0.00	0.22	0.10
MB107	8,760 hr/yr	0.06	0.06	0.21	0.70	0.01	0.05	0.02
MB108	8,760 hr/yr	0.06	0.06	0.21	0.70	0.01	0.05	0.02
MB109	8,760 hr/yr	0.16	0.16	0.32	0.79	0.01	0.12	0.04
MB110	8,760 hr/yr	0.16	0.16	0.32	0.79	0.01	0.12	0.04
MB111	8,760 hr/yr	0.16	0.16	0.32	0.79	0.01	0.12	0.04
MB112	8,760 hr/yr	0.16	0.16	0.32	0.79	0.01	0.12	0.04
MB113	8,760 hr/yr	0.07	0.07	0.13	0.32	0.01	0.05	0.02
MB114	8,760 hr/yr	0.07	0.07	0.13	0.32	0.01	0.05	0.02
MB115	8,760 hr/yr	0.07	0.07	0.13	0.32	0.01	0.05	0.02
MB116	8,760 hr/yr	0.07	0.07	0.13	0.32	0.01	0.05	0.02
MB117	8,760 hr/yr	0.21	0.21	0.00	0.00	0.00	0.00	0.00
MB118	8,760 hr/yr	0.07	0.07	0.13	0.32	0.01	0.05	0.02
MB119	8,760 hr/yr	0.07	0.07	0.13	0.32	0.01	0.05	0.02
MB120	8,760 hr/yr	0.05	0.05	0.10	0.54	0.01	0.04	0.01
MB121	8,760 hr/yr	0.16	0.16	0.25	0.38	0.01	0.12	0.04
MB122	8,760 hr/yr	0.16	0.16	0.25	0.38	0.01	0.12	0.04

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
MB123	8,760 hr/yr	0.16	0.16	0.25	0.38	0.01	0.12	0.04
MB124	8,760 hr/yr	0.16	0.16	0.25	0.38	0.01	0.12	0.04
MB125	8,760 hr/yr	0.06	0.06	0.10	0.32	0.01	0.05	0.02
MB134	8,760 hr/yr	0.06	0.06	0.10	0.70	0.01	0.05	0.02
MB135	8,760 hr/yr	0.06	0.06	0.10	0.70	0.01	0.05	0.02
MB136	8,760 hr/yr	0.16	0.16	0.24	0.81	0.01	0.12	0.04
MB137	8,760 hr/yr	0.16	0.16	0.24	0.81	0.01	0.12	0.04
MB138	8,760 hr/yr	0.16	0.16	0.24	0.81	0.01	0.12	0.04
MB139	8,760 hr/yr	0.16	0.16	0.24	0.81	0.01	0.12	0.04
MB140	8,760 hr/yr	0.16	0.16	0.24	0.81	0.01	0.12	0.04
MB141	8,760 hr/yr	0.16	0.16	0.24	0.81	0.01	0.12	0.04
MB142	8,760 hr/yr	0.16	0.16	0.24	0.81	0.01	0.12	0.04
MB143	8,760 hr/yr	0.16	0.16	0.24	0.81	0.01	0.12	0.04
MB144	8,760 hr/yr	0.21	0.21	0.40	1.01	0.02	0.15	0.05

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not allow actual emissions from the individual emission units to exceed the emission rates and emission concentrations listed in Table 1-16. *[737 NSR ATC/OP, Modification 3 (01/10/03), Section B]*

Table 1-16: Emission Rates (pounds per hours) – Mandalay Bay

EU	Rating	NO_x	CO
MB004	20.0 MMBtu/hr	0.70	0.30
MB051	20.0 MMBtu/hr	0.73	1.48

3. The permittee shall not discharge into the atmosphere, from any emission unit in this section, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.5.4 Compliance Demonstration Requirements

1.5.4.1 Monitoring

Visible Emissions

See Section 2.0.

Boilers/Water Heaters

1. The permittee shall install and utilize nonresettable hour meters such that the monthly consumption of natural gas can be established for each applicable boiler (EUs: MB004 and MB051). *[AQR 12.5.2.6(d) & 40 CFR Part 60, Subpart Dc]*

Burner Efficiency Tests

2. The permittee shall conduct burner efficiency tests in accordance with the manufacturer's O&M manual and good combustion practices. Alternative methods may be used upon Control Officer approval (EUs: MB004, MB009, MB051, MB090, MB121 through MB124, and MB136 – MB143). *[AQR 12.5.2.6(d)]*

3. The permittee shall perform a burner efficiency test once each calendar year (EUs: MB009, MB121 through MB124, and MB144). *[AQR 12.5.2.6(d)]*

4. The permittee shall not have to perform a burner efficiency test if the actual hours of operation are 0. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: MB009, MB090, MB121 through MB124, and MB144). *[AQR 12.5.2.6(d)]*

5. The permittee shall perform a burner efficiency test twice each calendar year, at least five months apart but no more than seven (EUs: MB004 and MB051). *[AQR 12.5.2.6(d)]*

6. The permittee may perform a burner efficiency test once each calendar year if the actual hours of operation are less than 50. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: MB004 and MB051). *[AQR 12.5.2.6(d)]*

7. The permittee may replace one contemporaneously-required burner efficiency test with a performance test that has acceptable results (EUs: MB004 and MB051). *[AQR 12.5.2.6(d)]*

8. A performance test may replace a required burner efficiency test with Control Officer approval. *[AQR 12.5.2.6(d)]*

9. The results from burner efficiency testing shall not be used to determine an emission unit's compliance status with its corresponding emission limit(s). *[AQR 12.5.2.6]*

Diesel Generators/Fire Pumps

10. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: MB061 through MB067 and MB093). *[AQR 12.5.2.6(d)]*

11. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators (EUs: MB061 through MB063, MB066, MB067, and MB093) by retaining a copy of vendor fuel specifications. *[40 CFR 63.6604(b)]*

Surface Coating

12. The permittee shall inspect spray paint booth and all ancillary equipment for leaks, malfunctions, proper operation of gauges and pressure drops each month the booth is operated, and perform appropriate maintenance as needed. A log must be kept of all inspections as well as any corrective actions taken to repair the equipment. *[AQR 12.5.2.6(d)]*

Gasoline Storage/Dispensing

13. The permittee shall monitor the combined throughput of gasoline each month (EU: MB089). *[AQR 12.5.2.6(d)]*

14. The permittee shall monitor the fuel storage and dispensing system (EU: MB089) to determine if components of the system are in compliance with the control requirements of this permit. The monitoring shall consist of, but not be limited to, the following: *[AQR 12.5.2.6(d)]*

    a. The permittee shall inspect daily for gasoline spills, and record the times and dates the source became aware of a spill and cleaned it up.

    b. The permittee shall inspect covers on gasoline containers and fill-pipes after each delivery, and record the dates of fuel deliveries and corresponding inspections.

    c. The permittee shall record the date and approximate volume of gasoline sent to open waste collection systems that collect recyclable gasoline.

Cooling Towers

15. The permittee shall monitor the TDS of the recirculation water for each cooling tower monthly, using a conductivity meter or other device approved in advance by the Control Officer. *[AQR 12.5.2.6(d)]*

1.5.4.2 Testing

Boiler/ Water Heater Performance Tests

1. Performance testing is subject to 40 CFR Part 60.8 (as amended), Subpart A, and the department's Guidelines for Source Testing (9/19/2019). Performance testing shall be the instrument for determining compliance with emission limitations set forth in this permit for all boilers that have a heat input rating equal to or greater than 10.0 MMBtu/hr (EUs: MB004 and MB051). *[AQR 12.5.2.6(d)]*

2. Subsequent performance testing shall be conducted at a frequency of no later than once every five years, and no later than 90 days after the anniversary date of the last performance test on that boiler. Subsequent performance testing shall be conducted on emission units MB004 and MB051. *[AQR 12.5.2.6(d)]*

3. Performance testing for the applicable boilers shall comply with the testing protocol requirements identified in Table 1-17. *[AQR 12.5.2.6(d)]*

Table 1-17: Performance Testing Protocol Requirements

Test Point	Pollutant	Method
Boiler Exhaust Outlet Stack	NO_x	EPA Method 7E
Boiler Exhaust Outlet Stack	CO	EPA Method 10 analyzer
Stack Gas Parameters	—	EPA Methods 1, 2, 3A, and 4

Note: 40 CFR Part 60, Subpart Dc applies to specific combustion units at this facility.

Gasoline Dispensing

4. The permittee shall conduct Phase I vapor recovery tests in accordance with the CARB-approved vapor recovery test procedures (as revised) listed in Table 1-18, as applicable. *[AQR 12.5.2.8(a)]*

Table 1-18: Vapor Recovery System Testing Procedures and Schedules

Type of Vapor Recovery System	Test Procedure	Frequency
Phase I Vapor Balance System	Pressure Decay/Leak test: TP201.3B (as revised for AST)	Initial and every three years thereafter
	Static Torque of Rotatable Phase I Adaptors CARB procedure TP-201.1B (With swivel adapters only)	Initial and every three years thereafter
	Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves: CARB procedure TP-201.1E (as revised)	Initial and every three years thereafter
	Flow rate Test: CC_VRTP_1	Initial and every three years thereafter

5. The permittee shall submit, by mail, fax, or hand delivery, a DAQ-approved vapor recovery test notification form (available on the DAQ website) to schedule each vapor recovery test with the Stationary Sources Section supervisor at least 30 calendar days before the anticipated date of testing, unless otherwise specified in this permit. *[AQR 12.5.2.8(a)]*

6. Any prior approved scheduled vapor recovery system test cannot be canceled and/or rescheduled without the Control Officer's prior approval. *[AQR 12.5.2.8(a)]*

7. The permittee shall conduct Phase I vapor recovery system testing on affected gasoline dispensing equipment according to the following requirements: *[AQR 12.5.2.8(a)]*

    a. The permittee shall conduct and pass an initial vapor recovery system test within 180 days of startup of new equipment, or within 90 days after completion of repairs or reconstruction where the integrity of the vapor recovery system has been affected by the repair or reconstruction. Routine maintenance, including the replacement of hoses, nozzles, and efficiency compliance devices (e.g., bellows, face shield, splash guard, etc.), does not require an initial vapor recovery system test.

    b. The permittee shall conduct and pass subsequent Phase I vapor recovery system tests on or before the anniversary date of the previous successful test at the frequency specified in Table 1-18.

    c. Each vapor recovery system test may be witnessed by a DAQ inspector.

8. The permittee shall submit a Gasoline Dispensing Operation Certification of Vapor Recovery System Test Results Submittal Form (available on the DAQ website), along with associated test results, to the Control Officer after each vapor recovery system test. The submittal form shall be: *[AQR 12.5.2.8(a)]*

    a. Complete and signed by the Responsible Official for the equipment being tested. The Responsible Official must certify that the test results are true, accurate, and complete.

b. Submitted by mail, by fax, or in person.

c. Submitted by the source, or by the permittee's testing company or consultant. However, the source is the responsible party and must ensure that the test report is delivered to DAQ within the applicable time frame.

9. If the source passes or fails the vapor recovery system test, the permittee shall submit the test results report to the Control Officer within 60 days of the date of the vapor recovery system test.

10. If the source fails a vapor recovery system test: *[Clark County Department of Air Quality Source Testing Guidelines (9/19/2019)]*

a. The permittee shall notify the Control Officer, by email or phone, within 24 hours of equipment test failure. If repairs can be made within five working days of the original scheduled test date, the permittee shall make the repairs and pass the required test(s).

b. If the equipment cannot be repaired in five working days, the permittee shall make all necessary repairs and schedule a retest of the affected facility by submitting a new Test Notification Form to the Control Officer by mail, fax, or hand delivery no later than three business days before the new test date.

c. After retesting (pass/fail), the owner/operator shall submit a Test Results Submittal Form (available on the DAQ website) and supporting test documents to the Control Officer within 15 days of completion.

d. The permittee shall continue retesting until the affected facility successfully passes all aspects of the vapor recovery system test.

11. The Control Officer may require the permittee to conduct any test after a failed vapor recovery system test in the presence of a DAQ representative. *[AQR 12.5.2.8(a)]*

1.5.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

c. SDS or records demonstrating the VOC content for each compound used for surface coating activities;

Cooling Towers

d. Monthly TDS content measurements of cooling tower circulation water (EUs: MB068 through MB070, MB078 through MB086, MB100 through MB103, and MB117);

Boilers/Water Heater

e. Monthly natural gas fuel consumed by each boiler (EUs: MB004 and MB051) (reported semiannually);

f. Burner efficiency test results (EUs: MB004, MB009, MB051, MB090, and MB121 through MB124);

Emergency Engines

g. Date and duration of operation of each diesel-fired emergency generator and each fire pump for testing, maintenance, and nonemergency use (EUs: MB061 through MB067, and MB093) (reported semiannually);

h. Monthly duration of operation of each emergency generator and fire pump for emergency use, including documentation justifying use during the emergency (EUs: MB061 through MB067, and MB093) (reported semiannually);

i. Sulfur content and cetane index or aromatic content of diesel fuel used to power the emergency generators (EUs: MB061 through MB063, MB066, MB067, and MB093), as certified by the supplier;

Gasoline Dispensing (EU: MB089)

j. Monthly, consecutive 12-month total of gasoline throughput (EU: MB089) (reported semiannually) *[40 CFR Part 63.11116(b)]*;

k. A record of any maintenance on any part of the Phase I equipment, including a general description of the maintenance;

l. The date and time the equipment was taken out of service;

m. The date of repair or replacement;

n. A general description of the part location (e.g., pump, tank, nozzle number);

o. A description of the problem;

p. The results of the monthly inspections;

q. Equipment inspections, including findings and corrective actions;

r. Maintenance on storage and distribution equipment, including a general description of location(s) and part(s);

Surface Coating

s. Monthly, consecutive 12-month total consumption (in gallons) of each VOC-containing compound (paints, basecoats, primers, reducers, thinners, solvents, etc.) related to surface coating activities (EUs: MB087, MB104, and MB105) (reported semiannually);

Nonroad Engines.

t. Records of location changes for nonroad engines, if applicable;

Emissions

u. Performance test results, if applicable (reported as required by Section 1.5.4.2 of this permit);

v. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

w. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

x. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.6 THE FOUR SEASONS

1.6.1 Emission Units

The stationary source activities at The Four Seasons, covered by this Part 70 OP, consist of the emission units and associated appurtenances summarized in Table 1-19. *[Title V OP (10/21/13, 09/14/17, and 6/25/19)]*

Table 1-19: Summary of EUs – The Four Seasons

EU	Rating	Description	Make	Model No.	Serial No.
FS001	2.0 MMBtu/hr	Boiler	Patterson-Kelley	N2000MFD	FH08-18-40319
FS002	1.9 MMBtu/hr	Boiler	Patterson-Kelley	SD-1900-2	CJ20-98-8889
FS003	1.9 MMBtu/hr	Boiler	Patterson-Kelley	SD-1900-2	CJ20-98-8891
FS005	288" X 120" X 84"	Spray Booth	Spray Zone	SP-CPS-SF-24 SE DIM	206256

1.6.2 Controls

1.6.2.1 Control Devices

No add-on controls have been identified.

1.6.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in all boilers and water heaters. *[Title V OP (10/21/13)]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[Title V OP (10/21/13)]*

3. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 8.5 ppmv NO_x, corrected to 3% oxygen (EU: FS001). *[Title V OP (06/25/19)]*

4. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 32 ppmv CO, corrected to 3% oxygen (EU: FS001). *[Title V OP (06/25/19)]*

5. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 30 ppmv NO_x, corrected to 3% oxygen (EUs: FS002 through FS003). *[Title V OP (10/21/13)]*

6. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 85 ppmv CO, corrected to 3% oxygen (EUs: FS002 through FS003). *[Title V OP (10/21/13)]*

Surface Coating

7. The permittee shall not operate the spray booth (EUs: FS005) unless all exhaust air passes through appropriate filter media having a particulate capture efficiency of at least 99.0%. (This is usually accomplished with tacky filter material that is at least 2 inches thick.) The dry filter media must cover all openings in the spray booth. *[Title V OP (01/25/21)]*

8. The permittee shall use covered containers for storage or disposal of VOC- or HAP-containing cloth or paper (excluding masking tape) used for surface preparation and cleanup. *[AQR 12.5.2.6(a)]*

9. All filters or other control equipment associated with surface coating operations shall follow manufacturer's specifications for use and operation. Dry filters must be changed at sufficient intervals to prevent clogging and decreased effectiveness. *[AQR 12.5.2.6(a)]*

10. The permittee shall use a manometer (or equivalent) to monitor the pressure drop across the spray booth filters. *[AQR 12.5.2.6(a)]*

11. The permittee shall follow the manufacturer's O&M manual for use and operation of exhaust filters. *[AQR 12.5.2.6(a)]*

12. The differential pressure drop shall not exceed 0.25 inches (6.35 millimeters) of water column unless the O&M manual indicates a different pressure drop value. *[AQR 12.5.2.6(a)]*

13. Exhaust filters must be replaced prior to exceeding 0.25 inches (6.35 millimeters) of water column or, if the O&M manual indicates a different pressure drop value, prior to exceeding the different pressure drop value cited in the O&M manual. *[AQR 12.5.2.6(a)]*

14. The permittee shall clean surface coating application equipment in an enclosed container to minimize VOC volatilization into the ambient air. *[AQR 12.5.2.6(a)]*

15. All containers with VOC-containing products shall remain securely closed except during product transfer. Containers shall be inspected regularly for leakage, and the contents of any leaking container must be immediately transferred to an appropriately labeled container that has been specifically designed for storage of the compound. *[AQR 12.5.2.6(a)]*

16. The permittee shall employ good housekeeping practices to prevent the accumulation and/or dispersal of particulate matter from sanding, blasting, surface preparation, etc. carried out in conjunction with surface coating operations. No more than 0.25 inches of particulate matter shall accumulate on surrounding surfaces at any time. *[AQR 12.5.2.6(a)]*

Other

17. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.6.3 Limitations and Standards

1.6.3.1 Operational Limits

1. The permittee shall limit the consumption of VOC-containing paint strippers, paint, basecoats, primers, reducers, thinners, solvents, etc. to 1,000 gallons per any consecutive 12 months, based on a weighted average VOC content of 7.6 pounds per gallon in the booth (EU: FS005). *[Title V OP (09/14/17)]*

1.6.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-20. *[Title V OP (10/21/13, 09/14/17, 8/28/18, and 6/25/19)]*

Table 1-20: PTE (tons per year) – The Four Seasons

EU	Conditions[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
FS001	8,760 hr/yr	0.06	0.06	0.08	0.18	0.01	0.04	0.01
FS002	8,760 hr/yr	0.06	0.06	0.30	0.52	0.01	0.04	0.02
FS003	8,760 hr/yr	0.06	0.06	0.30	0.52	0.01	0.04	0.02
FS005	1,000 gal/yr	0.00	0.00	0.00	0.00	0.00	3.79	0.58

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.6.4 Compliance Demonstration Requirements

1.6.4.1 Monitoring

Surface Coating

1. The permittee shall employ a manometer (or equivalent) and monitor the pressure drop across the spray booth exhaust filters each day of operation. *[AQR 12.5.2.6(d)]*

2. The permittee shall inspect the spray booth and all ancillary equipment for filter bypass, malfunctions, proper gauge operation, pressure drops, etc., each day the booth operates. *[AQR 12.5.2.6(d)]*

3. The permittee shall monitor monthly the consumption of each individual VOC-containing compound (e.g., paint strippers, paints, basecoats, primers, reducers, thinners, solvents, etc.) in gallons. *[AQR 12.5.2.6(d)]*

1.6.4.2 Testing

No performance testing requirements have been identified for the emission units at the Four Seasons. *[AQR 12.5.2.6(d)]*

1.6.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Inspections/Maintenance/General

a. Log book of all inspections, maintenance, and repairs, as specified in this document;

b. SDS or records demonstrating the VOC content for each compound used for surface coating activities;

Surface Coating

c. Monthly, consecutive 12-month total consumption (in gallons) of each VOC-containing compound (paints, basecoats, primers, reducers, thinners, solvents, etc.) related to surface coating activities (EU: FS005) (reported semiannually);

d. Spray booth pressure drop readings;

Nonroad Engines.

e. Records of location changes for nonroad engines, if applicable;

Emissions

f. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

g. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

h. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.7 LUXOR

1.7.1 Emission Units

The stationary source activities at Luxor covered by this Part 70 OP consist of the emission units and associated appurtenances summarized in Table 1-21. *[856 NSR ATC/OP, Modification 1 (4/15/99); 737 NSR ATC/OP, Modification 4 (4/29/04); 825 NSR ATC/OP, Modification 10 (09/20/06); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 12/26/14, 09/16/16, 09/14/17, 08/28/18, 06/25/19, and 01/25/21, 05/19/22, and 03/25/24); Prior Notification (03/10/22) incorporated into the Title V; and Title V Minor Revision Application (4/22/2024)]*

Table 1-21: Summary of EUs – Luxor

EU	Rating	Description	Make	Model No.	Serial No.
LX005	8.5 MMBtu/hr	Boiler	Bryan	RW 850-S-150-FDG-WLX	79526
LX006	8.5 MMBtu/hr	Boiler	Bryan	RW 850-S-150-FDG-WLX	79543
LX009	2,168 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z03005
LX010	2,168 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02998
LX011	2,168 hp	Diesel Emergency Generator DOM: 1993	Caterpillar	3516TA	25Z02999

EU	Rating	Description	Make	Model No.	Serial No.
LX013	708 hp	Diesel Emergency Fire Pump DOM: 1993	Detroit	DDFP8FH8178V	8VF-155357
LX015	3,600 gpm	Cooling Tower	Evapco	AT 114-4Q24	22P118328
LX016	3,600 gpm	Cooling Tower	Evapco	AT 114-4Q24	22P118329
LX017	3,600 gpm	Cooling Tower	Evapco	AT 114-4Q24	22P118327
LX018	3,600 gpm	Cooling Tower	Evapco	AT 114-4Q24	22P118330
LX019	3,600 gpm	Cooling Tower	Evapco	US-114-1124	11463075
LX022	26’6”x19’6”x9’	Spray Booth	Binks		
LX024	2,206 hp	Diesel Emergency Generator DOM: 2006	Caterpillar	3512C	EGB00199
LX025	2,206 hp	Diesel Emergency Generator DOM: 2006	Caterpillar	3512C	EGB00203
LX034	0.399 MMBtu/hr	Boiler	Raypak	R406A	1212349894
LX035	0.399 MMBtu/hr	Boiler	Raypak	R406A	1303354597
LX036	4.999 MMBtu/hr	Boiler	CAMUS Hydronics	DRNH5000	011724033
LX037	4.999 MMBtu/hr	Boiler	CAMUS Hydronics	DRNH5000	011724036
LX038	4.999 MMBtu/hr	Boiler	CAMUS Hydronics	DRNH5000	011724035
LX039	4.999 MMBtu/hr	Boiler	CAMUS Hydronics	DRNH5000	011724034
LX040	5.00 MMBtu/hr	Boiler	Camus	DRNH 5000 MSI	061724945
LX041	5.00 MMBtu/hr	Boiler	Camus	DRNH 5000 MSI	061724946
LX042	5.00 MMBtu/hr	Boiler	Camus	DRNH 5000 MSI	061724947
LX043	5.00 MMBtu/hr	Boiler	Camus	DRNH 5000 MSI	061724948
LX053	5.00 MMBtu/hr	Boiler	RBI	MB-5000	112395388
LX054	5.00 MMBtu/hr	Boiler	RBI	MB-5000	112395387

EU	Rating	Description	Make	Model No.	Serial No.
LX055	5.00 MMBtu/hr	Boiler	RBI	MB-5000	022496151
LX056	5.00 MMBtu/hr	Boiler	RBI	MB-5000	022496150
LX049	575 bhp	Diesel-Powered Fire Pump DOM: 2020	Clarke	C18H0-UFAD30	SO149541P
LX050	3,850 gpm	Cooling Tower	Baltimore Aircoil	S3E 1424 14S/H	6210973502-01-01
LX051	3,850 gpm	Cooling Tower	Baltimore Aircoil	S3E 1424 14S/H	6210973501-01-01
LX052	3,850 gpm	Cooling Tower	Baltimore Aircoil	S3E 1424 14S/H	6210973502-02-01

1.7.2 Controls

1.7.2.1 Control Devices

No add-on controls have been identified.

1.7.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in all boilers and water heaters. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-11]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-11]*

3. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 25 ppmv NO_x, corrected to 3% oxygen (EUs: LX005, and LX006). *[Title V OP (10/21/13)]*

4. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 47 ppmv CO, corrected to 3% oxygen (EUs: LX005 and LX006). *[Title V OP (10/21/13)]*

5. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.0115 lb/MMBtu NO_x, corrected to 3% oxygen (EUs: LX036 through LX039). *[Title V OP (09/14/17)]*

6. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 82 ppmv NO_x, corrected to 3% oxygen (EUs: LX053 – LX056). *[Title V Minor Revision Application (4/22/2024)]*

7. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 114 ppmv CO, corrected to 3% oxygen (EUs: LX053 – LX056). *[Title V Minor Revision Application (4/22/2024)]*

Diesel Generators

8. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators and fire pump (EUs: LX09 through LX011, LX024, LX025, and LX049). *[40 CFR 60.4207(b) and 40 CFR 63.6604(b)]*

9. The permittee shall operate and maintain all diesel generators and fire pumps in accordance with the manufacturer's O&M manual for emissions-related components. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-15]*

10. The permittee shall combust only diesel fuel in all diesel generators and fire pumps. *[AQR 12.5.2.6]*

Cooling Towers

11. The permittee shall operate and maintain each of the cooling towers in accordance with the manufacturer's O&M manual for emissions-related components (EUs: LX015 through LX019 and LX050 through LX052). *[AQR 12.5.2.6]*

12. The permittee shall operate each of the cooling towers with drift eliminators that have a manufacturer's maximum drift rate of 0.001% (EUs: LX015 through LX019). *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-16, and Title V OP (10/21/13)*

13. The permittee shall operate each of the cooling towers with drift eliminators that have a manufacturer's maximum drift rate of 0.001% (EUs: LX050 through LX052). *[Title V Minor Revision (00825_20210524_APP) incorporated into the Title V]*

14. The permittee shall limit the TDS content of each cooling tower's circulation water to 5,000 ppm (EUs: LX015 through LX019 and LX050 through LX052). *[Title V OP (01/25/21) and Title V Minor Revision (00825_20210524_APP) incorporated into the Title V]*

Surface Coating

15. The permittee shall not operate spray booths unless all exhaust air passes through appropriate filter media having a particulate capture efficiency of at least 99.0%. (This is usually accomplished with tacky filter material that is at least 2 inches thick.) The dry filter media must cover all openings in the spray booth. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-1]*

16. The permittee shall not use open containers for storage or disposal of VOC- or HAP-containing cloth or paper (excluding masking tape) used for surface preparation and cleanup. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-2]*

17. All filters or other control equipment associated with surface coating operations shall follow manufacturer's specifications for use and operation. Dry filters must be changed at sufficient intervals to prevent clogging and decreased effectiveness. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-5]*

18. The permittee shall use a manometer (or equivalent) to monitor the pressure drop across the spray booth filters. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-6]*

19. The permittee shall follow the manufacturer's O&M manual for use and operation of exhaust filters. *[AQR 12.5.2.6(a)]*

20. The differential pressure drop shall not exceed 0.25 inches (6.35 millimeters) of water column unless the O&M manual indicates a different pressure drop value. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-6]*

21. Exhaust filters must be replaced prior to exceeding 0.25 inches (6.35 millimeters) of water column or, if the O&M manual indicates a different pressure drop value, prior to exceeding the different pressure drop value cited in the O&M manual. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-6]*

22. The permittee shall clean surface coating application equipment in an enclosed container to minimize VOC volatilization into the ambient air. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-7]*

23. All containers with VOC-containing products shall remain securely closed except during product transfer. Containers shall be inspected regularly for leakage, and the contents of any leaking container must be immediately transferred to an appropriately labeled container that has been specifically designed for storage of the compound. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-8]*

24. The permittee shall employ good housekeeping practices to prevent the accumulation and/or dispersal of particulate matter from sanding, blasting, surface preparation, etc. carried out in conjunction with surface coating operations. No more than 0.25 inches of particulate matter shall accumulate on surrounding surfaces at any time. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-B-6]*

Other

25. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.7.3 Limitations and Standards

1.7.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generators (EUs: LX009 through LX011, LX024, and LX025) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generators cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 60.4211 and 40 CFR Part 63.6640]*

    a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

d. The power is provided only to the facility itself or to support the local transmission and distribution system.

e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

2. The permittee shall limit the operation of the fire pumps (EUs: LX013 and LX049) for testing and maintenance purposes to 100 hours/year. The permittee may operate the fire pumps up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. *[40 CFR Part 60.4211 and 40 CFR Part 63.6640]*

3. The permittee shall limit the consumption of VOC-containing paints, basecoats, primers, reducers, inks, thinners, solvents, etc. in the spray booth (EU: LX022) to 240 gallons per any consecutive 12 months, based on an average VOC content of 6.84 pounds per gallon and 55% HAP content. *[737 NSR ATC/OP, Modification 4 (4/29/04), Condition III-A-43]*

1.7.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-22. *[856 NSR ATC/OP, Modification 1 (4/15/99); 737 NSR ATC/OP, Modification 4 (4/29/04); 825 NSR ATC/OP, Modification 10 (09/20/06); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 12/26/14, 09/16/16, 09/14/17, 08/28/18, 06/25/19, 01/25/21, and 05/19/22); and Prior Notification (03/10/22) incorporated into the Title V]*

Table 1-22: PTE (tons per year) – Luxor

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
LX005	8,760 hr/yr	0.28	0.28	1.13	1.29	0.02	0.20	0.07
LX006	8,760 hr/yr	0.28	0.28	1.13	1.29	0.02	0.20	0.07
LX009	500 hr/yr	0.38	0.38	13.01	2.98	0.01	0.38	0.02
LX010	500 hr/yr	0.38	0.38	13.01	2.98	0.01	0.38	0.02
LX011	500 hr/yr	0.38	0.38	13.01	2.98	0.01	0.38	0.02
LX013	500 hr/yr	0.12	0.12	4.25	0.97	0.01	0.12	0.01
LX015	8,760 hr/yr	0.19	0.19	0.00	0.00	0.00	0.00	0.00
LX016	8,760 hr/yr	0.19	0.19	0.00	0.00	0.00	0.00	0.00
LX017	8,760 hr/yr	0.19	0.19	0.00	0.00	0.00	0.00	0.00
LX018	8,760 hr/yr	0.19	0.19	0.00	0.00	0.00	0.00	0.00
LX019	8,760 hr/yr	0.19	0.19	0.00	0.00	0.00	0.00	0.00

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
LX022	240 gal/yr	0.00	0.00	0.00	0.00	0.00	0.82	0.45
LX024	500 hr/yr	0.05	0.05	7.50	0.99	0.01	0.18	0.10
LX025	500 hr/yr	0.05	0.05	7.50	0.99	0.01	0.18	0.10
LX034	8,760 hr/yr	0.01	0.01	0.17	0.14	0.01	0.01	0.01
LX035	8,760 hr/yr	0.01	0.01	0.17	0.14	0.01	0.01	0.01
LX036	8,760 hr/yr	0.16	0.16	0.25	1.80	0.01	0.12	0.04
LX037	8,760 hr/yr	0.16	0.16	0.25	1.80	0.01	0.12	0.04
LX038	8,760 hr/yr	0.16	0.16	0.25	1.80	0.01	0.12	0.04
LX039	8,760 hr/yr	0.16	0.16	0.25	1.80	0.01	0.12	0.04
LX040	8,760 hr/yr	0.16	0.16	0.32	0.79	0.01	0.12	0.04
LX041	8,760 hr/yr	0.16	0.16	0.32	0.79	0.01	0.12	0.04
LX042	8,760 hr/yr	0.16	0.16	0.32	0.79	0.01	0.12	0.04
LX043	8,760 hr/yr	0.16	0.16	0.32	0.79	0.01	0.12	0.04
LX053	8,760 hr/yr	0.16	0.16	2.19	1.84	0.01	0.12	0.04
LX054	8,760 hr/yr	0.16	0.16	2.19	1.84	0.01	0.12	0.04
LX055	8,760 hr/yr	0.16	0.16	2.19	1.84	0.01	0.12	0.04
LX056	8,760 hr/yr	0.16	0.16	2.19	1.84	0.01	0.12	0.04
LX049	500 hr/yr	0.05	0.05	0.90	0.83	0.01	0.36	0.01
LX050	8,760 hr/yr	0.20	0.20	0.00	0.00	0.00	0.00	0.00
LX051	8,760 hr/yr	0.20	0.20	0.00	0.00	0.00	0.00	0.00
LX052	8,760 hr/yr	0.20	0.20	0.00	0.00	0.00	0.00	0.00

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.7.4 Compliance Demonstration Requirements

1.7.4.1 Monitoring

Visible Emissions

See Section 2.0.

Burner Efficiency Tests

1. The permittee shall conduct burner efficiency tests in accordance with the manufacturer's O&M manual and good combustion practices. Alternative methods may be used upon Control Officer approval (EUs: LX005, LX006, LX036 through LX043, and LX053 through LX056). *[AQR 12.5.2.6(d)]*

2. The permittee shall perform a burner efficiency test once each calendar year (EUs: LX005, LX006, LX036 through LX043, and LX053 thorough LX056). *[AQR 12.5.2.6(d)]*

3. The permittee shall not have to perform a burner efficiency test if the actual hours of operation are 0. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: LX005, LX006, LX036 through LX043, and LX053 through LX056). *[AQR 12.5.2.6(d)]*

4. A performance test may replace a required burner efficiency test with Control Officer approval. *[AQR 12.5.2.6(d)]*

5. The results from burner efficiency testing shall not be used to determine an emission unit's compliance status with its corresponding emission limit(s). *[AQR 12.5.2.6]*

Diesel Generators

6. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators and fire pump (EUs: LX09 through LX011, LX024, LX025, and LX049) by retaining a copy of vendor fuel specifications. *[40 CFR 60.4207(b) and 40 CFR 63.6604(b)]*

7. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: LX009 through LX011, LX013, LX024, LX025, and LX049). *[AQR 12.5.2.6(d)]*

Cooling Towers

8. The permittee shall monitor the TDS of the recirculation water for each cooling tower monthly, using a conductivity meter or other device approved in advance by the Control Officer. *[AQR 12.5.2.6(d)]*

Surface Coating

9. The permittee shall inspect spray paint booth and all ancillary equipment for leaks, malfunctions, proper operation of gauges, and pressure drops each month the booth is operated, and perform appropriate maintenance as needed. A log must be kept of all inspections, as well as any corrective actions taken to repair the equipment. *[AQR 12.5.2.6(d)]*

1.7.4.2 Testing

No performance testing requirements have been identified for units at Luxor.

1.7.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

c. SDS or records demonstrating the VOC content for each compound used for surface coating activities;

Cooling Towers

d. Monthly TDS content measurements of cooling tower circulation water (EUs: LX015 through LX019 and LX050 through LX052);

Boilers/Water Heaters

e. Burner efficiency test results (EUs: LX005, LX006, LX036 through LX043, and LX053 through LX056);

Emergency Engines

f. Date and duration of operation of each diesel-fired emergency generator for testing, maintenance, and nonemergency use (EUs: LX009 through LX011, LX013, LX024, LX025, and LX049) (reported semiannually);

g. Monthly duration of operation of each emergency generator for emergency use, including documentation justifying use during the emergency (EUs: LX009 through LX011, LX013, LX024, LX025, and LX049) (reported semiannually);

h. Sulfur content and cetane index or aromatic content of diesel fuel used to power the of each emergency generator and fire pump, as certified by the supplier (EU: LX09 through LX011, LX024, LX025, and LX049);

Nonroad Engines.

i. Records of location changes for nonroad engines, if applicable;

Emissions

j. Performance test results, if applicable (reported as required by Section 1.7.4.2 of this permit);

k. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

l. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

m. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.8 EXCALIBUR

1.8.1 Emission Units

The stationary source activities at Excalibur covered by this Part 70 OP consist of the emission units and associated appurtenances summarized in Table 1-25. *[609 NSR ATC/OP, Modification 1 (03/03/02); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 09/16/16, 09/14/17, 08/28/18, 06/25/19, 01/25/21, and 05/19/22); and Prior Notification (03/10/22) incorporated into the Title V]*

Table 1-25: Summary of EUs – Excalibur

EU	Rating	Description	Manufacturer	Model No.	Serial No.
EX001	21.0 MMBtu/hr	Boiler	Superior	700 W	2380
EX007	1,592 hp	Diesel Emergency Generator DOM: 1990	Caterpillar	3512	24Z02774
EX008	1,592 hp	Diesel Emergency Generator DOM: 1990	Caterpillar	3512	24Z02784
EX009	1,592 hp	Diesel Emergency Generator DOM: 1990	Caterpillar	3512	24Z02770
EX010	1,592 hp	Diesel Emergency Generator DOM: 1990	Caterpillar	3512	24Z02753
EX011	270 hp	Diesel Emergency Fire Pump DOM: 1990	Caterpillar	PL4927-89	03Z08914
EX012	350 hp	Diesel-Powered Fire Pump DOM: 1990	Caterpillar	3406B	6TB05883
EX013	3,000 gpm	Cooling Tower	Evapco	AT 114-3P24	22P118324
EX014	3,000 gpm	Cooling Tower	Evapco	AT 114-3P24	22P118325
EX015	3,000 gpm	Cooling Tower	Evapco	AT 114-3P24	22P118326
EX021	1.8 MMBtu/hr	Pool Heater	Raypak	1802C	1901481581

EU	Rating	Description	Manufacturer	Model No.	Serial No.
EX031	1.90 MMBtu/hr	Boiler	Patterson-Kelley	N-1900-2	CK38-98-9543
EX032	207 hp	Diesel Emergency Generator DOM: 2004	Cummins	6CT8.3-G2	45748231
EX033	600 gpm	Cooling Tower	Baltimore Aircoil	F1462-PM	99201761
EX034	174 hp	Diesel Emergency Generator DOM: 2006	Cummins	B5.9-C	21337208
EX035	174 hp	Diesel Emergency Generator DOM: 2006	Cummins	B5.9-C	21337209
EX036	1.999 MMBtu/hr	Boiler	Raypak Hi-Delta	P-2002B-C-6-G1	1509407507
EX038	1.99 MMBtu/hr	Water Heater	Raypak	2002B	1703440009
EX039	480 bhp	Emergency Generator DOM: 2017	Caterpillar	C9	CAT0000C9HN GP00795
EX040	275 bhp	Diesel-Powered Fire Pump DOM: 2017	Clarke	JU6H-UFADT0	PE6068L283371
EX043	1.999 MMBtu/hr	Water Heater	A.O. Smith	BTH-199 100	1013M001322
EX053	5 MMBtu/hr	Boiler	Lochinvar	PBN5000	2138126101442
EX054	5 MMBtu/hr	Boiler	Lochinvar	PBN5000	2138126101440
EX055	5 MMBtu/hr	Boiler	Lochinvar	PBN5000	2138126101441
EX056	5 MMBtu/hr	Boiler	Lochinvar	PBN5000	2138126101439
EX057	5 MMBtu/hr	Boiler	Lochinvar	PBN5000	2138126101443
EX058[1]	4.35 MMBtu/hr	Boilers/Water Heaters <1.00 MMBtu/hr	Various	Various	Various

[1]Combined total for all units with a heat input rating of less than 1.0 MMBtu/hr, plus 10%.

1.8.2 Controls

1.8.2.1 Control Devices

No add-on controls have been identified.

1.8.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in all boilers and water heaters. *[609 NSR ATC/OP, Modification 1 (03/03/02), Condition III-B-1]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[609 NSR ATC/OP, Modification 1 (03/03/02), Condition III-B-2]*

3. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 25 ppmv NO_x, corrected to 3% oxygen (EU: EX001) *[AQR 12.5.2.6(a)]*

4. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 89 ppmv CO, corrected to 3% oxygen (EU: EX001). *[AQR 12.5.2.6(a)]*

5. The permittee shall operate and maintain the pool heater with burners that have a manufacturer's maximum emission concentration of 30 ppmv NO_x, corrected to 3% oxygen (EU: EX021). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-E-2-d]*

6. The permittee shall operate and maintain the pool heater with burners that have a manufacturer's maximum emission concentration of 100 ppmv CO, corrected to 3% oxygen (EU: EX021). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-E-2-d]*

7. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 30 ppmv NO_x, corrected to 3% oxygen (EU: EX031). *[Title V OP (10/21/13)]*

8. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 100 ppmv CO, corrected to 3% oxygen (EU: EX031). *[Title V OP (10/21/13)]*

9. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EU: EX036). *[Title V OP (09/14/17)]*

10. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EU: EX053 through EX057). *[Title V OP (05/19/22)]*

11. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: EX053 through EX057). *[Title V OP (05/19/22)]*

Diesel Generators

12. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators and fire pump (EUs: EX007 through EX010, EX032, EX034, EX035, EX039, and EX040). *[40 CFR 60.4207(b) and 40 CFR 60.4207(b)]*

13. The permittee shall operate and maintain all diesel generators and fire pumps in accordance with the manufacturer's O&M manual for emissions-related components. *[Title V OP (10/21/13)]*

14. The permittee shall combust only diesel fuel in all diesel generators and fire pumps. *[AQR 12.5.2.6]*

Cooling Towers

15. The permittee shall operate and maintain each of the cooling towers in accordance with the manufacturer's O&M manual for emissions-related components (EUs: EX013 through EX015 and EX033). *[AQR 12.5.2.6]*

16. The permittee shall operate each of the 3,000 gpm cooling towers with drift eliminators that have a manufacturer's maximum drift rate of 0.001% (EUs: EX013 through EX015). *[609 NSR ATC/OP, Modification 1 (03/03/02), Condition III-B-5]*

17. The permittee shall operate the 600 gpm cooling tower with drift eliminators that have a manufacturer's maximum drift rate of 0.002% (EU: EX033). *[Title V OP (10/21/13)]*

18. The permittee shall limit the TDS content of each cooling tower's circulation water to 4,500 ppm (EUs: EX013 through EX015 and EX033). *[Title V OP (01/25/21)]*

Other

19. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.8.3 Limitations and Standards

1.8.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generators (EUs: EX007 through EX010, EX032, EX034, EX035, and EX039) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generators cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 60.4211 and 40 CFR Part 63.6640]*

    a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

d. The power is provided only to the facility itself or to support the local transmission and distribution system.

e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

2. The permittee shall limit the operation of the fire pumps (EUs: EX011, EX012, and EX040) for testing and maintenance purposes to 100 hours/year. The permittee may operate the fire pump up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. *[40 CFR Part 60.4211 and 40 CFR Part 63.6640]*

3. The permittee shall limit the operation of the boilers/water heaters that are rated less than 1.00 MMBtu/hr to a total of 4.35 MMBtu/hr at any one time (EU: EX058). *[AQR 12.5.2.6]*

1.8.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-26. *[609 NSR ATC/OP, Modification 1 (03/03/02); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 09/16/16, 09/14/17, 08/28/18, 06/25/19, 01/25/21, and 05/19/22); and Prior Notification (03/10/22) incorporated into the Title V]*

Table 1-26: PTE (tons per year) – Excalibur

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
EX001	8,760 hr/yr	0.69	0.69	2.91	6.07	0.06	0.50	0.17
EX007	500 hr/yr	0.28	0.28	9.55	2.19	0.01	0.28	0.01
EX008	500 hr/yr	0.28	0.28	9.55	2.19	0.01	0.28	0.01
EX009	500 hr/yr	0.28	0.28	9.55	2.19	0.01	0.28	0.01
EX010	500 hr/yr	0.28	0.28	9.55	2.19	0.01	0.28	0.01
EX011	500 hr/yr	0.15	0.15	2.09	0.45	0.01	0.17	0.01
EX012	500 hr/yr	0.19	0.19	2.71	0.58	0.01	0.22	0.01
EX013	8,760 hr/yr	0.14	0.14	0.00	0.00	0.00	0.00	0.00
EX014	8,760 hr/yr	0.14	0.14	0.00	0.00	0.00	0.00	0.00
EX015	8,760 hr/yr	0.14	0.14	0.00	0.00	0.00	0.00	0.00
EX021	8,760 hr/yr	0.06	0.06	0.29	0.58	0.01	0.04	0.01
EX031	8,760 hr/yr	0.06	0.06	0.30	0.62	0.01	0.04	0.02
EX032	500 hr/yr	0.11	0.11	1.60	0.35	0.01	0.13	0.01

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
EX033	8,760 hr/yr	0.06	0.06	0.00	0.00	0.00	0.00	0.00
EX034	500 hr/yr	0.10	0.10	1.35	0.29	0.01	0.11	0.01
EX035	500 hr/yr	0.10	0.10	1.35	0.29	0.01	0.11	0.01
EX036	8,760 hr/yr	0.07	0.07	0.21	0.72	0.01	0.05	0.02
EX038	8,760 hr/yr	0.06	0.06	0.85	0.72	0.01	0.05	0.02
EX039	500 hr/yr	0.01	0.01	1.04	0.06	0.01	0.02	0.01
EX040	500 hr/yr	0.01	0.01	0.39	0.09	0.01	0.01	0.01
EX043	8,760 hr/yr	0.07	0.07	0.86	0.72	0.01	0.05	0.02
EX053	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
EX054	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
EX055	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
EX056	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
EX057	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
EX058	8,760 hr/yr	0.14	0.14	1.87	1.57	0.01	0.10	0.04

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not allow actual emissions from the individual emission units to exceed the emission rates and emission concentrations listed in Table 1-27. *[609 NSR ATC/OP, Modification 1 (03/03/02), and Title V OP (01/25/21)]*

Table 1-27: Emission Rates (pounds per hour) – Excalibur

EU	Rating	NOx	CO
EX001	21.0 MMBtu/hr	0.66	1.39

3. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.8.4 Compliance Demonstration Requirements

1.8.4.1 Monitoring

Visible Emissions

See Section 2.0.

Boilers/Water Heaters

1. The permittee shall install and utilize nonresettable hour meters such that the monthly consumption of natural gas can be established for each applicable boiler (EU: EX001). *[AQR 12.5.2.6 & 40 CFR Part 60, Subpart Dc]*

2. The permittee shall demonstrate compliance with the combined heat rate (MMBtu/hr) limit for the boilers/water heaters (EU: EX058) by maintaining a monthly log of each boiler/heater heat rate, along with the total heat rate for all boilers/heaters less than 1.00 MMBtu/hr. *[AQR 12.5.2.6(d)]*

Burner Efficiency Tests

3. The permittee shall conduct burner efficiency tests in accordance with the manufacturer's O&M manual and good combustion practices. Alternative methods may be used upon Control Officer approval (EUs: EX001 and EX053 through EX057). *[AQR 12.5.2.6(d)]*

4. The permittee shall perform a burner efficiency test once each calendar year (EUs: EX053 through EX057). *[AQR 12.5.2.6(d)]*

5. The permittee shall not have to perform a burner efficiency test if the actual hours of operation are 0. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: EX053 through EX057). *[AQR 12.5.2.6(d)]*

6. The permittee shall perform a burner efficiency test twice each calendar year, at least five months apart but no more than seven (EU: EX001). *[AQR 12.5.2.6(d)]*

7. The permittee may perform a burner efficiency test once each calendar year if the actual hours of operation are less than 50. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EU: EX001). *[AQR 12.5.2.6(d)]*

8. The permittee may replace one contemporaneously required burner efficiency test with a performance test that has acceptable results (EU: EX001). *[AQR 12.5.2.6(d)]*

9. A performance test may replace a required burner efficiency test with Control Officer approval. *[AQR 12.5.2.6(d)]*

10. The results from burner efficiency testing shall not be used to determine an emission unit's compliance status with its corresponding emission limit(s). *[AQR 12.5.2.6(d)]*

Diesel Generators

11. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators and fire pump (EUs: EX007 through EX010, EX032, EX034, EX035, EX039, and EX040) by retaining a copy of vendor fuel specifications. *[40 CFR 60.4207(b)]*

12. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: EX007 through EX012, EX032, EX034, EX035, EX039, and EX040). *[AQR 12.5.2.6(d)]*

Cooling Towers

13. The permittee shall monitor the TDS of the recirculation water for each cooling tower monthly, using a conductivity meter or other device approved in advance by the Control Officer. *[AQR 12.5.2.6(d)]*

1.8.4.2 Testing

No performance testing requirements have been identified for emission units at Excalibur. *[AQR 12.5.2.6(d)]*

1.8.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

Cooling Towers

c. Monthly TDS content measurements of cooling tower circulation water (EUs: EX013 through EX015 and EX033);

Boilers/Water Heaters

d. Monthly natural gas fuel consumed by each boiler (EU: EX001) (reported semiannually);

e. Log of boilers rated less than 1.00 MMBtu/hr heat input demonstrating compliance with rating limit (EU: EX058). This log shall include the following:

i. rating, make, model, and serial number of each unit;

ii. cumulative MMBtu ratings of all active units; and

iii. date each unit is installed and removed (when applicable);

f. Monthly, consecutive 12-month total MMBtu/hr of all boilers/heaters (EU: EX058) less than 1.00 MMBtu/hr (reported semiannually);

g. Burner efficiency test results (EUs: EX001 and EX053 through EX057);

Emergency Engines

h. Date and duration of operation of each diesel-fired emergency generator and fire pump for testing, maintenance, and nonemergency use (EUs: EX007 through EX012, EX032, EX034, EX035, EX039, and EX040);

i. Monthly duration of operation of each emergency generator and fire pump for emergency use, including documentation justifying use during the emergency (EUs: EX007 through EX012, EX032, EX034, EX035, EX039, and EX040) (reported semiannually);

j. Sulfur content and cetane index or aromatic content of diesel fuel used to power the of each emergency generator and fire pump, as certified by the supplier (EUs: EX007 through EX010, EX032, EX034, EX035, EX039, and EX040);

Nonroad Engines.

k. Records of location changes for nonroad engines, if applicable;

Emissions

l. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

m. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

n. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.9 BELLAGIO

1.9.1 Emission Units

The stationary source activities at Bellagio covered by this Part 70 OP consist of the emission units and associated appurtenances summarized in Table 1-28. *[756 NSR ATC/OP, Modification 0 (03/20/00); 756 NSR ATC/OP, Modification 3 (05/31/05); 825 NSR ATC/OP, Modification 12 (09/10/07); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 12/26/14, 09/16/16, 09/14/17, 08/28/18, 06/25/19, 01/25/21, 05/16/22, and 03/25/24); Prior Notifications (03/10/22) and (10/25/2023) incorporated into the Title V; and Minor Revision Applications (04/22/2024 and 06/11/2024)]*

Table 1-28: Summary of EUs – Bellagio

EU	Rating	Description	Make	Model No.	Serial No.
BE07	1.999 MMBtu/hr	Boiler	McKenna	JFS-50 PF	H-2592
BE68	1.36 MMBtu/hr (See BE097)	Spray Booth Heater	Bananza		3061000.154

EU	Rating	Description	Make	Model No.	Serial No.
BE74	18 MMBtu/hr (burner rated at 14.7 MMBtu/hr)	Boiler	Bryan		91446
BE75	18 MMBtu/hr (burner rated at 14.7 MMBtu/hr)	Boiler	Bryan		91388
BE76	18 MMBtu/hr (burner rated at 14.7 MMBtu/hr)	Boiler	Bryan		91416
BE80	2,520 hp	Diesel-Powered Emergency Generator DOM: 1998	Caterpillar	3416	25Z05330
BE81	2,520 hp	Diesel-Powered Emergency Generator DOM: 1998	Caterpillar	3416	25Z05335
BE82	2,520 hp	Diesel-Powered Emergency Generator DOM: 1998	Caterpillar	3416	25Z05333
BE83	2,520 hp	Diesel-Powered Emergency Generator DOM: 1998	Caterpillar	3416	25Z05332
BE84	2,520 hp	Diesel-Powered Emergency Generator DOM: 1998	Caterpillar	3416	25Z05339
BE85	2,520 hp	Diesel-Powered Emergency Generator DOM: 1998	Caterpillar	3416	25Z05338
BE86	2,520 hp	Diesel-Powered Emergency Generator DOM: 1998	Caterpillar	3416	25Z05340
BE87	2,520 hp	Diesel-Powered Emergency Generator DOM: 1998	Caterpillar	3416	1LZ00545
BE88	2,520 hp	Diesel Emergency Generator DOM: 1998	Caterpillar	3416	1LZ00546
BE89	55.2 hp	Diesel Emergency Generator DOM: 1998	Whisper Watt	DCA-45SSIUII	7200884
BE90	33,750 gpm (9-Cell)	Cooling Tower	Ceramic	PCS2187	
BE94	140 gpm	Cooling Tower	Baltimore		U041435902MAD
BE95	140 gpm	Cooling Tower	Baltimore		U041435901MAD
BE199	6,000 gpm	Cooling Tower (2 cell – 3,000 per cell)	Evapco	AT 228-3024	TBD

EU	Rating	Description	Make	Model No.	Serial No.
BE200	3,000 gpm	Cooling Tower (2 cell – 1,500 per cell)	Evapco	Eco-ATWB-H	TBD
BE201	3,000 gpm	Cooling Tower (2 cell – 1,500 per cell)	Evapco	Eco-ATWB-H	TBD
BE96	14'W x 9'H x 26'D	Spray Booth	Binks	AA-530	
BE97	13' x 14' x 23'-10" Pressurized Dry Filter Booth	Spray Booth (Showroom)	Binks	I-121217	
BE98	7' x 7' x 5'	Spray Booth (Closet)	Binks	I-121217	
BE99		Powder Coating Booth	Nordson Power System; Grieve Electric Oven		00497-8; 64130
BE101	764 hp	Diesel-Powered Emergency Generator DOM: 2004	Caterpillar	CAT 3456	7WG03957
BE111	2.1 MMBtu/hr	Boiler	Hurst	Series 400 Wetback	S300-150-36
BE125	4.20 MMBtu/hr	Boiler	Hurst	A4-G-100-150	S500-150-191
BE126	5.25 MMBtu/hr	Boiler	Hurst	S4-G-125-150	S625-150-96
BE131	20.0 MMBtu/hr	Boiler	Hurst	S4-X-500-60W	S2500-60W-1
BE134	5 MMBtu/hr	Boiler	Lochinvar	FBN5000	1915101422240
BE135	5 MMBtu/hr	Boiler	Lochinvar	FBN5000	D15H00274768
BE137	5 MMBtu/hr	Boiler	Lochinvar	FBN5000	D15H00278106
BE144	1.06 MMBtu/hr	Boiler	Aerco Innovation	1060	G-16-1411
BE145	1.06 MMBtu/hr	Boiler	Aerco Innovation	1060	G-16-1694
BE146	1.06 MMBtu/hr	Boiler	Aerco Innovation	1060	G-16-2301
BE147	1.06 MMBtu/hr	Boiler	Aerco Innovation	1060	G-16-2300
BE148	1.06 MMBtu/hr	Boiler	Aerco Innovation	1060	G-16-2299
BE149	1.06 MMBtu/hr	Boiler	Aerco Innovation	1060	G-16-2298
BE150	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-1819
BE151	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-1937
BE152	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-1936
BE154	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-2828
BE157	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-2825
BE158	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-1941
BE159	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-2827
BE160	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-1939
BE161	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-1942
BE162	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-2826
BE163	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-3008
BE164	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-3006
BE165	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-1943
BE166	1.35 MMBtu/hr	Boiler	Aerco Innovation	1350	G-16-3007
BE185	6.7 lb/gal	Solvent Degreasing Operation			
BE187	5.00 MMBtu/hr	Boiler	Lochinvar	FBN5000	1925 115339824
BE188	5.00 MMBtu/hr	Boiler	Lochinvar	FBN5000	1925 115339825
BE189	5.00 MMBtu/hr	Boiler	Lochinvar	FBN5000	2213128943570
BE192	5.00 MMBtu/hr	Boiler	Lochinvar	FBN5000	2037 120840482

EU	Rating	Description	Make	Model No.	Serial No.
BE193[1]	12.40 MMBtu/hr	Boilers/Water Heaters <1.00 MMBtu/hr	Various	Various	Various
BE194	1.5 MMBtu/hr	Boiler	Lochinvar	PBN1501	2245 131606992
BE195	1.5 MMBtu/hr	Boiler	Lochinvar	PBN1501	2245 131606993
BE196	3.0 MMBtu/hr	Boiler	Lochinvar	PBN3001	2247 131730468
BE197	3.0 MMBtu/hr	Boiler	Lochinvar	PBN3001	2247 131730469
BE198	5.0 MMBtu/hr	Boiler	Lochinvar	FBN5000	2340 135743865

[1]Combined total for all units with a heat input rating of less than 1.0 MMBtu/hr, plus 10%.

1.9.2 Controls

1.9.2.1 Control Devices

No add-on controls have been identified.

1.9.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in all boilers and water heaters. *[825 NSR ATC/OP, Modification 12 (09/10/07), Condition IV-B-1]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[825 NSR ATC/OP, Modification 12 (09/10/07), Condition IV-B-2]*

3. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EU: BE07). *[Title V OP (06/25/19)]*

4. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 100 ppmv CO, corrected to 3% oxygen (EU: BE07). *[Title V OP (06/25/19)]*

5. The permittee shall operate and maintain the spray booth heater with burners that have a manufacturer's maximum emission concentration of 12 ppmv NO_x, corrected to 3% oxygen (EU: BE68, BE74 through BE76). *[Title V OP (10/21/13)]*

6. The permittee shall operate and maintain the spray booth heater with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: BE68, BE74 through BE76). *[Title V OP (10/21/13)]*

7. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EU: BE111). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-F-2-d]*

8. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: BE111). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-F-2-d]*

9. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 40 ppmv NO_x, corrected to 3% oxygen (EU: BE125, BE126). *[Title V OP (10/21/13)]*

10. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 111 ppmv CO, corrected to 3% oxygen (EU: BE125, BE126). *[Title V OP (10/21/13)]*

11. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EU: BE131). *[Title V OP (09/16/16)]*

12. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: BE131). *[Title V OP (09/16/16)]*

13. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 0.0232 lb/MMBtu NO_x, corrected to 3% oxygen (EUs: BE134, BE135, and BE137). *[Title V OP (09/14/17)]*

14. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EUs: BE144 through BE152, BE154, and BE157 through BE166). *[Title V OP (09/14/17)]*

15. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EUs: BE187 through BE189 and BE192). *[Title V OP (01/25/21)]*

16. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EUs: BE187 through BE189 and BE192). *[Title V OP (01/25/21)]*

17. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EUs: BE194 through BE197). *[Title V OP (03/25/24)]*

18. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: BE196 and BE197). *[Title V OP (03/25/24)]*

19. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 200 ppmv CO, corrected to 3% oxygen (EUs: BE194 and BE195). *[Title V OP (03/25/24)]*

20. The permittee shall operate and maintain the boiler with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EU: BE198). *[Prior Notification (10/25/2023]*

21. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EU: BE198). *[Prior Notification (10/25/2023)]*

22. The permittee shall limit the operation of the boilers/water heaters that are rated less than 1.00 MMBtu/hr to a total of 7.88 MMBtu/hr at any one time (EU: BE193). *[AQR 12.5.2.6]*

Diesel Generators

23. The permittee shall operate and maintain all diesel generators in accordance with the manufacturer's O&M manual for emissions-related components. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-10*]

24. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators (EUs: BE80 through BE89 and BE101). *[40 CFR 60.4207(b) and 40 CFR 63.6604(b)]*

Cooling Towers

25. The permittee shall operate and maintain each of the cooling towers in accordance with the manufacturer's O&M manual for emissions-related components (EUs: BE90, BE94, BE95, BE199, BE200, and BE201). *[AQR 12.5.2.6]*

26. The permittee shall operate each cooling tower with drift eliminators that have a manufacturer's minimum rated drift efficiency of 0.001% (EUs: BE90, BE94, BE95, BE199, BE200, and BE201). *[AR 12.5.2.6]*

27. The permittee shall limit the TDS content of each cooling tower's circulation water to 4,500 ppm (EUs: BE90, BE94, BE95, BE199, BE200, and BE201). *[AQR 12.5.2.6]*

Surface Coating

28. The permittee shall not operate spray booths unless all exhaust air passes through appropriate filter media having a particulate capture efficiency of at least 99.0%. (This is usually accomplished with tacky filter material that is at least 2 inches thick.) The dry filter media must cover all openings in the spray booth. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-16]*

29. The permittee shall not use open containers for storage or disposal of VOC- or HAP-containing cloth or paper (excluding masking tape) used for surface preparation and cleanup. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-17],*

30. All filters or other control equipment associated with surface coating operations shall follow manufacturer's specifications for use and operation. Dry filters must be changed at sufficient intervals to prevent clogging and decreased effectiveness. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-20]*

31. The permittee shall use a manometer (or equivalent) to monitor the pressure drop across the spray booth filters. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-21]*

32. The permittee shall follow the manufacturer's O&M manual for use and operation of exhaust filters. *[AQR 12.5.2.6(a)]*

33. The differential pressure drop shall not exceed 0.25 inches (6.35 millimeters) of water column unless the O&M manual indicates a different pressure drop value. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-21]*

34. Exhaust filters must be replaced prior to exceeding 0.25 inches (6.35 millimeters) of water column or, if the O&M manual indicates a different pressure drop value, prior to exceeding the different pressure drop value cited in the O&M manual. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-21]*

35. The permittee shall clean surface coating application equipment in an enclosed container to minimize VOC volatilization into the ambient air. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-22]*

36. All containers with VOC-containing products shall remain securely closed except during product transfer. Containers shall be inspected regularly for leakage, and the contents of any leaking container must be immediately transferred to an appropriately labeled container that has been specifically designed for storage of the compound. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-23]*

37. The permittee shall employ good housekeeping practices to prevent the accumulation and/or dispersal of particulate matter from sanding, blasting, surface preparation, etc. carried out in conjunction with surface coating operations. No more than 0.25 inches of particulate matter shall accumulate on surrounding surfaces at any time. *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-B-19]*

Other

38. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.9.3 Limitations and Standards

1.9.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generators (EUs: BE80 through BE89 and BE101) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generators cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 63.6640]*

    a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

    b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

d. The power is provided only to the facility itself or to support the local transmission and distribution system.

e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

2. The permittee shall limit the consumption of VOC-containing paints, basecoats, primers, reducers, thinners, solvents, etc., to 621 gallons per any consecutive 12 months based on a weighted average VOC content of 7.90 pounds per gallon for each surface coating operation (EUs: BE96 and BE97). *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-A-24]*

3. The permittee shall limit the consumption of VOC-containing paints, basecoats, primers, reducers, thinners, solvents, etc., to 100 gallons per any consecutive 12 months for the spray paint booth in the closet based on a weighted average VOC content of 7.42 pounds per gallon (EU: BE98). *[756 NSR ATC/OP Modification 3 (05/31/05) Condition III-A-25]*

4. The permittee shall limit the consumption of VOC-containing powder coating to 910 gallons per any consecutive 12 months for the spray paint booth in the showroom (EU: BE99). *[756 NSR ATC/OP, Modification 3 (05/31/05), Condition III-A-26]*

5. The permittee shall limit the consumption of VOC-containing degreasers to 500 gallons per any consecutive 12 months based on a VOC content limit of 6.7 pounds per gallon (EU: BE185). *[Title V OP (08/28/18)]*

6. The permittee shall limit the operation of the boilers/water heaters that are rated less than 1.00 MMBtu/hr (EU: BE193) to a total of 7.88 MMBtu/hr at any one time. *[AQR 12.5.2.6]*

1.9.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-29. *[756 NSR ATC/OP, Modification 0 (03/20/00); 756 NSR ATC/OP, Modification 3 (05/31/05); 825 NSR ATC/OP, Modification 12 (09/10/07); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 12/26/14, 09/16/16, 09/14/17, 08/28/18, 6/25/19, 01/25/21, 05/19/22, and 03/25/24); Prior Notification (10/25/2023) and Minor Revision Applications (04/22/2024 and 06/11/2024)]*

Table 1-29: PTE (tons per year) – Bellagio

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
BE07	8,760 hr/yr	0.07	0.07	0.21	0.65	0.01	0.05	0.02
BE68	8,760 hr/yr	0.04	0.04	0.08	0.22	0.01	0.03	0.01
BE74	8,760 hr/yr	0.48	0.48	0.94	2.38	0.04	0.35	0.12
BE75	8,760 hr/yr	0.48	0.48	0.94	2.38	0.04	0.35	0.12

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
BE76	8,760 hr/yr	0.48	0.48	0.94	2.38	0.04	0.35	0.12
BE80	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
BE81	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
BE82	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
BE83	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
BE84	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
BE85	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
BE86	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.44	0.02
BE87	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.41	0.02
BE88	500 hr/yr	0.44	0.44	15.12	3.47	0.01	0.41	0.02
BE89	500 hr/yr	0.03	0.03	0.43	0.09	0.01	0.03	0.01
BE90	8,760 hr/yr	1.57	1.57	0	0	0	0	0
BE94	8,760 hr/yr	0.01	0.01	0	0	0	0	0
BE95	8,760 hr/yr	0.01	0.01	0	0	0	0	0
BE199	8,760 hr/yr	0.28	0.01	0	0	0	0	0
BE200	8,760 hr/yr	0.14	0.01	0	0	0	0	0
BE201	8,760 hr/yr	0.14	0.01	0	0	0	0	0
BE96	621 gal/yr	0.01	0.01	0	0	0	2.45	1.15
BE97	621 gal/yr	0.01	0.01	0	0	0	2.45	1.15
BE98	100 gal/yr	0.01	0.01	0	0	0	0.37	0.17
BE99	910 gal/yr	0.01	0.01	0	0	0	0.01	0.01
BE101	500 hr/yr	0.13	0.13	4.58	1.05	0.01	0.13	0.01
BE111	8,760 hr/yr	0.07	0.07	0.22	0.34	0.01	0.05	0.02
BE125	8,760 hr/yr	0.14	0.14	0.90	1.51	0.01	0.10	0.03
BE126	8,760 hr/yr	0.17	0.17	1.13	1.89	0.01	0.12	0.04
BE131	8,760 hr/yr	0.66	0.66	2.14	3.25	0.05	0.47	0.17
BE134	8,760 hr/yr	0.16	0.16	0.51	1.80	0.01	0.12	0.04
BE135	8,760 hr/yr	0.16	0.16	0.51	1.80	0.01	0.12	0.04
BE137	8,760 hr/yr	0.16	0.16	0.51	1.80	0.01	0.12	0.04
BE144	8,760 hr/yr	0.03	0.03	0.11	0.38	0.01	0.03	0.01
BE145	8,760 hr/yr	0.03	0.03	0.11	0.38	0.01	0.03	0.01
BE146	8,760 hr/yr	0.03	0.03	0.11	0.38	0.01	0.03	0.01
BE147	8,760 hr/yr	0.03	0.03	0.11	0.38	0.01	0.03	0.01
BE148	8,760 hr/yr	0.03	0.03	0.11	0.38	0.01	0.03	0.01
BE149	8,760 hr/yr	0.03	0.03	0.11	0.38	0.01	0.03	0.01
BE150	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE151	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE152	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE154	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE157	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE158	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
BE159	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE160	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE161	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE162	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE163	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE164	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE165	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE166	8,760 hr/yr	0.04	0.04	0.14	0.49	0.01	0.03	0.01
BE185	500 gal/yr	0.00	0.00	0.00	0.00	0.00	1.68	1.68
BE187	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
BE188	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
BE189	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
BE192	8,760 hr/yr	0.16	0.16	0.51	1.80	0.01	0.12	0.04
BE193	8,760 hr/yr	0.41	0.41	5.32	4.48	0.03	0.29	0.10
BE194	8,760 hr/yr	0.05	0.05	0.16	0.97	0.01	0.04	0.01
BE195	8,760 hr/yr	0.05	0.05	0.16	0.97	0.01	0.04	0.01
BE196	8,760 hr/yr	0.10	0.10	0.32	0.49	0.01	0.07	0.02
BE197	8,760 hr/yr	0.10	0.10	0.32	0.49	0.01	0.07	0.02
BE198	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not allow actual emissions from the individual emission units to exceed the emission rates and emission concentrations listed in Table 1-30. *[756 NSR ATC/OP, Modification 3 (05/31/05)]*

Table 1-30: Emission Rates (pounds per hours) – Bellagio

EU	Rating	NO_x	CO
BE74	14.7 MMBtu/hr	0.21	0.54
BE75	14.7 MMBtu/hr	0.21	0.54
BE76	14.7 MMBtu/hr	0.21	0.54
BE131	20.0 MMBtu/hr	0.49	0.71

3. The permittee shall not discharge into the atmosphere, from any emission unit in this section, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.9.4 Compliance Demonstration Requirements

1.9.4.1 Monitoring

Visible Emissions

See Section 2.0.

Boilers/Water Heaters

1. The permittee shall install and utilize nonresettable hour meters such that the monthly consumption of natural gas can be established for each applicable boiler (EUS: BE74 through BE76 and BE131). *[AQR 12.5.2.6 & 40 CFR Part 60, Subpart Dc]*

2. The permittee shall demonstrate compliance with the combined heat rate (MMBtu/hr) limit for the boilers/water heaters (EU: BE193) by maintaining a monthly log of each boiler/heater heat rate, along with the total heat rate for all boilers/heaters less than 1.00 MMBtu/hr. *[AQR 12.5.2.6(d)]*

Burner Efficiency Tests

3. The permittee shall conduct burner efficiency tests in accordance with the manufacturer's O&M manual and good combustion practices. Alternative methods may be used upon Control Officer approval (EUs: BE74 through BE76, BE125, BE126, BE131, BE134, BE135, BE137, BE187 through BE189, and BE192). *[AQR 12.5.2.6(d)]*

4. The permittee shall perform a burner efficiency test once each calendar year (EUs: BE125, BE126, BE134, BE135, BE137, BE187 through BE189, and BE192). *[AQR 12.5.2.6(d)]*

5. The permittee shall not have to perform a burner efficiency test if the actual hours of operation are 0. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: BE125, BE126, BE134, BE135, BE137, BE187 through BE189, and BE192). *[AQR 12.5.2.6(d)]*

6. The permittee shall perform a burner efficiency test twice each calendar year, at least five months apart but no more than seven (EUs: BE74 through BE76 and BE131). *[AQR 12.5.2.6(d)]*

7. The permittee may perform a burner efficiency test once each calendar year if the actual hours of operation are less than 50. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: BE74 through BE76 and BE131). *[AQR 12.5.2.6(d)]*

8. The permittee may replace one contemporaneously required burner efficiency test with a performance test that has acceptable results (EUs: BE74 through BE76 and BE131). *[AQR 12.5.2.6(d)]*

9. A performance test may replace a required burner efficiency test with Control Officer approval. *[AQR 12.5.2.6(d)]*

10. The results from burner efficiency testing shall not be used to determine an emission unit's compliance status with its corresponding emission limit(s). *[AQR 12.5.2.6]*

Diesel Generators/Fire Pumps

11. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: BE80 through BE89 and BE101). *[AQR 12.5.2.6(d)]*

12. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators (EUs: BE80 through BE89 and BE101) by retaining a copy of vendor fuel specifications. *[40 CFR 60.4207(b) and 40 CFR 63.6604(b)]*

Cooling Towers

13. The permittee shall monitor the TDS of the recirculation water for each cooling tower monthly, using a conductivity meter or other device approved in advance by the Control Officer. *[AQR 12.5.2.6(d)]*

Surface Coating

14. The permittee shall inspect spray paint booth and all ancillary equipment for leaks, malfunctions, proper operation of gauges, and pressure drops each month the booth is operated, and perform appropriate maintenance as needed. A log must be kept of all inspections, as well as any corrective actions taken to repair the equipment. *[AQR 12.5.2.6(d)]*

1.9.4.2 Testing

Boiler/Water Heater Performance Tests

1. Performance testing is subject to 40 CFR Part 60.8 (as amended), Subpart A, and the department's Guidelines for Source Testing (9/19/2019). Performance testing shall be the instrument for determining compliance with the emission limitations set forth in this permit for all boilers that have a heat input rating equal to or greater than 10.0 MMBtu/hr (EUs: BE74 through BE76 and BE131). *[AQR 12.5.2.6(d)]*

2. Subsequent performance testing shall be conducted at a frequency of no later than once every five years, and no later than 90 days after the anniversary date of the last performance test on that boiler. Subsequent performance testing shall be conducted on EUs BE74 through BE76 and BE131. *[AQR 12.5.2.6(d)]*

3. Performance testing for the applicable boilers shall comply with the testing protocol requirements identified in Table 1-31. *[AQR 12.5.2.6(d)]*

Table 1-31: Performance Testing Protocol Requirements

Test Point	Pollutant	Method
Boiler Exhaust Outlet Stack	NO_x	EPA Method 7E
Boiler Exhaust Outlet Stack	CO	EPA Method 10 analyzer
Stack Gas Parameters	—	EPA Methods 1, 2, 3A, and 4

Note: 40 CFR Part 60, Subpart Dc applies to specific combustion units at this facility.

1.9.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

c. SDS or records demonstrating the VOC content for each compound used for surface coating activities;

Cooling Towers

d. Monthly TDS content measurements of circulation water for each cooling tower (EUs: BE90, BE 94, BE95, and BE199 – BE201);

Boilers/Water Heater

e. Monthly natural gas fuel consumed by each boiler (EUs: BE74 through BE76 and BE131) (reported semiannually);

f. Log of boilers rated less than 1.00 MMBtu/hr heat input demonstrating compliance with rating limit (EU: BE193). This log shall include the following:

i. rating, make, model, and serial number of each unit;

ii. cumulative MMBtu ratings of all active units; and

iii. date each unit is installed and removed (when applicable);

g. Monthly, consecutive 12-month total MMBtu/hr of all boilers/heaters (EU: BE193) less than 1.00 MMBtu/hr (reported semiannually);

h. Burner efficiency test results (EUs: BE74 through BE76, BE125, BE126, BE131, BE134, BE135, BE137, BE187 through BE189, and BE192);

Emergency Engines

i. Date and duration of operation of each diesel-fired emergency generator for testing, maintenance, and nonemergency use (EUs: BE80 through BE89 and BE101) (reported semiannually);

j. Monthly duration of operation of each emergency generator for emergency use, including documentation justifying use during the emergency (EUs: BE80 through BE89 and BE101) (reported semiannually);

k. Sulfur content and cetane index or aromatic content of diesel fuel used to power the emergency generators (EUs: BE80 through BE89 and BE101), as certified by the supplier;

Powder Coating

l. Monthly, consecutive 12-month total consumption (in gallons) of powder coating materials (EUs: BE99).

Nonroad Engines.

m. Records of location changes for nonroad engines, if applicable;

Emissions

n. Performance test results, if applicable (reported as required by Section 1.9.4.2 of this permit);

o. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

p. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

q. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.10 CITYCENTER

1.10.1 Emission Units

The stationary source activities at CityCenter covered by this Part 70 OP consist of the emission units and associated appurtenances summarized in Table 1-32. *[825 NSR ATC, Modification 8 (03/30/06); 825 NSR ATC, Modification 13 (12/31/09); Title V OP (10/21/13, 09/14/17, 08/28/18, 06/25/19, and 05/19/22)]*

Table 1-32: Summary of EUs – CityCenter

EU	Rating	Description	Manufacturer	Model No.	Serial No.
CC005	4.2 MMBtu/hr	Boiler	Hurst	400	S500-150-151
CC006	4.2 MMBtu/hr	Boiler	Hurst	400	S500-150-152
CC007	4.6 MW (Nominal Electrical Rating)	Combustion Gas Turbine (CGT)	Solar	Mercury 50-6000R	PG06N11

EU	Rating	Description	Manufacturer	Model No.	Serial No.
CC008	4.6 MW (Nominal Electrical Rating)	Combustion Gas Turbine (CGT)	Solar	Mercury 50-6000R	PG06N12
CC009	3,622 hp	Diesel Emergency Generator DOM: 2005	Caterpillar	3516C	SBK00196
CC010	3,622 hp	Diesel Emergency Generator DOM: 2005	Caterpillar	3516C	SBK00197
CC011	3,622 hp	Diesel Emergency Generator DOM: 2005	Caterpillar	3516C	SBK00198
CC012	2,937 hp	Diesel Emergency Generator DOM: 2005	Caterpillar	3516C	SBJ00378
CC013	2,937 hp	Diesel Emergency Generator DOM: 2005	Caterpillar	3516C	SBJ00379
CC014	2,937 hp	Diesel Emergency Generator DOM: 2005	Caterpillar	3516C	SBJ00380
CC015	2,937 hp	Diesel Emergency Generator DOM: 2005	Caterpillar	3516C	SBJ00382
CC029	10,890 gpm	Cooling Tower Cell 1	Composite Cooling System	FM-4242-250-P6	1163
CC030	10,890 gpm	Cooling Tower Cell 2	Composite Cooling System	FM-4242-250-P6	1163
CC031	10,890 gpm	Cooling Tower Cell 3	Composite Cooling System	FM-4242-250-P6	1163
CC032	10,890 gpm	Cooling Tower Cell 4	Composite Cooling System	FM-4242-250-P6	1163
CC033	10,890 gpm	Cooling Tower Cell 5	Composite Cooling System	FM-4242-250-P6	1163
CC034	10,890 gpm	Cooling Tower Cell 6	Composite Cooling System	FM-4242-250-P6	1163
CC035	175 hp	Diesel Fire Pump DOM: 2010	Clarke	JU6H-UF-34	PE6068T717220
CC036	175 hp	Diesel Fire Pump DOM: 2010	Clarke	JU6H-UF-34	PE6068T717222
CC037	105 hp	Diesel Fire Pump DOM: 2010	Clarke	JU6H-UF-40	PE4045T740064
CC038	105 hp	Diesel Fire Pump DOM: 2010	Clarke	JU6H-UF-40	PE4045T740067

EU	Rating	Description	Manufacturer	Model No.	Serial No.
CC039	55 hp	Diesel Fire Pump DOM: 2010	Clarke	JU4H-UF-10	BF4045D721508
CC040	55 hp	Diesel Fire Pump DOM: 2010	Clarke	JU4H-UF-10	BF4045D724411
CC041	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1634103366555
CC042	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1634103366558
CC043	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1634103366557
CC044	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1634103328695
CC045	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1634103328697
CC046	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1634103328696
CC047	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1634103328698
CC048	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1634103366556
CC049	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1730106902798
CC050	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1728106832775
CC051	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1728106812583
CC052	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1729106846566
CC053	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1730106902797
CC054	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1728106832774
CC055	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1728106812584
CC056	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	1729106846565
CC057	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	2133125400835
CC058	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	2133125720987
CC059	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	2133125720986
CC060	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	2133125400837

EU	Rating	Description	Manufacturer	Model No.	Serial No.
CC061	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	2133125400836
CC062	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	2133125720985
CC063	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	2133125720984
CC064	5.00 MMBtu/hr	Boiler	Lochinvar Powerfin	PBN5000	2133125720988

1.10.2 Controls

1.10.2.1 Control Devices

No add-on controls have been identified.

1.10.2.2 Control Requirements

Boilers/Water Heaters

1. The permittee shall combust only natural gas in each boiler (EUs: CC041 through CC064). *[Title V OP (12/30/16 & 08/28/18)]*

2. The permittee shall operate and maintain each boiler and heater in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices (EUs: CC005, CC006, and CC041 through CC064). *[825 NSR ATC, Modification 8 (03/30/06), Condition III-B-2 and Title V OP (09/14/17 & 08/28/18)]*

3. The permittee shall operate and maintain each of the boiler with burners that have a manufacturer's maximum emission concentration of 12 ppmv NO_x, corrected to 3% oxygen, and flue gas recirculation control devices (EUs: CC005 and CC006). *[825 NSR ATC, Modification 8 (03/30/06), Conditions III-B-5 and III-B-6]*

4. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 30 ppmv CO, corrected to 3% oxygen, and flue gas recirculation control devices (EUs: CC005 and CC006). *[825 NSR ATC, Modification 8 (03/30/06), Conditions III-B-5 and III-B-6]*

5. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 25 ppmv NO_x, corrected to 3% oxygen (EUs: CC041 through CC048). *[Title V OP (09/14/17)]*

6. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EUs: CC041 through CC048). *[Title V OP (09/14/17)]*

7. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EUs: CC049 through CC056). *[Title V OP (08/28/18)]*

8. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EUs: CC049 through CC056). *[Title V OP (08/28/18)]*

9. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 20 ppmv NO_x, corrected to 3% oxygen (EUs: CC057 through CC064). *[Title V OP (05/16/22)]*

10. The permittee shall operate and maintain each of the boilers with burners that have a manufacturer's maximum emission concentration of 50 ppmv CO, corrected to 3% oxygen (EUs: CC057 through CC064). *Title V OP (05/16/22)]*

Turbines

11. The permittee shall combust only pipeline quality natural gas in the two turbines (EUs: CC007 and CC008). *[825 NSR ATC, Modification 8 (03/30/06), Condition III-B-7]*

12. The permittee shall operate and maintain the two turbines in accordance with the manufacturer's O&M manual for emissions-related components (EUs: CC007 and CC008). *[825 NSR ATC, Modification 8 (03/30/06), Condition III-B-8]*

13. The permittee shall equip the two turbines, each with a nominal rating of 4.6 MW, with lean pre-mix technology (EUs: CC007 and CC008). *[825 NSR, Modification 8 (03/30/06), Condition III-B-10]*

14. The permittee shall not use natural gas with a sulfur content that exceeds 20 grains per 100 dscfm (0.05% by weight). *[40 CFR Part 60.4365]*

Diesel Generators/Fire Pumps

15. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generators (EUs: CC009 through CC015 and CC035 through CC040). *[40 CFR 60.4207(b) and 40 CFR 63.6604(b)]*

16. The permittee shall operate and maintain all diesel generators and fire pumps in accordance with the manufacturer's O&M manual for emissions-related components (EUs: CC009 through CC015 and CC035 through CC040). *[825 NSR, Modification 8 (03/30/06), Condition III-B-13 and 825 NSR ATC, Modification 13 (12/31/09), Condition V-3]*

17. The permittee shall combust only diesel fuel in the diesel generators and fire pumps (EUs: CC009 through CC015 and CC035 through CC040). *[AQR 12.5.2.6]*

Cooling Towers

18. The permittee shall operate and maintain each of the cooling towers in accordance with the manufacturer's O&M manual for emissions-related components (EUs: CC029 through CC034). *[825 NSR, Modification 8 (03/30/06), Condition III-B-15]*

19. The permittee shall operate the cooling towers with drift eliminators that have a manufacturer's maximum drift rate of 0.001% (EUs: CC029 through CC034). *[825 NSR ATC, Modification 13 (12/31/09), Condition IV-G-4-b]*

20. The permittee shall limit the TDS content of the cooling tower's circulation water to 4,500 ppm (EUs: CC029 through CC034). *[Title V OP (10/21/13)]*

Other

21. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.10.3 Limitations and Standards

1.10.3.1 Operational Limits

1. The heat input rating of each of the two turbines, including any exchanged turbine modules (EUs: CC007 and CC008), shall exceed neither 44.5 MMBtu/hour nor 357,408 MMBtu/year, based on the Lower Heat Value (LHV) of the fuel. *[825 NSR ATC, Modification 8 (03/30/06), Condition III-A-4]*

2. The permittee shall limit the operation of the emergency generators (EUs: CC009 through CC015) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (2.a–e inclusive), the emergency generators cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 63.6640]*

    a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

    b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

    c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

    d. The power is provided only to the facility itself or to support the local transmission and distribution system.

    e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

3. The permittee shall limit the operation of the fire pumps (EUs: CC035 through CC040) for testing and maintenance purposes to 100 hours/year. The permittee may operate the fire pumps up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. *[40 CFR Part 60.4211]*

1.10.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-33. *[609 NSR ATC/OP, Modification 1 (03/03/02); 825 NSR ATC, Modification 13 (12/31/09); and Title V OP (10/21/13, 09/16/16, 09/14/17, 08/28/18, 06/25/19, 01/25/21, and 05/19/22)]*

Table 1-33: PTE (tons per year) – CityCenter

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
CC005	8,760 hr/yr	0.14	0.14	0.27	0.41	0.01	0.10	0.03
CC006	8,760 hr/yr	0.14	0.14	0.27	0.41	0.01	0.10	0.03
CC007	357,408 MMBtu/yr	3.75	3.75	3.28	1.00	0.13	0.46	0.18
CC008	357,408 MMBtu/yr	3.75	3.75	3.28	1.00	0.13	0.46	0.18
CC009	500 hr/yr	0.10	0.10	12.03	1.47	0.01	0.29	0.01
CC010	500 hr/yr	0.10	0.10	12.03	1.47	0.01	0.29	0.01
CC011	500 hr/yr	0.10	0.10	12.03	1.47	0.01	0.29	0.01
CC012	500 hr/yr	0.14	0.14	10.47	1.01	0.01	0.28	0.02
CC013	500 hr/yr	0.14	0.14	10.47	1.01	0.01	0.28	0.02
CC014	500 hr/yr	0.14	0.14	10.47	1.01	0.01	0.28	0.02
CC015	500 hr/yr	0.14	0.14	10.47	1.01	0.01	0.28	0.02
CC029	8,760 hr/yr	0.51	0.51	0.00	0.00	0.00	0.00	0.00
CC030	8,760 hr/yr	0.51	0.51	0.00	0.00	0.00	0.00	0.00
CC031	8,760 hr/yr	0.51	0.51	0.00	0.00	0.00	0.00	0.00
CC032	8,760 hr/yr	0.51	0.51	0.00	0.00	0.00	0.00	0.00
CC033	8,760 hr/yr	0.51	0.51	0.00	0.00	0.00	0.00	0.00
CC034	8,760 hr/yr	0.51	0.51	0.00	0.00	0.00	0.00	0.00
CC035	500 hr/yr	0.03	0.03	0.40	0.11	0.01	0.03	0.01
CC036	500 hr/yr	0.03	0.03	0.40	0.11	0.01	0.03	0.01
CC037	500 hr/yr	0.01	0.01	0.33	0.02	0.01	0.02	0.01
CC038	500 hr/yr	0.01	0.01	0.33	0.02	0.01	0.02	0.01
CC039	500 hr/yr	0.01	0.01	0.18	0.06	0.01	0.03	0.01
CC040	500 hr/yr	0.01	0.01	0.18	0.06	0.01	0.03	0.01
CC041	8,760 hr/yr	0.16	0.16	0.67	0.81	0.01	0.12	0.04
CC042	8,760 hr/yr	0.16	0.16	0.67	0.81	0.01	0.12	0.04
CC043	8,760 hr/yr	0.16	0.16	0.67	0.81	0.01	0.12	0.04
CC044	8,760 hr/yr	0.16	0.16	0.67	0.81	0.01	0.12	0.04
CC045	8,760 hr/yr	0.16	0.16	0.67	0.81	0.01	0.12	0.04
CC046	8,760 hr/yr	0.16	0.16	0.67	0.81	0.01	0.12	0.04
CC047	8,760 hr/yr	0.16	0.16	0.67	0.81	0.01	0.12	0.04
CC048	8,760 hr/yr	0.16	0.16	0.67	0.81	0.01	0.12	0.04
CC049	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC050	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC051	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
CC052	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC053	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC054	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC055	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC056	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC057	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC058	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC059	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC060	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC061	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC062	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC063	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04
CC064	8,760 hr/yr	0.16	0.16	0.53	0.81	0.01	0.12	0.04

2. The permittee shall limit the actual and allowable emissions from each turbine to the PTE listed in Table 1-34 during periods of startup and shutdown (EUs: CC007 and CC008). *[825 NSR ATC, Modification 8 (03/30/06), Table II-B-4 and Title V OP (10/23/13)]*

Table 1-34: Potential Emissions from CityCenter Turbine Startup/Shutdown Event[1]

Event	NO_x (pounds per event)	CO (pounds per event)	UHC[2] (pounds per event)
Startup	1.30	34.5	2.90
Shutdown	0.60	4.20	0.40

[1]Based on an approximate duration of 20 minutes for startup event and 9 minutes for shutdown event.
[2]Unburned hydrocarbons (UHC). VOC emission factors are 10-20% of UHC value.

3. The permittee shall limit the actual emissions from the turbines (EUs: CC007 and CC008) to the emission rates listed in Table 1-35. The emission limits represent normal operation (excluding startup and shutdown) only. *[825 NSR ATC, Modification 8 (03/30/06) and Title V OP (10/21/13)]*

Table 1-35: Emission Rates (pounds per hour) – CityCenter

EU	Rating	NO_x	CO
CC007	4.6 MW	0.82	0.25
CC008	4.6 MW	0.82	0.25

4. The permittee shall limit the actual concentration from each turbine unit (EUs: CC007 and CC008) to the concentrations listed in Table 1-36. The concentrations represent normal operation (excluding startup and shutdown) limits only. *[825 NSR ATC, Modification 8 (03/30/06)]*

Table 1-36: Emission Concentrations (ppmv), Normal Operation – CityCenter

EU	O_2 Correction Standard	NO_x	CO	VOC
CC007	15%	5[1]	2.5[1]	2.0[2]
CC008	15%	5[1]	2.5[1]	2.0[2]

[1]Based on a 36-minute averaging period.
[2]Annual emission limitation as CH_4.

5. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.10.4 Compliance Demonstration Requirements

1.10.4.1 Monitoring

Visible Emissions

See Section 2.0.

Burner Efficiency Tests

1. The permittee shall conduct burner efficiency tests in accordance with the manufacturer's O&M manual and good combustion practices. Alternative methods may be used upon Control Officer approval (EUs: CC005, CC006, and CC041 through CC064). *[AQR 12.5.2.6(d)]*

2. The permittee shall perform a burner efficiency test once each calendar year (EUs: CC005, CC006, and CC041 through CC064). *[AQR 12.5.2.6(d)]*

3. The permittee shall not have to perform a burner efficiency test if the actual hours of operation are 0. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: CC005, CC006, and CC041 through CC064). *[AQR 12.5.2.6(d)]*

4. A performance test may replace a required burner efficiency test with Control Officer approval. *[AQR 12.5.2.6(d)]*

5. The results from burner efficiency testing shall not be used to determine an emission unit's compliance status with its corresponding emission limit(s). *[AQR 12.5.2.6]*

Diesel Generators/Fire Pumps

6. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generators (EUs: CC009 through CC015 and CC035 through CC040) by retaining a copy of vendor fuel specifications. *[40 CFR 60.4207(b) and 40 CFR 63.6604(b)]*

7. The permittee shall operate each emergency generator/fire pump with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EUs: CC009 through CC015 and CC035 through CC040). *[AQR 12.5.2.6(d)]*

Turbines

8. The number of startup/shutdown events shall be tracked, and the emissions shall be used to verify compliance with the annual emission limitations for the combustion turbines. *[AQR 12.5.2.6(d), 40 CFR Part 60.4400(a), and 40 CFR Part 60.4340(a)]*

9. Compliance with the sulfur standards for natural gas fuel contained in 40 CFR Part 60, Subpart KKKK shall be demonstrated using the methods described in the subpart. *[40 CFR Part 60.4330]*

Cooling Towers

10. The permittee shall monitor the TDS of the cooling tower recirculation water monthly, using a hand-held conductivity meter or other device approved in advance by the Control Officer (EUs: CC029 through CC034). *[AQR 12.5.2.6(d)]*

1.10.4.2 Testing

1. The 4.6 MW combustion gas turbines (EUs: CC007 and CC008) are subject to 40 CFR Part 60, Subpart KKKK. Compliance with the turbine emission limitations specified in 40 CFR Part 60, Subpart KKKK and this permit shall be demonstrated by an initial performance test, subsequent performance tests, and recordkeeping according to the following *[AQR 12.5.2.6(d)]*:

    a. The permittee shall conduct initial performance tests on each 4.6 MW turbine within 60 days of achieving the maximum production rate at which the facility will be operated but no later than 180 days after initial startup, including exchanged turbine modules placed into service, as described in Table 1-37, or by alternative test methods preapproved by the Control Officer.

    b. The permittee shall conduct subsequent performance testing annually on each 4.6 MW turbine within the same quarter of the anniversary date of the last performance test on that turbine.

2. The permittee shall submit to the Control Officer for approval a performance testing protocol that contains test, reporting, and notification schedules, test protocols, and anticipated test dates at least 45 days prior to the anticipated test date, unless otherwise specified in an NSPS, but not more than 90 days prior to the anticipated test date. *[AQR 12.5.2.6(d)]*

3. A report describing the results of the performance test shall be submitted to the Control Officer within 60 days of the end of the performance test. *[AQR 12.5.2.6(d)]*

4. Pursuant to AQR 10, the permittee of any stationary source or emissions unit that fails to demonstrate compliance with emissions standards or permit limitations during any subsequent performance test shall submit a compliance plan to the Control Officer within 90 days of the end of the performance test. *[AQR 12.5.2.6(d)]*

5. The Control Officer may consider approving the permittee's requests for alternative performance test methods if proposed in writing. *[AQR 12.5.2.6(d)]*

6. The permittee shall perform the performance tests listed in Table 1-37 on EUs: CC007 and CC008. *[AQR 12.5.2.6(d)]*

Table 1-37: Performance Testing Requirements

Test Point	Pollutant	Method
4.6-MW Turbine Exhaust Outlet Stack	NO_x	EPA Method 7E
4.6-MW Turbine Exhaust Outlet Stack	CO	EPA Method 10
Turbine Exhaust Outlet Stack Gas Parameters	—	EPA Methods 1, 2, 3, 4

1.10.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

Cooling Towers

c. Monthly TDS content measurements of cooling tower circulation water (EUs: CC029 through CC034);

Boilers/Water Heater

d. Burner efficiency test results (EUs: CC005, CC006, and CC041 through CC064);

Emergency Engines

e. Date and duration of operation of each diesel-fired emergency generator for testing, maintenance, and nonemergency use (EUs: CC009 through CC015 and CC035 through CC040) (reported semiannually);

f. Monthly duration of operation of each emergency generator for emergency use, including documentation justifying use during the emergency (EUs: CC009 through CC015 and CC035 through CC040) (reported semiannually);

g. Sulfur content and cetane index or aromatic content of diesel fuel used to power the of each emergency generator, as certified by the supplier (EUs: CC009 through CC015 and CC035 through CC040);

Turbines

h. Monthly, consecutive 12-month total of natural gas consumed (in MMBtu) by the combustion gas turbines (EUs: CC007 and CC008) (reported semiannually);

i. Dates and number of each startup and shutdown cycle of each combustion gas turbine (EUs: CC007 and CC008);

j. Date and serial number when a power turbine module is exchanged with a replacement power turbine (reported semiannually);

k. If applicable, updated emission information for the replacement power turbine module(s) placed into service (reported semiannually);

Nonroad Engines.

l. Records of location changes for nonroad engines, if applicable;

Emissions

m. Performance test results, if applicable (reported as required by Section 1.10.4.2 of this permit);

n. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

o. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

p. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.11 T-MOBILE ARENA

1.11.1 Emission Units

1. The stationary source activities at T-Mobile Arena covered by this Part 70 OP consist of the emission units and associated appurtenances summarized in Table 1-38. *[Title V OP (09/14/17)]*

Table 1-38: Summary of EUs – T-Mobile Arena

EU	Rating	Description	Manufacturer	Model No.	Serial No.
TM01	3,701 hp	Diesel Emergency Generator DOM: 2016	Caterpillar	3516DITA	DD501118

1.11.2 Controls

1.11.2.1 Control Devices

No add-on controls have been identified.

1.11.2.2 Control Requirements

1. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generator (EU: TM01). *[40 CFR 60.4207(b)]*

2. The permittee shall operate and maintain the diesel generator in accordance with the manufacturer's O&M manual for emissions-related components. *[AQR 12.5.2.6(d)]*

3. The permittee shall combust only diesel fuel in the diesel generator (EU: TM01). *[AQR 12.5.2.6]*

Other

4. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.11.3 Limitations and Standards

1.11.3.1 Operational Limits

1. The permittee shall limit the operation of the emergency generator (EU: TM01) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generator up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (a–e inclusive), the emergency generator cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: *[40 CFR Part 60.4211]*

    a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

    b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

    c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

    d. The power is provided only to the facility itself or to support the local transmission and distribution system.

e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

1.11.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-39. *[Title V OP (09/14/17)]*

Table 1-39: PTE (tons per year) – T-Mobile Arena

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP
TM01	500 hr/yr	0.08	0.08	10.83	0.85	0.01	0.20	0.03

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than 6 consecutive minutes. *[AQR 26.1]*

1.11.4 Compliance Demonstration Requirements

1.11.4.1 Monitoring

Visible Emissions

See Section 2.0.

Diesel Generator

1. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generator (EU: TM01) by retaining a copy of vendor fuel specifications. *[40 CFR 60.4207(b)]*

2. The permittee shall operate each emergency generator with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. The nature of the emergency leading to emergency operation shall be documented (EU: TM01). *[AQR 12.5.2.6(d)]*

1.11.4.2 Testing

No performance testing requirements have been identified for units at T-Mobile Arena at this time.

1.11.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and time when visible emissions checks and observations are made, and the steps taken to make any necessary corrections to bring opacity into compliance;

Inspections/Maintenance/General

b. Log book of all inspections, maintenance, and repairs, as specified in this document;

Emergency Engines

c. Date and duration of operation of the diesel-fired emergency generator for testing, maintenance, and nonemergency use (EU: TM01) (reported semiannually);

d. Monthly total of operating hours of the emergency generator for emergency use, including documentation justifying use during the emergency (EU: TM01) (reported semiannually);

e. Sulfur content and cetane index or aromatic content of diesel fuel used to power the of each emergency generator and fire pump, as certified by the supplier (EU: TM01);

Nonroad Engines.

f. Records of location changes for nonroad engines, if applicable;

Emissions

g. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

h. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

i. Calendar year annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.12 COSMOPOLITAN OF LAS VEGAS

1.12.1 Emission Units

1. The stationary source activities at Cosmopolitan of Las Vegas covered by this Part 70 OP consist of the emission units and associated appurtenances summarized in Table 1-40. *[Title V OP (03/25/24)]*

Table 1-40: Summary of EUs – Cosmopolitan of Las Vegas

EU	Rating	Description	Manufacturer	Model No.	Serial No.
CO01	21.0 MMBtu/hr	Natural Gas Boiler	UBW	UFH33500160PFN	M039190
CO02	21.0 MMBtu/hr	Natural Gas Boiler	UBW	UFH33500160PFN	M039180
CO03	21.0 MMBtu/hr	Natural Gas Boiler	UBW	UFH33500160PFN	M039200
CO04	21.0 MMBtu/hr	Natural Gas Boiler	UBW	UFH33500160PFN	M039170
CO05	21.0 MMBtu/hr	Natural Gas Boiler	UBW	UFH33500160PFN	M039160
CO06	5.49 MMBtu/hr[1]	Boilers <1.00 MMBtu/hr	Various	Various	Various
CO07	2,000 kW	Emergency Generator	Caterpillar	SR4BGD	G5H00391
	2,937 hp	Diesel Engine; DOM 2007		3516C	SBJ00370
CO08	2,000 kW	Emergency Generator	Caterpillar	SR4BGD	G5H00375
	2,937 hp	Diesel Engine; DOM 2007		3516C	SBJ00338
CO09	2,000 kW	Emergency Generator	Caterpillar	SR4BGD	G5H00376
	2,937 hp	Diesel Engine; DOM 2007		3516C	SBJ00337
CO10a	3,600 gpm	Cooling Tower (cell 1 of 4)	Baltimore Aircoil	31301A-4	U0701121801
CO10b	3,600 gpm	Cooling Tower (cell 2 of 4)			
CO10c	3,600 gpm	Cooling Tower (cell 3 of 4)			
CO10d	3,600 gpm	Cooling Tower (cell 4 of 4)			
CO11a	3,600 gpm	Cooling Tower (cell 1 of 4)	Baltimore Aircoil	31301A-4/V	U0701121802
CO11b	3,600 gpm	Cooling Tower (cell 2 of 4)			
CO11c	3,600 gpm	Cooling Tower (cell 3 of 4)			
CO11d	3,600 gpm	Cooling Tower (cell 4 of 4)			

[1]Combined total for all units with a heat input rating of less than 1.0 MMBtu/hr, plus 10%.

1.12.2 Controls

1.12.2.1 Control Devices

No add-on controls have been identified.

1.12.2.2 Control Requirements

Boilers

1. The permittee shall combust only natural gas in each boiler (EUs: CO01 through CO06). *[AQR 12.5.2.6]*

2. The permittee shall operate and maintain each boiler in accordance with the manufacturer's operations and maintenance (O&M) manual for emissions-related components and good combustion practices (EUs: CO01 through CO06). *[AQR 12.5.2.6]*

3. The permittee shall maintain and operate each boiler with burners that have a manufacturer's maximum emission concentration of 12 parts per million (ppm) NO_x, corrected to 3 percent oxygen (EUs: CO01 through CO05). *[AQR 12.5.2.6]*

4. The permittee shall maintain and operate each boiler with burners that have a manufacturer's maximum emission concentration of 50 ppm CO, corrected to 3 percent oxygen (EUs: CO01 and CO05). *[AQR 12.5.2.6]*

Generators [AQR 12.5.2.6]

5. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency generator (EUs: CO07 through CO09). *[40 CFR 60.4207(b)]*

6. The permittee shall operate and maintain each diesel-powered emergency generator set in accordance with the manufacturer's O&M manual for emissions-related components (EUs: CO07 through CO09). *[AQR 12.5.2.6]*

Cooling Towers

7. The permittee shall operate each cooling tower with drift eliminators that have a manufacturer's maximum drift rate of 0.005% (EUs: CO10(a-d) and CO11(a-d)). *[AQR 12.5.2.6]*

8. The permittee shall limit the total dissolved solids (TDS) content of each cooling tower's circulation water to 5,000 ppm (EUs: CO10(a-d) and CO11(a-d)). *[AQR 12.5.2.6]*

9. The permittee shall operate and maintain each cooling tower in accordance with the manufacturer's O&M manual for emissions-related components (EUs: CO10(a-d) and CO11(a-d)). *[AQR 12.5.2.6]*

Other

10. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[AQR 40 & AQR 43]*

1.12.3 Limitations and Standards

1.12.3.1 Operational Limits

1. The permittee shall limit the operation of each emergency generator for testing and maintenance purposes to 100 hours/year. The permittee may operate each emergency generator up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (1.a), the 50 hours per year for nonemergency use cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity (EUs: CO07 through CO09): *[40 CFR Part 60.4211]*

    a. The 50 hours per year for nonemergency use can be used to supply power as part of a financial arrangement with another entity if all the following conditions are met:

i. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.

ii. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.

iii. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.

iv. The power is provided only to the facility itself or to support the local transmission and distribution system.

v. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

2. The permittee shall limit the operation of the boilers/water heaters that are rated less than 1.00 MMBtu/hr to a total of 5.49 MMBtu/hr at any one time (EU: CO06). *[AQR 12.5.2.6]*

1.12.3.2 Emission Limits

1. The permittee shall limit the actual emissions from each emission unit to the PTE listed in Table 1-41. *[AQR 12.5.2.6]*

Table 1-41. PTE (tons per year) – Cosmopolitan of Las Vegas

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H_2S	Pb
CO01	8,760 hr/yr	0.69	0.69	1.34	3.41	0.06	0.50	0.17	0	0
CO02	8,760 hr/yr	0.69	0.69	1.34	3.41	0.06	0.50	0.17	0	0
CO03	8,760 hr/yr	0.69	0.69	1.34	3.41	0.06	0.50	0.17	0	0
CO04	8,760 hr/yr	0.69	0.69	1.34	3.41	0.06	0.50	0.17	0	0
CO05	8,760 hr/yr	0.69	0.69	1.34	3.41	0.06	0.50	0.17	0	0
CO06	8,760 hr/yr	0.18	0.18	2.36	1.98	0.01	0.13	0.05	0	0
CO07	500 hr/yr	0.04	0.04	8.73	0.47	0.01	0.18	0.01	0	0
CO08	500 hr/yr	0.04	0.04	8.73	0.47	0.01	0.18	0.01	0	0
CO09	500 hr/yr	0.04	0.04	8.73	0.47	0.01	0.18	0.01	0	0
CO10a	8,760 hr/yr	0.93	0.56	0	0	0	0	0	0	0
CO10b	8,760 hr/yr	0.93	0.56	0	0	0	0	0	0	0
CO10c	8,760 hr/yr	0.93	0.56	0	0	0	0	0	0	0
CO10d	8,760 hr/yr	0.93	0.56	0	0	0	0	0	0	0
CO11a	8,760 hr/yr	0.93	0.56	0	0	0	0	0	0	0
CO11b	8,760 hr/yr	0.93	0.56	0	0	0	0	0	0	0

EU	Condition[1]	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	VOC	HAP	H_2S	Pb
CO11c	8,760 hr/yr	0.93	0.56	0	0	0	0	0	0	0
CO11d	8,760 hr/yr	0.93	0.56	0	0	0	0	0	0	0

[1]The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

2. The permittee shall not allow actual emissions from each emission unit to exceed the rates listed in Table 1-42. *[AQR 12.5.2.6]*

Table 1-42. Emission Rate (lb/hr)

EU	NO_x	CO
CO01 through CO05	0.31	0.78

3. The permittee shall not allow the actual emissions from each emission unit to exceed the concentrations listed in Table 1-43. *[AQR 12.5.2.6]*

Table 1-43. Allowable Emission Concentrations

EU	O_2 Correction Standard	NO_x (ppmvd)	CO (ppmvd)
CO01 through CO05	3 percent	12	50

4. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for more than six consecutive minutes. *[AQR 26.1]*

1.12.4 Compliance Demonstration Requirements

1.12.4.1 Monitoring Requirements

Visible Emissions

See Section 2.0.

Boilers, Water Heaters, and Fuel Burning Equipment

1. The permittee shall monitor the monthly fuel consumption of the boilers (EUs: CO01 through CO05). *[AQR 12.5.2.6(d)]*

2. The permittee shall conduct burner efficiency tests in accordance with the manufacturer's O&M manual and good combustion practices. Alternative methods may be used upon Control Officer approval. (EUs: CO01 through CO05). *[AQR 12.5.2.6(d)]*

3. The permittee shall perform a burner efficiency test twice each calendar year, at least five months apart but no more than seven. (EUs: CO01 through CO05). *[AQR 12.5.2.6(d)]*

4. The permittee may perform a burner efficiency test once each calendar year if the actual hours of operation are less than 50. To exercise this option, the permittee must install an hour meter and begin keeping written records before the start of the calendar year (EUs: CO01 through CO05). *[AQR 12.5.2.6(d)]*

5. The permittee may replace one contemporaneously required burner efficiency test with a performance test that has acceptable results (EUs: CO01 through CO05). *[AQR 12.5.2.6(d)]*

Generators / Engines

6. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in each emergency generator by retaining a copy of vendor fuel specifications (EUs: CO07 through CO09). *[40 CFR 60.4207(b)]*

7. The permittee shall operate each diesel-fired emergency generator engine with a nonresettable hour meter and monitor each one during testing, maintenance, and nonemergency operation. If the engine is used for an emergency, the permittee shall monitor its operation and document the nature of the emergency (EUs: CO07 through CO09). *[AQR 12.5.2.6(d)]*

Cooling Towers

8. The permittee shall monitor the TDS of each cooling tower recirculation water monthly using a conductivity meter or another device the Control Officer has approved in advance (EUs: CO10(a-d) and C011(a-d). *[AQR 12.5.2.6(d)]*

1.12.4.2 Testing

1. Performance testing is subject to 40 CFR Part 60.8 (as amended), Subpart A, and *Clark County Department of Air Quality Guidelines for Source Testing (2/21/2019)*. Performance testing shall be the instrument for determining subsequent compliance with the emission limitations set forth in Tables 1-43 and 1-44 of this permit. *[AQR 12.5.2.6(d)]*

2. The permittee shall conduct performance tests on each boiler every five years, and no later than 90 days after the anniversary date of the last performance test (EUs: CO01 through CO05): *[Clark County Department of Air Quality Guidelines for Source Testing (2/21/2019)]*

3. The permittee shall use the performance testing methodologies for individual emission units listed in Table 1-44. The Control Officer will consider approving a request for alternative performance test methods if proposed in writing in the performance test protocols. *[AQR 12.5.2.6(d)]*

Table 1-44. Performance Testing Protocol Requirements

EU	Test Point	Pollutant	Method	Frequency
CO01 through CO05	Boiler Exhaust Outlet Stack	NO_x	EPA Method 7E	5 years
	Boiler Exhaust Outlet Stack	CO	EPA Method 10	
	Stack Gas Parameters	—	EPA Methods 1, 2, 3A, and 4	

4. The permittee shall submit to the Control Officer for approval a performance testing protocol that contains test, reporting, and notification schedules, test protocols, and anticipated test dates at least 45 days, but not more than 90 days, before the anticipated test date. *[AQR 12.5.2.6(d)]*

5. The permittee shall submit a report describing the results of the performance test to the Control Officer within 60 days of the end of the performance test. *[AQR 12.5.2.6(d)]*

6. The permittee of any stationary source that fails to demonstrate compliance with emissions standards or limitations during any performance test shall submit a compliance plan to the Control Officer within 90 days of the end of the performance test. *[AQR 12.5.2.6(d)]*

7. The Control Officer may require additional performance testing when operating conditions appear inadequate to demonstrate compliance with the limitations in this permit. *[AQR 4.5]*

1.12.4.3 Recordkeeping

1. The permittee shall keep and maintain the following records, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation: *[AQR 12.5.2.6(d)(2)]*

Opacity

a. Dates and times when visible emissions checks and observations are made, and the corrective steps taken to bring opacity into compliance.

Inspections/Maintenance/General

b. Manufacturer's O&M manual for each emission unit identified in Table 1-40;

Cooling Towers

c. Monthly TDS content measurements of cooling tower circulation water (EUs: CO10(a-d) and CO11(a-d));

Boilers

d. Monthly natural gas fuel consumed by each boiler (EUs: CO01 through CO05) (reported semiannually);

e. Log of boilers rated less than 1.00 MMBtu/hr heat input demonstrating compliance with rating limit (EU: CO06). This log shall include the following:

i. rating, make, model, and serial number of each unit;

ii. cumulative MMBtu ratings of all active units; and

iii. date each unit is installed and removed (when applicable);

f. Monthly, consecutive 12-month total MMBtu/hr of all boilers/heaters (EU: CO06) less than 1.00 MMBtu/hr (reported semiannually);

g. Burner efficiency test results (EUs: CO01 through CO05);

Emergency Generators

h. Sulfur content and cetane index or aromatic content of diesel fuel used to power the emergency generator as certified by the supplier (EUs: CO07 through CO09);

i. Date and duration of operation of each diesel-powered emergency generator for testing, maintenance, and nonemergency use (EUs: CO07 through CO09) (reported semiannually);

j. Date and duration of operation of each emergency generator for emergency use, including documentation justifying use during the emergency (EUs: CO07 through CO09) (reported semiannually);

Nonroad Engines

k. Records of location changes for nonroad engines, if applicable;

Emissions

l. Performance test results, if applicable (reported as required by Section 1.12.4.2 of this permit);

m. Deviations from permit requirements that result in excess emissions (reported as required in Section 5.0 of this permit);

n. Deviations from permit requirements that do not result in excess emissions (reported semiannually); and

o. Calendar year and annual emissions calculated for each emission unit in this section (reported annually).

2. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable.

3. The permittee shall comply with the general recordkeeping requirements identified in Section 4.0.

1.13 INSIGNIFICANT ACTIVITIES

Units or activities, identified in Section 11.3 of this permit, are present at this source but are insignificant pursuant to AQR 12.5.2.5. The emissions from these units or activities, when added to the PTE of the source, will not make the source major for any additional pollutant.

1.14 NONROAD ENGINES

Pursuant to Title 40, Part 1068.30 of the Code of Federal Regulations (40 CFR Part 1068.30), nonroad engines shall not remain at a location for more than 12 consecutive months; otherwise, the engine(s) will constitute a stationary reciprocating internal combustion engine (RICE) and be subject to the applicable requirements of 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 60, Subpart IIII; and/or 40 CFR Part 60, Subpart JJJJ. Stationary RICE shall be permitted as emission units upon commencing operation at this stationary source.

Records of location changes for portable or transportable nonroad engines shall be maintained, and shall be made available to the Control Officer upon request. These records are not required for engines owned and operated by a contractor for maintenance and construction activities as long as records are maintained demonstrating that such work took place at the stationary source for periods of less than 12 consecutive months.

Nonroad engines used on self-propelled equipment do not have this 12-month limitation or the associated recordkeeping requirements.

2.0 VISIBLE EMISSIONS REQUIREMENTS

Visible Emissions [AQR 12.5.2.6(d) & AQR 12.5.2.8]

1. The Responsible Official shall sign and adhere to the *Visible Emissions Check Guidebook* and keep a copy of the signed guide on-site at all times.

2. The permittee shall conduct a visual emissions check at least quarterly on each diesel-fired emergency generator and each fire pump while in operation.

3. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name.

4. If a plume appears to exceed the opacity standard, the permittee shall do one of the following:

    a. Immediately correct the perceived exceedance, then record the first and last name of the person who performed the emissions check, the date the check was performed, the unit(s) observed, and the results of the observation; or

    b. Call a certified Visible Emissions Evaluation (VEE) reader to perform an EPA Method 9 evaluation.

        i. For sources required to have a certified reader on-site, the reader shall start Method 9 observations within 15 minutes of the initial observation. For all other sources, the reader shall start Method 9 observations within 30 minutes of the initial observation.

        ii. If no opacity exceedance is observed, the certified VEE reader shall record the first and last name of the person who performed the VEE, the date the VEE was performed, the unit(s) evaluated, and the results. A Method 9 VEE form shall be completed for each emission unit that was initially perceived to have exceeded the opacity limit, and the record shall also indicate:

            (1) The cause of the perceived exceedance;

            (2) The color of the emissions; and

            (3) Whether the emissions were light or heavy.

        iii. If an opacity exceedance is observed, the certified VEE reader shall take immediate action to correct the exceedance. The reader shall then record the first and last name of the person performing the VEE, the date the VEE was performed, the unit(s) evaluated, and the results. A Method 9 VEE form shall be completed for each reading identified, and the record shall also indicate:

            (1) The cause of the exceedance;

            (2) The color of the emissions;

(3) Whether the emissions were light or heavy;

(4) The duration of the emissions; and

(5) The corrective actions taken to resolve the exceedance.

5. Any scenario of visible emissions noncompliance can and may lead to enforcement action.

3.0 GENERAL TESTING

1. At the Control Officer's request, the permittee shall test (or have tests performed) to determine emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of those allowed by the AQRs is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. *[AQR 4.2]*

2. At the Control Officer's request, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. *[AQR 4.2]*

3. The permittee shall submit to the Control Officer for approval a performance testing protocol that contains testing, reporting, and notification schedules, test protocols, and anticipated test dates no less than 45 days, but no more than 90 days, before the anticipated date of the performance test unless otherwise specified in this permit. *[AQR 12.5.2.8]*

4. The permittee shall submit to EPA for approval any alternative test methods EPA has not already approved to demonstrate compliance with a requirement under 40 CFR Part 60. *[40 CFR Part 60.8(b)]*

5. The permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days of the end of the test. *[AQR 12.5.2.8]*

6. Performance testing is subject to 40 CFR Part 60.8 (as amended), Subpart A, and the Clark County *Guidelines for Source Testing (9/19/2019)*. Performance testing shall be the instrument for determining initial and subsequent compliance with the emission limitations set forth in sections specified in this permit. *[AQR 12.5.2.8(a)]*

7. The Control Officer will consider approving the permittee's request for alternative performance test methods if proposed in writing in the performance test protocols. *[AQR 12.5.2.8(a)]*

8. The permittee of any stationary source that fails to demonstrate compliance with emissions standards or limitations during any performance test shall submit a compliance plan to the Control Officer within 90 days of the end of the performance test. *[AQRs 10.1 & 12.5.2.8(a)]*

9. The Control Officer may require additional performance testing when operating conditions appear inadequate to demonstrate compliance with the emissions and/or limitations in this permit. *[AQRs 4.2 & 12.5.2.8(a)]*

4.0 GENERAL RECORDKEEPING

1. The permittee shall keep records of all inspections, maintenance, and repairs, as required by this permit. *[AQR 12.5.2.6(d) and AQR 12.5.2.8]*

2. All records, logs, etc., or copies thereof, shall be kept on-site for a minimum of five years from the date the measurement or data was entered. *[AQR 12.5.2.6(d) and AQR 12.5.2.8]*

3. Records and data required by this permit to be maintained by the permittee may be audited at any time by a third party selected by the Control Officer. *[AQR 4.1]*

4. The permittee shall create and maintain the following records, at a minimum, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation. *[AQRs 12.5.2.6(d) & 12.5.2.8]*

5.0 REPORTING AND NOTIFICATIONS

1. The permittee shall certify compliance with the terms and conditions contained in this Part 70 OP, including emission limitations, standards, work practices, and the means for monitoring such compliance. *[AQR 12.5.2.8(e)]*

2. The permittee shall submit compliance certifications annually in writing to the Control Officer (4701 W. Russell Road, Suite 200, Las Vegas, NV 89118) and the EPA Region 9 Administrator (Director, Air and Radiation Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30 of the following year, and shall include the following: *[AQR 12.5.2.8(e)]*

    a. The identification of each term or condition of the permit that is the basis of the certification;

    b. The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. These methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR Part 70.6(a)(3). If necessary, the permittee shall also identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information; and

    c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in item 2.b. The certification shall identify each deviation and take it into account. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance was required and an excursion or exceedance, as defined under 40 CFR Part 64, occurred.

3. The permittee shall report to the Control Officer any startup, shutdown, malfunction, emergency, or deviation that causes emissions of regulated air pollutants in excess of any limits set by regulations or this permit. The report shall be in two parts, as specified below: *[AQR 12.5.2.6(d)(4)(B); AQR 25.6.1]*

    a. Within 24 hours of the time the permittee learns of the excess emissions, the permittee shall notify DAQ by phone at (702) 455-5942, by fax at (702) 383-9994, or by email at airquality@clarkcountynv.gov.

    b. Within 72 hours of the notification required by item 3.a, the permittee shall submit a detailed written report to DAQ containing the information required by AQR 25.6.3.

4. With the semiannual monitoring report, the permittee shall report to the Control Officer all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown. Reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. *[AQR 12.5.2.6(d)(4)(B)]*

5. The owner or operator of any source required to obtain a permit under AQR 12 shall report to the Control Officer emissions in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health and safety or the environment as soon as possible, but no later than 12 hours after the deviation is discovered, and submit a written report within two days of the occurrence. *[AQR 25.6.2]*

6. The permittee shall submit all compliance certifications to EPA and to the Control Officer. *[AQR 12.5.2.8(e)(4)]*

7. Any application form, report, or compliance certification submitted to the Control Officer pursuant to the permit or AQRs shall contain a certification by a Responsible Official, with an original signature, of truth, accuracy, and completeness. This certification, and any other required under AQR 12.5, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *[AQR 12.5.2.6(l)]*

8. The permittee shall furnish to the Control Officer, in writing and within a reasonable time, any information that the Control Officer may request to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Control Officer copies of records that the permit requires keeping. The permittee may furnish records deemed confidential directly to the Administrator, along with a claim of confidentiality. *[AQR 12.5.2.6(g)(5)]*

9. At the Control Officer's request, the permittee shall provide any information or analyses that will disclose the nature, extent, quantity, or degree of air contaminants that are or may be discharged by the source, and the type or nature of the control equipment in use. The Control Officer may require that such disclosures be certified by a professional engineer registered in the state. In addition to this report, the Control Officer may designate an authorized agent to make an independent study and report on the nature, extent, quantity, or degree of any air contaminants that are or may be discharged from the source. An agent so designated may examine any article, machine, equipment, or other contrivance necessary to make the inspection and report. *[AQR 4.1]*

10. The permittee shall submit annual emissions inventory reports based on the following: *[AQRs 18.6.1 & 12.5.2.4]*

    a. The annual emissions inventory must be submitted to DAQ by March 31 of each calendar year (if March 31 falls on a Saturday or Sunday, or a Nevada or federal holiday, the submittal shall be due on the next regularly scheduled business day);

    b. The calculated actual annual emissions from each emission unit shall be reported even if there was no activity, along with the total calculated actual annual emissions for the source based on the emissions calculation methodology used to establish the PTE in the permit or an equivalent method approved by the Control Officer prior to submittal; and

    c. As the first page of text, a signed certification containing the sentence: "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate, and complete." This statement shall be signed and dated by a Responsible Official of the company (a sample form is available from DAQ).

11. Stationary sources that emit 25 tons or more of NO_x and/or 25 tons or more of VOCs from their emission units, insignificant activities, and exempt activities during a calendar year shall submit an annual emissions statement for both pollutants. Emissions statements must include actual annual NO_x and VOC emissions from all activities, including emission units, insignificant activities, and exempt activities. Emissions statements are separate from, and additional to, the calculated annual emissions reported each year for all regulated air pollutants (i.e., the emissions inventory). *[AQR 12.9.1]*

12. The permittee shall submit to the Control Officer, within 15 days after commencing operation, any outstanding identification and/or description that was not previously available for new emission unit(s), as noted in this permit with "TBD."

13. The permittee shall comply with all applicable notification and reporting requirements of 40 CFR Part 60.7, 40 CFR Part 60 Subpart OOO, 40 CFR Part 63 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ, and 40 CFR Part 63, Subpart CCCCC. *[AQR 12.5.2.6(d)]*

14. The permittee shall submit semiannual monitoring reports to DAQ. *[AQR 12.5.2.6(d) and AQR 12.5.2.8]*

15. The following requirements apply to semiannual reports: *[AQRs 12.5.2.6(d) & 12.5.2.8]*

    a. The report shall include the item(s) listed in Sections 1.1.4.3, 1.2.4.3, 1.3.4.3, 1.4.4.3, 1.5.4.3, 1.6.4.3, 1.7.4.3, 1.8.4.3, 1.9.4.3, 1.10.4.3, and 1.11.4.3 for semiannual reporting.

    b. The report shall be based on a calendar semiannual period, which includes partial reporting periods.

    c. DAQ shall receive the report within 30 calendar days of the end of the semiannual period.

16. Regardless of the date of issuance of this OP, the source shall comply with the schedule for report submissions outlined in Table 5-1. *[AQR 12.5.2.6(d) and AQR 12.5.2.8]*

Table 5-1: Required Submission Dates for Various Reports

Required Report	Applicable Period	Due Date
Semiannual report for 1st six-month period	January, February, March, April, May, June	July 30 each year[1]
Semiannual report for 2nd six-month period; any additional annual records required	July, August, September, October, November, December	January 30 each year[1]
Annual Compliance Certification	Calendar year	January 30 each year[1]
Annual Emissions Inventory Report	Calendar year	March 31 each year[1]
Annual Emissions Statement[2]	Calendar year	March 31 each year[1]
Notification of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 24 hours of the permittee learns of the event

Required Report	Applicable Period	Due Date
Excess Emissions that Pose a Potential Imminent and Substantial Danger	As required	No less than 45 days, but no more than 90 days, before the anticipated test date[1]
Performance Testing Protocol	As required	No less than 45 days, but no more than 90 days, before the anticipated test date[1]
Report of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 72 hours of the notification
Deviation Report without Excess Emissions	As required	Along with semiannual reports[1]
Performance Testing	As required	Within 60 days of end of test[1]

[1]If the due date falls on a Friday, Saturday, Sunday, or federal or Nevada holiday, the submittal is due on the next regularly scheduled business day.
[2] Required only for stationary sources that emit 25 tons or more of NO_X and/or 25 tons or more of VOCs during a calendar year.

17. The Control Officer reserves the right to require additional reporting to verify compliance with permit emission limits, applicable permit requirements, and requirements of applicable federal regulations. *[AQR 4.1]*

6.0 MITIGATION

The source has no federal offset requirements. *[AQR 59.1.1]*

7.0 PERMIT SHIELD

The source has not requested a permit shield. *[AQR 12.5.2.9]*

8.0 ACID RAIN PROGRAM REQUIREMENTS

The source is not subject to Acid Rain Program requirements.

9.0 OTHER REQUIREMENTS

1. Any person who violates any provision of the AQRs, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry, or monitoring activities; or any requirements from DAQ is guilty of a civil offense and shall pay a civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than $10,000. Each day of violation constitutes a separate offense. *[AQR 9.1; NRS 445B.640]*

2. Any person aggrieved by an order issued pursuant to AQR 9.1 is entitled to review, as provided in Chapter 233B of the NRS. *[AQR 9.12]*

3. The permittee shall comply with the requirements of Title 40, Part 61 of the Code of Federal Regulations (40 CFR Part 61), Subpart M—the National Emission Standard for Asbestos—for all demolition and renovation projects. *[AQR 13.1(b)(8)]*

4. The permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a Class I or Class II ozone-depleting substance or any nonexempt substitute refrigerant as a working fluid, unless such fluid has been approved for sale in such use by the EPA Administrator. The permittee shall keep records of all paperwork relevant to the applicable requirements of 40 CFR Part 82 on-site. *[40 CFR Part 82]*

5. A risk management plan is required for the storing, handling and use of an applicable "Highly Hazardous Chemical" pursuant to 40 CFR Part 68. The permittee shall submit revisions of the risk management plan to the appropriate authority and a copy to DAQ. *[40 CFR Part 68.150(b)(3)]*

10.0 ADMINISTRATIVE REQUIREMENTS

10.1 GENERAL

1. The permittee shall comply with all conditions of the Part 70 OP. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations, Nevada law, and the Clean Air Act, and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a renewal application. *[AQR 12.5.2.6(g)(1)]*

2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall be unaffected and remain valid. *[AQR 12.5.2.6(f)]*

3. The permittee shall pay all permit fees pursuant to AQR 18. *[AQR 12.5.2.6(h)]*

4. This permit does not convey property rights of any sort, or any exclusive privilege. *[AQR 12.5.2.6(g)(4)]*

5. The permittee agrees to allow inspection of the premises to which this permit relates by any authorized representative of the Control Officer at any time during the permittee's hours of operation without prior notice. The permittee shall not obstruct, hamper, or interfere with any such inspection. *[AQRs 4.1, 5.1.1, & 12.5.2.8(b)]*

6. The permittee shall allow the Control Officer, upon presentation of credentials, to: *[AQRs 4.1 & 12.5.2.8(b)]*

    a. Access and copy any records that must be kept under the conditions of the permit;

    b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

    c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and

    d. Document alleged violations using such devices as cameras or video equipment.

7. Any permittee who fails to submit relevant facts, or who has submitted incorrect information in a permit application, shall, upon becoming aware of such failure or incorrect submittal, promptly submit the needed supplementary facts or corrected information. In addition, the permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. A Responsible Official shall certify the additional information consistent with the requirements of AQR 12.5.2.4. *[AQR 12.5.2.2]*

8. Anyone issued a permit under AQR 12.5 shall post it in a location where it is clearly visible and accessible to facility employees and DAQ representatives. *[AQR 12.5.2.6(m)]*

9. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[AQR 12.5.2.6(g)(2)]*

10.2 MODIFICATION, REVISION, AND RENEWAL REQUIREMENTS

1. No person shall begin actual construction of a new Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct (ATC) from the Control Officer. *[AQR 12.4.1.1(a)]*

2. This permit may be revised, revoked, reopened and reissued, or terminated for cause by the Control Officer. The filing of a request by the permittee for a permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, does not stay any permit condition. *[AQR 12.5.2.6(g)(3)]*

3. The permit shall be reopened under any of the following circumstances and when all applicable requirements pursuant to AQR 12.5.2.15 are met: *[AQR 12.5.2.15(a)]*

    a. New requirements become applicable to a stationary source considered "major" (per the definition in AQR 12.2, AQR 12.3, or 40 CFR Part 70.3(a)(1)) with a remaining permit term of three or more years;

    b. Additional requirements (including excess emissions requirements) become applicable to an affected source under the Acid Rain Program;

    c. The Control Officer or EPA determines that the permit contains a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

    d. The EPA Administrator or the Control Officer determines that the permit must be revised or revoked to assure compliance with applicable requirements.

4. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: *[AQR 12.5.2.10(a)]*

    a. The permittee has submitted to the Control Officer a complete application for a permit, permit revision, or permit renewal (except that, pursuant to AQR 12.5.2.20, a complete application need not be received before a Part 70 general permit is issued); and

    b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of AQR 12.5.

5. The permittee shall not build, erect, install, or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 & 40 CFR Part 60.12]*

6. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. *[AQR 12.5.2.6(i)]*

7. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. *[AQR 12.5.2.11(b)]*

8. For purposes of permit renewal, a timely application is a complete application that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 OP until final action is taken on its application for a renewed Part 70 OP. *[AQR 12.5.2.1(a)(2)]*

11.0 ATTACHMENTS

11.1 APPLICABLE REGULATIONS

Requirements Specifically Identified as Applicable

1. NRS Chapter 445B.

2. Applicable AQRs listed in Table 11-1.

Table 11-1: Applicable Clark County AQRs

Citation	Title
AQR 00	"Definitions"
AQR 02	"Air Pollution Control Board"
AQR 04	"Control Officer"
AQR 05	"Interference with Control Officer"
AQR 06	"Injunctive Relief"
AQR 07	Hearing Board and Hearing Officer"
AQR 08	"Persons Liable for Penalties – Punishment: Defense"
AQR 09	"Civil Penalties"
AQR 10	"Compliance Schedules"
AQR 11	"Ambient Air Quality Standards"
AQR 12.0	"Applicability and General Requirements"
AQR 12.2	"Permit Requirements for Major Sources in Attainment Areas"
AQR 12.4	"Authority to Construct Application and Permit Requirements for Part 70 Sources"
AQR 12.5	"Part 70 Operating Permit Requirements"
AQR 12.6	"Confidentiality"
AQR 12.7	"Emission Reduction Credits"
AQR 12.9	"Annual Emissions Inventory Requirement"
AQR 12.10	"Continuous Monitoring Requirements for Stationary Sources"
AQR 12.12	"Transfer of Permit"
AQR 12.13	"Posting of Permit"
AQR 13.2(b)(1)	"Subpart A - General Provisions"
AQR 13.2(b)(82)	"Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines"
AQR 13.2(b)(106)	"Subpart CCCCCC - National Emissions Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities"
AQR 14.1(b)(1)	"Subpart A – General Provisions"
AQR 14.1(b)(81)	"Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines"
AQR 18	"Permit and Technical Service Fees"
AQR 25	"Affirmative Defense for Excess Emissions due to Malfunctions, Startup, and Shutdown"

Citation	Title
AQR 26	“Emission of Visible Air Contaminants”
AQR 28	“Fuel Burning Equipment”
AQR 29	“Sulfur Contents of Fuel Oil”
AQR 35	“Diesel Engine Powered Electrical Generating Equipment”
AQR 40	“Prohibitions of Nuisance Conditions”
AQR 41	“Fugitive Dust”, AQR 41.1.2 only
AQR 42	“Open Burning”
AQR 43	“Odors in the Ambient Air”
AQR 50	“Storage of Petroleum Products”
AQR 70	“Emergency Procedures”
AQR 80	“Circumvention”
AQR 81	“Provisions of Regulations Severable”
AQR 92	“Fugitive Dust from Unpaved Parking Lots and Storage Areas”
AQR 94	“Permitting and Dust Control for Construction Activities”

3. Clean Air Act Amendments (42 U.S.C. § 7401, et seq.)

4. Applicable 40 CFR sections listed in Table 11-2.

Table 11-2: Federal Standards

Citation	Title
40 CFR Part 52.21	“Prevention of significant deterioration of air quality”
40 CFR Part 52.1470	“Approval and Promulgation of Implementation Plans, Subpart DD—Nevada”
40 CFR Part 60, Subpart A	“General Provisions”
40 CFR Part 60, Subpart IIII	“Standards of Performance for Stationary Compression Ignition Internal Combustion Engines”
40 CFR Part 60	Appendix A, Method 9 or equivalent, (Opacity)
40 CFR Part 60, Appendix A-3	“Test Methods 4 through 5I” (PM in g/dscm)
40 CFR Part 60, Appendix A-4	“Test Methods 6 through 10B” (opacity)
40 CFR Part 63, Subpart A	“General Provisions”
40 CFR Part 63, Subpart ZZZZ	“National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines”
40 CFR Part 63, Subpart CCCCCC	“National Emissions Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities”
40 CFR Part 70	“State Operating Permit Programs”
40 CFR Part 82	“Protection of Stratospheric Ozone”

11.2 ACID RAIN PERMIT

The source is not subject to Acid Rain Program requirements.

11.3 INSIGNIFICANT ACTIVITIES

Table 11-3: Insignificant Units and Activities

MGM Grand
Nederman Series 5000 Weld Shop Fume Extractor
500 gallon Aboveground Storage Tank, Diesel
0.270 MMBtu/hr Bradford White Boiler, M/N: D100L2703NA, S/N: WC8831314
Carpentry Shop with Donaldson Torit Dust Collector, M/N: 30 CYC, S/N: IG903561
Carpentry Shop with Donaldson Torit Dust Collector, M/N: DFE 2-8, S/N: IG14480535
New York – New York
0.325 MMBtu/hr Raypak Pool Heater, M/N NA, S/N: 404220541
0.334 MMBtu/hr Raypak Pool Heater, M/N NA, S/N 401215981
0.325 MMBtu/hr Raypak Pool Heater, M/N NA, S/N: 4032181426
Carpentry Shop with Murphy Rogers Dust Collector, M/N: MRSE-13-4D, S/N: 1003
Park MGM
0.45 MMBtu/hr Raypak heater (Laguna Pool), M/N: P0824A-Beduca, S/N: 9508125600
Carpentry Shop with Donaldson Torit Dust Collector, M/N: UMA 250, S/N: 4316888-01-01-01
Mandalay Bay
0.175 MMBtu/hr Space Heater
0.175 MMBtu/hr Space Heater
0.175 MMBtu/hr Space Heater
0.175 MMBtu/hr Space Heater
35 hp mobile gasoline-fired chipper
0.745 MMBtu/hr Lochinvar Boiler, M/N: CWN0745PM, S/N: F03H00155166
0.745 MMBtu/hr Lochinvar Boiler, M/N: CWN0745PM, S/N: F03H00155167
Carpentry Shop with Murphy Rogers Dust Collector, M/N: MRSE-16-4-D, S/N: 1039
Carpentry Shop with Donaldson Torit Dust Collector, M/N: 20 Cyclone, S/N: 3758157
0.40 MMBtu/hr Raypak Boiler, M/N: C-R406A-EN-X ASME, S/N: 1903483313
0.40 MMBtu/hr Raypak Boiler, M/N: C-R406A-EN-X ASME, S/N: 1902482763
Four Seasons
0.90 MMBtu/hr Bryan Boiler, M/N: CL90-S-150-G1, S/N: 82907
40 lb Union DF-2000 Petroleum Dry Cleaning Unit, M/N: 40E, S/N: N/A
Luxor
Carpentry Shop with American Cyclone Dust Collector, M/N: ACH-BF-24, S/N: 138169
Excalibur
0.264 MMBtu/hr Raypak Spa Heater, M/N: C-R265A-EN ASME, S/N 0310212229
0.264 MMBtu/hr Raypak Spa Heater, M/N: C-R265A-EN ASME, S/N 0310212226
0.327 MMBtu/hr Raypak (Raytherm) Water Heater, M/N: H3-0400, S/N: 0207197574
0.40 MMBtu/hr Raypak Water Heater, M/N: P-R405A EN, S/N: 0301012869
0.399 MMBtu/hr Raypak Water Heater
0.264 MMBtu/hr Raypak Water Heater
0.264 MMBtu/hr Raypak Water Heater
0.20 MMBtu/hr Tank Type A.O. Smith Hot Water Heater
500 gallon aboveground storage tank, diesel
Bellagio
0.512 MMBtu/hr Raypak Boiler, M/N: P-0514, S/N: 9801145937 (formerly BE12)
0.512 MMBtu/hr Raypak Boiler, M/N: P-0514, S/N: 9801145939 (formerly BE13)

0.26 MMBtu/hr Raypak Boiler, M/N: P-BR265EN, S/N: 9710143277 (formerly BE20)
0.26 MMBtu/hr Raypak Boiler, M/N: P-BR265EN, S/N: 9710143276 (formerly BE21)
0.26 MMBtu/hr Raypak Boiler, M/N: P-BR265EN, S/N: 9710143273 (formerly BE24)
0.26 MMBtu/hr Raypak Boiler, M/N: P-BR265EN, S/N: 9710143279 (formerly BE27)
0.26 MMBtu/hr Raypak Boiler, M/N: P-BR265EN, S/N: 9710143281 (formerly BE28)
0.26 MMBtu/hr Raypak Boiler, M/N: P-BR265EN, S/N: 9710143278 (formerly BE31)
0.26 MMBtu/hr Raypak Low-NO_x Boiler, M/N: C-R265B-EN, S/N: 0405222001 (formerly BE73)
0.90 MMBtu/hr Bryan Boiler, M/N: AB90-S-150-FDG-LX, S/N: 91369 (formerly BE77)
0.90 MMBtu/hr Bryan Boiler, M/N: AB90-S-150-FDG-LX, S/N: 91343 (formerly BE78)
0.181 MMBtu/hr Raypak Spa Heater, M/N RP2100 C-R185A-EN ASME, S/N 0302205255
0.181 MMBtu/hr Raypak Spa Heater, M/N RP2100 C-R185B, S/N 0407222210
0.181 MMBtu/hr Raypak Spa Heater, M/N RP2100 C-R185B, S/N 0407222211
0.181 MMBtu/hr Raypak Spa Heater, M/N RP2100 C-R185B, S/N 0407222212
0.181 MMBtu/hr Raypak Spa Heater, M/N RP2100 C-R185B, S/N 0407222213
0.181 MMBtu/hr Raypak Spa Heater, M/N RP2100 C-R185B, S/N 0407222214
0.181 MMBtu/hr Raypak Spa Heater, M/N RP2100 C-R185B, S/N 0407222215
0.181 MMBtu/hr Raypak Spa Heater, M/N RP2100 C-R185B, S/N 0407222216
0.266 MMBtu/hr Raypak Low-NO_x Boiler, M/N: C-R267A-EN-C, S/N: 0412229238 (formerly BE20)
0.264 MMBtu/hr Raypak Low-NO_x Boiler, M/N: C-R265AL-EN, S/N: 0304207824 (formerly BE31)
Carpentry Shop with Aget Dust Collector, M/N: FT64-SP & 90B70-SP, S/N: 1792 & 912
Carpentry Shop with Torit Dust Collector, M/N: VS2400, S/N: IG465155
Cosmopolitan
0.984 MMBtu/hr Power Flame Natural Gas-Fired Air Handler, M/N: JR30A12HTD, S/N: 010871690
0.984 MMBtu/hr Power Flame Natural Gas-Fired Air Handler, M/N: JR30A12HTD, S/N: 010871689
0.984 MMBtu/hr Power Flame Natural Gas-Fired Air Handler, M/N: JR30A12HTD, S/N: 010871691
GFS Spray Booth, M/N: IFPG-120824-S-RM-S