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PART 70 OPERATING PERMIT TECHNICAL SUPPORT DOCUMENT (STATEMENT of BASIS)

**APPLICATION FOR:
Significant Revision**

Application Received: November 14, 2023

SUBMITTED BY:
Broadbent & Associates, Inc.

FOR:
Caesars Entertainment, Inc., Caesars Consolidated Properties
Source: 00257

LOCATION:
One Caesars Palace Drive
Las Vegas, Nevada 89109

SIC Code 7011, "Hotels and Motels"
NAICS Code 721120, "Casino Hotels"

TSD Date: September 25, 2024

EXECUTIVE SUMMARY

Caesars Entertainment, Inc., Caesars Consolidated Properties is the operator of multiple gaming and lodging facilities located in Hydrographic Area 212 (the Las Vegas Valley). Hydrographic Area 212 is designated as attainment for all regulated air pollutants except ozone and was designated a moderate nonattainment area for ozone on January 5, 2023. The designation has not imposed any new requirements at this time. HA 212 is also subject to a maintenance plan for the CO and PM₁₀ NAAQS.

Caesars owns and operates several adjacent and contiguous hotels and casinos grouped under SIC Code 7011, “Hotels and Motels” and NAICS Code 721120, “Casino Hotels”. The source operates eleven facilities consisting of natural gas-fired boilers, diesel-powered generators, cooling towers, and a gasoline dispensing facility. Insignificant emission units include natural gas-fired boilers and water heaters, spray booths, woodworking operations, media blasting operations, and diesel storage tanks. The source operates a combination of fossil-fuel boilers with a cumulative heat-input rating exceeding 250 million Btu per hour, which classifies it as a categorical source under AQR 12.2.2(j).

Caesars Entertainment, Inc. is a major source for NO_x, CO, and GHG, and a minor source for all other regulated pollutants. The source is subject to 40 CFR Part 60, Subparts Dc and IIII and 40 CFR Part 63, Subparts ZZZZ and CCCCCC.

The following table summarizes the source potential to emit for each regulated air pollutant from all emission units addressed by this Part 70 Operating Permit:

Table 1: Source Potential To Emit and Program Applicability

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAPs	GHG ¹
Source PTE (ton/year)	70.36	70.36	439.96	186.97	2.29	27.23	5.92	354,845.18
Applicability Emissions (ton/yr)	76.13	74.30	442.33	189.96	2.34	30.27	7.34	356,771.93
Major Source Thresholds (Title V)/Categorical	100	100	100	100	100	100	10/25 ²	75,000
Major Stationary Source Threshold (Nonattainment)			100			100		

¹GHG expressed as CO₂e.

²10 tons for any individual HAP or 25 tons for combination of all HAPs.

DAQ will continue to require the sources to estimate their GHG potential to emit in terms of each individual pollutant (CO₂, CH₄, N₂O, SF₆). The TSD includes these PTEs for informational purposes.

DAQ has received delegated authority from the U.S. Environmental Protection Agency to implement the requirements of the Part 70 OP. Based on the information submitted by the applicant, supplemental information provided to the application, and a technical review performed by DAQ staff, the draft Part 70 OP is proposed.

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I. ACRONYMS AND ABBREVIATIONS

TR	Term
AQR	Clark County Air Quality Regulation
AST	aboveground storage tank
Avgas	aviation gasoline
BACT	Best Available Control Technology
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
MACT	Maximum Achievable Control Technology
MMBtu/hr	Millions of British Thermal Units per Hour
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	nitrogen oxides
NSPS	New Source Performance Standard
NSR	New Source Review
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
RACT	Reasonably Available Control Technology
RICE	reciprocating internal combustion engine
SCC	source classification code
SDS	Safety Data Sheet
SIP	State Implementation Plan
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
UST	underground storage tank
VOC	volatile organic compound

II. SOURCE DESCRIPTION

A. PROCESS DESCRIPTION

Caesars Entertainment, Inc., Caesars Consolidated Properties operates multiple resort hotels and casinos. The properties that have been consolidated for this permit are identified in Table II-A-1.

Table II-A-1: Caesars Entertainment, Inc. Property Identification

Harrah's Las Vegas , 3475 S. Las Vegas Blvd.	The LINQ Hotel & Casino , 3535 S. Las Vegas Blvd.
Flamingo Las Vegas , 3555 S. Las Vegas Blvd.	Planet Hollywood , 3667 S. Las Vegas Blvd.
Horseshoe Las Vegas , 3645 S. Las Vegas Blvd.	LINQ Complex - High Roller , 3545 S. Las Vegas Blvd.
Caesars Palace , 3570 S. Las Vegas Blvd.	Battista's , 4041 Audrie St.
The Cromwell Las Vegas , 3595 S. Las Vegas Blvd.	Forum Meeting Center , 3911 Koval Lane
Paris Las Vegas , 3655 S. Las Vegas Blvd.	

B. PERMITTING ACTION

This is a significant revision to an AQR 12.5 operating permit. The permittee requested to revise the burner ratings for three existing natural gas-fired boilers (EUs: IP01 – IP03). Previous permits required these units to be equipped with burners rated at 40.2 ppm for NO_x. The application states that the units were never equipped with low-NO_x burners. This requires a significant revision pursuant to AQR 12.5.2.14(a)(1)(C). Other requests contained in the application include the following:

- Replace the 1.5 MMBtu/hr natural gas-fired boiler identified as EU: CP25, located at Caesars Palace Hotel, with a like-in-kind replacement. The new boiler is the same make and model, with the exact heat-input rating and annual PTE. The emission unit identifier has been retained.
- Remove the 2,848 hp diesel-powered emergency generator identified as EU: PA37, located at the Paris Hotel.
- Increase the NO_x burner ratings from 40 to 120 ppm for the three 1.25 MMBtu/hr natural gas-fired boilers identified as EUs: IP01, IP02, and IP03, located at the Linq hotel. The application included a letter from Pyro Combustion and Controls which states the three boilers are atmospheric units that cannot meet the NO_x requirements for a burner rating of 40 ppm.

Revised GHG calculations were submitted by the permittee on March 27, 2024. These calculations have been included in the current permitting action.

Revisions Not Requested by the Permittee

The PTE calculations for all emission units operated by the source were reviewed and updated with this permitting action. This was done to correct the DES Excel spreadsheet for this source to correct inaccuracies, and to be consistent with the current permitting action. The updated calculations varied slightly for the cooling towers that are identified in Table II-B-1. The source PTE for particulate matter has been revised accordingly.

Table II-B-1: PTE Revisions for Cooling Towers

EU	Old PTE (PM ₁₀ & PM _{2.5})	Revised PTE (PM ₁₀ & PM _{2.5})	Difference (tpy)
FL28	2.49 tpy	2.47 tpy	-0.02
CP19a	2.76 tpy	2.74 tpy	-0.02
CP19b	2.76 tpy	2.74 tpy	-0.02
CP19c	2.76 tpy	2.74 tpy	-0.02
CP20	1.49 tpy	1.48 tpy	-0.01
CP21	1.49 tpy	1.48 tpy	-0.01
CP22	1.49 tpy	1.48 tpy	-0.01
PA19	1.23 tpy	1.22 tpy	-0.01
PA20	1.23 tpy	1.22 tpy	-0.01
PA21	1.23 tpy	1.22 tpy	-0.01
PA22	1.23 tpy	1.22 tpy	-0.01
PA23	1.23 tpy	1.22 tpy	-0.01
PH14	8.65 tpy	8.60 tpy	-0.05
LI08	1.56 tpy	1.55 tpy	-0.01
LI09	1.56 tpy	1.55 tpy	-0.01
LI10	1.56 tpy	1.55 tpy	-0.01
Total			-0.24

The consultant for this source conducted a site review for all properties. In response to that review, supplemental information was submitted on May 13, 2024, requesting the following revisions:

Harrah's

- Add six insignificant diesel fuel storage tanks. Refer to Table 11-3 in operating permit for volumes.

Flamingo

- Add three insignificant diesel fuel storage tanks. Specific volumes undetermined.

Horseshoe

- Update engine model numbers for EUs: BA11 and BA12.
- Update capacity for diesel UST (insignificant activity).
- Add seven insignificant diesel fuel storage tanks. Refer to Table 11-3 in operating permit for volumes.

Cromwell

- Add a dust collector as an insignificant activity.

Caesars Palace

- Combine EUs: C19a, C19b, and C19c as one emission unit (EU: CP19). This is a 3-cell cooling tower. Previous permitting actions erroneously identified each cell as being capable of operating independently. There is no change to the annual PTE with this revision.
- Redefine EUs: CP20, CP21, and CP22. Each of these units were previously described as having one cell rated at 5,700 gpm. These are actually 3-cell units (1,917 gpm each) that cannot operate independently. The total gpm for each unit, and the annual PTE, remain unchanged.

- Combine EUs: C30a and C30b as one emission unit (EU: CP30). This is a 2-cell cooling tower. Previous permitting actions erroneously identified each cell as being capable of operating independently. There is no change to the annual PTE with this revision.
- Remove two 0.400 MMBtu Pentair pool heaters from list of insignificant activities.
- Update model and serial numbers for two 0.199 MMBtu/hr Lochinvar water heaters (insignificant activities).
- Add eleven insignificant diesel fuel storage tanks. Refer to Table 11-3 in operating permit for volumes.

Paris

- Update description of EU: PA30 from pool heater to boiler.
- Remove two insignificant 0.39 MMBtu boilers.
- Add four insignificant boilers. Refer to Table 11.3 in operating permit for heat input ratings.
- Add two 100 gallon diesel storage tanks.

Linq

- Add five insignificant diesel fuel storage tanks. Refer to Table 11-3 in operating permit for volumes.

Planet Hollywood

- Reinstate two 1.75 MMBtu boilers (EUs: PH03 and PH04). The permittee requested these boilers be removed in a minor revision application submitted on March 17, 2017. The boilers were taken out of service with plans to remove them from the property. They are currently in service and have been reintroduced into the permit with the original EU identifiers.
- Update the heat input ratings for EUs: PH07 through PH09 from 23.65 to 23.60 MMBtu/hr. The PTE has been revised accordingly.
- Update the Model Number for EU: PH14.
- Remove two insignificant 0.39 MMBtu boilers.
- Add nine insignificant diesel fuel storage tanks. Refer to Table 11-3 in operating permit for volumes.

III. EMISSIONS INFORMATION

A. EMISSION UNIT LIST

Table III-A-1 lists the emission units associated with this Part 70 OP.

Table III-A-1: Emission Unit List

EU	Description	Rating	Make	Model No.	Serial No.	SCC
Harrah's						
HA06	Natural Gas Boiler	4.50 MMBtu/hr	Bryan	RV450-S-150-FDG	66726 (#5)	10300603
HA07	Natural Gas Boiler	9.0 MMBtu/hr	Bryan	LM900-S-15-FDG	66665 (#4)	10300603
HA08	Natural Gas Boiler	8.369 MMBtu/hr	Cleaver Brooks	CB.200-200	L-70272 (#1)	10300603
HA09	Natural Gas Boiler	8.369 MMBtu/hr	Cleaver Brooks	CB.200-200	L-70271 (#2)	10300603
HA10	Natural Gas Boiler	8.369 MMBtu/hr	Cleaver Brooks	CB.200-200	L-70270 (#3)	10300603
HA11	Natural Gas Boiler	4.80 MMBtu/hr	Universal Energy	BF108C	10341-1 (#6)	10300603
HA12	Fire Pump	276 kW	Fairbanks Morse	5922F	3T1-020216	20300101
	Diesel Engine; DOM: Pre-2006	370 hp	Caterpillar	3406BD1	6TB06046	
HA13	Emergency Generator	800 kW	Marathon Electric	573RSL2056A-P266W	VE3575357	20300101
	Diesel Engine; DOM: Pre-2006	1,232 hp	Detroit Diesel	81637416	16VF007962	
HA14	Emergency Generator	600 kW	Caterpillar	SR4	6FA06166	20300101
	Diesel Engine; DOM: Pre-2006	890 hp		3412	81Z09924	
HA15	Emergency Generator	400 kW	Magna One	502FDR8056AB-L000W	KK-95206-3	20300101
	Diesel Engine; DOM: Pre-2006	536 hp	Detroit Diesel	71237305	12VA069124	
HA16	Emergency Generator	400 kW	Magna One	502FDR8056AB-L000W	KK-95206-1	20300101
	Diesel Engine; DOM: Pre-2006	536 hp	Detroit Diesel	71237305	12VA069593	
HA17	Emergency Generator	400 kW	Magna One	502FDR8056AB-L000W	KK-95206-2	20300101
	Diesel Engine; DOM: Pre-2006	536 hp	Detroit Diesel	71237305	12VA066655	
HA18	Emergency Generator	800 kW	Caterpillar	SR-4B	7AJ00864	20300101
	Diesel Engine; DOM: 1996	1,180 hp		3412	2WJ00740	
HA26	Cooling Tower, 2-Cells	5,200 gpm	Evapco	USS 244-3O18	17-830216	38500101
HA27	Cooling Tower, 2-Cells	5,200 gpm	Evapco	USS 244-3O18	17-830217	38500101
HA28	Cooling Tower, 2-Cells	5,200 gpm	Evapco	USS 244-3O18	17-830218	38500101
Flamingo						
FL01	Natural Gas Boiler	14.343 MMBtu/hr	Johnston	8786	9180-01	10300602
FL02	Natural Gas Boiler	14.645 MMBtu/hr	Kewanee	H3S-350-G	10016	10300602

EU	Description	Rating	Make	Model No.	Serial No.	SCC
FL03	Natural Gas Boiler	14.645 MMBtu/hr	Kewanee	H3S-350-G	10017	10300602
FL04	Natural Gas Boiler	14.645 MMBtu/hr	Kewanee	H3S-350-G	10476	10300602
FL05	Natural Gas Boiler	8.165 MMBtu/hr	Cleaver Brooks	CBI 700-200-150	0L104650	10300603
FL06	Fire Pump	313 kW	Fairbanks Morse	5922	K3P1017265	20300101
	Diesel Engine; DOM: Pre-2006	420 hp	Caterpillar	3406	6TB02994	
FL09	Emergency Generator	750 kW	Caterpillar	SR4B	6EJ01215	20300101
	Diesel Engine; DOM: 1999	1,109 hp		3412	2WJ02515	
FL10	Emergency Generator	750 kW	Caterpillar	SR4B	6EJ01238	20300101
	Diesel Engine; DOM: 1999	1,109 hp		3412	2WJ02570	
FL11	Emergency Generator	475 kW	Caterpillar	SR4	6EA01398	20300101
	Diesel Engine; DOM: Pre-2006	724 hp		3412	81Z08892	
FL26	Emergency Generator	600 kW	Caterpillar	LC7	G7A03394	20300101
	Diesel Engine; DOM: 2010	923 hp		C18	EST01182	
FL28	Cooling Tower, 4-cells	9,600 gpm	Marley	NC8411TAN4BGF	10050562-(A1-A4)	38500101
FL29	Cooling Tower, 2-Cells	3,800 gpm	Evapco	USS 244-3N18	17-833834	38500101
FL30	Cooling Tower, 2-Cells	3,800 gpm	Evapco	USS 244-3N18	17-833835	38500101
FL31	Cooling Tower, 2-Cells	3,800 gpm	Evapco	USS 244-3N18	17-833836	38500101
Horseshoe						
BA01	Natural Gas Boiler	16.8 MMBtu/hr	Kewanee	H3S-750-G02	NB-24935	10300602
BA02	Natural Gas Boiler	16.8 MMBtu/hr	Kewanee	H3S-750-G02	NB-25232	10300602
BA03	Natural Gas Boiler	25.106 MMBtu/hr	Kewanee	H3S-750-G02	NB-24875	10300602
BA04	Emergency Generator (#1)	1,000 kW	Magna One	682FDR8080AB-P667W	LD95982-1	20300101
	Diesel Engine; DOM: Pre-2006	1,340 hp	Detroit Diesel	9163-7305	16E0006591	
BA05	Emergency Generator (#2)	1,000 kW	Magna One	682FDR8080AB-P667W	LD-95982-2	20300101
	Diesel Engine; DOM: Pre-2006	1,340 hp	Detroit Diesel	9163-7305	16E0006592	

EU	Description	Rating	Make	Model No.	Serial No.	SCC
BA06	Emergency Generator	500 kW	Magna One	500SR9E	66111	20300101
	Diesel Engine; DOM: Pre-2006	670 hp	Detroit Diesel	7163-7305	16VA7496	
BA07	Emergency Generator	155 kW	Magna One	440FDR8024GG-H000W	LD-94032	20300101
	Diesel Engine; DOM: Pre-2006	200 hp	Detroit Diesel			
BA11	Emergency Generator (#3)	1,000 kW	Detroit Diesel	1000 DS	600214	20300101
	Diesel Engine; DOM: Pre-2006	1,340 hp		L18107	24VA001710	
BA12	Emergency Generator (#4)	1,000 kW	Detroit Diesel	1000 DS	600215	20300101
	Diesel Engine; DOM: Pre-2006	1,340 hp		L18127	24VA001728	
BA17	Fire Pump	526 hp	Clarke	JX6H-UFADK0-D	RG6135L023246	20300101
	Diesel Engine; DOM: 06/2011		John Deere	6135HFC48A		
BA18	Fire Pump	526 hp	Clarke	JX6H-UFADK0-D	RG6135L022100	20300101
	Diesel Engine; DOM: 04/2011		John Deere	6135HFC48A		
BA19	Cooling Tower 3 cells	18,000 GPM	Evapco	USS 314-4O72	16-804451	38500101
BA20	Cooling Tower; 3 cells	18,000 GPM	Evapco	USS314-4O72	16-804450	38500101
Cromwell						
CR01	Natural Gas Boiler	3.0 MMBtu/hr	Lochinvar	FBN3000	G13H00252062	10300603
CR02	Natural Gas Boiler	3.0 MMBtu/hr	Lochinvar	FBN3000	G13H00252063	10300603
CR03	Natural Gas Boiler	3.0 MMBtu/hr	Lochinvar	FBN3000	G13H00252141	10300603
CR04	Natural Gas Boiler	3.0 MMBtu/hr	Lochinvar	FBN3000	G13H00252065	10300603
CR05	Natural Gas Boiler	3.0 MMBtu/hr	Lochinvar	FBN3000	G13H00251706	10300603
CR06	Natural Gas Boiler	3.0 MMBtu/hr	Lochinvar	FBN3000	G13H00252064	10300603
CR07	Emergency Generator	1,500 kW	Caterpillar	SR4B-GD	G4W01097	20300101
	Diesel Engine; DOM: 2013	2,206 hp		3512C	EBG01274	
CR08	Emergency Generator	150 kW	Caterpillar	D150-8	CAT00C66ALC600121	20300101
	Diesel Engine; DOM: 2013	275 hp		C6.6	E6L00768	

EU	Description	Rating	Make	Model No.	Serial No.	SCC
CR09	Cooling Tower, 3-cell	5,850 gpm	Evapco	USS-312-936	13-541894	38500101
Caesars Palace						
CP01	Natural Gas Boiler	35.40 MMBtu/hr	Hurst	S4-G-800-150	S4000-150-18	10300602
CP02	Natural Gas Boiler	35.40 MMBtu/hr	Hurst	S4-G-800-150	S4000-150-19	10300602
CP03	Natural Gas Boiler	33.475 MMBtu/hr	Burnham	3P80050GBNM	12524	10300602
CP04	Natural Gas Boiler	33.475 MMBtu/hr	Burnham	3P80050GBNM	12164	10300602
CP05	Natural Gas Boiler	33.475 MMBtu/hr	Burnham	3P80050GBNM	12238	10300602
CP13	Emergency Generator DOM: 3/5/1997	2,000 kW	Caterpillar	SR-4B	8DM00558	20300101
		2,876 hp		3516	6HN00155	
CP14	Emergency Generator DOM: 3/3/1997	2,000 kW	Caterpillar	SR-4B	8DM00557	20300101
		2,876 hp		3516	6HN00154	
CP15	Emergency Generator DOM: 08/14/1996	1,750 kW	Caterpillar	SR-4B	7GM00534	20300101
		2,520 hp		3516	25Z05223	
CP16	Emergency Generator DOM: 04/18/1995	1,250 kW	Caterpillar	SR4	4DM00503	20300101
		1,818 hp		3512	24Z06413	
CP17	Emergency Generator DOM: 12/10/1997	2,000 kW	Caterpillar	SR-4B	8DM00625	20300101
		2,876 hp		3516	6HN00199	
CP19	Cooling Tower; 3 Cells (10,650 gpm each)	31,950 gpm	Baltimore Aircoil	4469-20-3W	92-4G-6184-P4	38500101
CP20	Cooling Tower; 3 Cells (1,917 gpmeach)	5,750 gpm	Baltimore Aircoil	3725A3	U040665201MAD	38500101
CP21	Cooling Tower; 3 Cells (1,917 gpm each)	5,750 gpm	Baltimore Aircoil	3725A-4	U040665202MAD	38500101
CP22	Cooling Tower; 3 Cells (1,917 gpm each)	5,750 gpm	Baltimore Aircoil	3725A-5	U040665203MAD	38500101
CP24	Natural Gas Boiler	1.5 MMBtu/hr	RBI Futera	FW1500	120644885	10300603
CP25 ¹	Natural Gas Boiler	1.5 MMBtu/hr	RBI Futera	FW1500	042393736	10300603
CP26	Natural Gas Boiler	24.0 MMBtu/hr	Unilux	ZF2500W-1-300/400	A1683	10300602

EU	Description	Rating	Make	Model No.	Serial No.	SCC
CP27	Natural Gas Boiler	24.0 MMBtu/hr	Unilux	ZF2500W-1-300/400	A1684	10300602
CP28	Emergency Generator DOM: 2008	2,000 kW	Caterpillar	SR4B HV	G3X00133	20300101
		2,937 hp		3516CDITA	SBJ00672	
CP29	Emergency Generator DOM: 2008	2,000 kW	Caterpillar	SR4B HV	G3X00229	20300101
		2,937 hp		3516CDITA	SBJ00673	
CP30	Cooling Tower; 2 cells (5,600 gpm each)	11,20 gpm	Composite Cooling Solutions	FT-2828-75-P6IL	CT-7	38500101
CP32	Aboveground Storage Tank	1,000-gallon	Fireguard	MWCFG		40600306
CP34	Diesel Fire Pump; DOM: Post-2006	525 hp	Clarke Fire Pump	JX6H-UF60	FPVT-C084983-002	20300101
			John Deere	6125HF070	RG6125H063341	
CP35	Diesel Fire Pump; DOM: Post-2006	525 hp	Clarke Fire Pump	JX6H-UF60	FPVT-C084983-001	20300101
			John Deere	6125HF070	RG6125H063339	
CP37	Natural Gas Pool Heater	1.5 MMBtu/hr	RBI Futera II	FW-1500	101984123	10300603
Paris						
PA12	Natural Gas Boiler #4	3.5 MMBtu/hr	Bryan	RV350S-150-FDG-LX	81362	10300603
PA13	Natural Gas Boiler #5	3.5 MMBtu/hr	Bryan	RV350S-150-FDG-LX	81349	10300603
PA14	Natural Gas Boiler #3	17.0 MMBtu/hr	Bryan	RW1700W-FDG-LX	81458	10300603
PA15	Natural Gas Boiler #1	21.0 MMBtu/hr	Bryan	RW2100W-FDG-LX	81444	10300603
PA16	Natural Gas Boiler #2	21.0 MMBtu/hr	Bryan	RW2100W-FDG-LX	81457	10300603
PA17	Emergency Generator #1 DOM: 03/25/1998	2,100kW	Cummins	QSW73	79652	20300101
		2,816 hp		CW73-G	66300058	
PA18	Emergency Generator #2 DOM: 02/26/1998	2,100kW	Cummins	QSW73	79651	20300101
		2,816 hp		CW73-G	66300040	
PA19	2-Cell Cooling Tower #1	4,725 gpm	Baltimore Aircoil	33758-2W	97221981 & 97222002	38500101
PA20	2-Cell Cooling Tower #2	4,725 gpm	Baltimore Aircoil	33758-2W	97222011 & 97222001	38500101
PA21	2-Cell Cooling Tower #3	4,725 gpm	Baltimore Aircoil	33758-2W	97222021 & 97221992	38500101
PA22	2-Cell Cooling Tower #4	4,725 gpm	Baltimore Aircoil	33758-2W	97221991 & 97222012	38500101
PA23	2-Cell Cooling Tower #5	4,725 gpm	Baltimore Aircoil	33758-2W	97222022 & 97221982	38500101

EU	Description	Rating	Make	Model No.	Serial No.	SCC
PA28	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	0409522881	10300603
PA29	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	092086486	10300603
PA30	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	092086497	10300603
PA31	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	071983421	10300603
PA32	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	021261112	10300603
PA33	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	121160719	10300603
PA34	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	011260847	10300603
PA35	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	021982198	10300603
PA36	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	051570836	10300603
Linq						
IP01	Natural Gas Boiler	1.25 MMBtu/hr	Ajax	WG-1250 D	82-34510	10300603
IP02	Natural Gas Boiler	1.25 MMBtu/hr	Ajax	WG-1250 D	82-34507	10300603
IP03	Natural Gas Boiler	1.25 MMBtu/hr	Ajax	WG-1250 D	82-34502	10300603
IP04	Natural Gas Boiler	16.738 MMBtu/hr	Kewanee	H3S 400HP	R8190	10300603
IP05	Natural Gas Boiler	16.738 MMBtu/hr	Kewanee	H3S 400-G0	R8191	10300603
IP06	Emergency Generator	470 kW	Caterpillar	SR4	6EA00547	20300101
	Diesel Engine; DOM: Pre-2006	680 hp		3412	81Z01351	
IP07	Emergency Generator	500 kW	Caterpillar	SR4	5NA05002	20300101
	Diesel Engine; DOM: Pre-2006	755 hp		3412	81Z04033	
IP08	Emergency Generator	600 kW	Caterpillar	SR4	6FA04856	20300101
	Diesel Engine; DOM: Pre-2006	890 hp		3412	81Z07511	
IP09	Emergency Generator	600 kW	Caterpillar	SR4	6FA05404	20300101
	Diesel Engine; DOM: Pre-2006	890 hp		3412	81Z08595	
IP10	Emergency Generator	280 kW	E.M. Generator	7083-7305	263120414	20300101
	Diesel Engine; DOM: Pre-2006	375 hp	Detroit			

EU	Description	Rating	Make	Model No.	Serial No.	SCC
IP11	Emergency Generator DOM: Pre-2006	500 kW	Marathon Electric	580FDF4036FFP D1W	JB-95613	20300101
		670 hp	Detroit	71637305	16VA015737	
IP38	Emergency Generator DOM: 2019	500 kW	Caterpillar	LC6	G6B25666	20300101
		762 hp	Caterpillar	C15	FTE04081	
Planet Hollywood						
PH03 ^N	Natural Gas Boiler	1.75 MMBtu/hr	RBI	FW1750	080850764	10300603
PH04 ^N	Natural Gas Boiler	1.75 MMBtu/hr	RBI	FW1750	050849828	10300603
PH07	Natural Gas Boiler	23.60 MMBtu/hr	Unilux	ZF2000W	2339	10300603
PH08	Natural Gas Boiler	23.60 MMBtu/hr	Unilux	ZF2000W	2340	10300603
PH09	Natural Gas Boiler	23.60 MMBtu/hr	Unilux	ZF2000W	2341	10300603
PH10	Genset – Emergency Engine – Diesel DOM: 1999	1,750 kW	Spectrum	1750DS4	0628031	20300101
		2,550 hp	MTU/Detroit Diesel	T1637K16	5272000427	
PH11	Genset – Emergency Engine – Diesel DOM: 1999	1,750 kW	Spectrum	1750DS4	0628032	20300101
		2,550 hp	MTU/Detroit Diesel	T1637K16	5272000397	
PH12	Genset – Emergency Engine – Diesel DOM: 1999	1,750 kW	Spectrum	1750DS4	0628033	20300101
		2,550 hp	MTU/Detroit Diesel	T1637K16	5272000421	
PH13	Genset – Emergency Engine – Diesel DOM: 2008	1,750 kW	MTU	1750RXC6DT2	301122-1-1-1208	20300101
		2,560 hp	MTU/Detroit Diesel	T1238A36	5262003725	
PH14	6-Cell Cooling Tower	33,360 gpm	Baltimore Aircoil Company	PCS50-2424-10	PC2429	38500101
High Roller						
LI01	Natural Gas Boiler	5.0 MMBtu/hr	CAMUS	DNRH-5000-MSI	041215509	10300603
LI02	Natural Gas Boiler	5.0 MMBtu/hr	CAMUS	DNRH-5000-MSI	041215507	10300603
LI03	Natural Gas Boiler	5.0 MMBtu/hr	CAMUS	DNRH-5000-MSI	041215508	10300603
LI04	Natural Gas Boiler	5.0 MMBtu/hr	CAMUS	DNRH-5000-MSI	041215506	10300603
LI05	Natural Gas Boiler	5.0 MMBtu/hr	CAMUS	DNRH-5000-MSI	041215505	10300603

EU	Description	Rating	Make	Model No.	Serial No.	SCC
LI06	Emergency Generator DOM: 2012	2,000 kW	Caterpillar	SR4B-GD	G4Z00115	20300101
		2,937 hp		3516C	SBJ01461	
LI07	Emergency Generator DOM: 2012	2,000 kW	Caterpillar	SR4B-GD	G4Z00116	20300101
		2,937 hp		3516C	SBJ01460	
LI08	Cooling Tower, 2 cell	6,000 gpm	Marley	NC8413VAN2BGF	NC-10054867-B1&B2	38500101
LI09	Cooling Tower, 2 cell	6,000 gpm	Marley	NC8413VAN2BGF	NC-10054867-C1&C2	38500101
LI10	Cooling Tower, 2 cell	6,000 gpm	Marley	NC8413VAN2BGF	NC-10054867-A1&A2	38500101
LI12	Emergency Engine DOM: 11/2012	180 kW	Deutz	TCD 6.1 L6	11360110	20300101
		241 hp				
LI13	Emergency Engine DOM: 11/2012	180 kW	Deutz	TCD 6.1 L6	11353814	20300101
		241 hp				
Forum Meeting Center						
FMC01	Natural Gas Boiler	6.00 MMBtu/hr	Lochinvar	FBN6001	1847112615299	10300603
FMC02	Natural Gas Boiler	6.00 MMBtu/hr	Lochinvar	FBN6001	1847112615300	10300603
FMC03	Natural Gas Boiler	6.00 MMBtu/hr	Lochinvar	FBN6001	1847112615301	10300603
FMC04	Natural Gas Boiler	6.00 MMBtu/hr	Lochinvar	FBN6001	1847112615298	10300603
FMC05	Emergency Generator DOM: 1/21/2019	1,000 kW	Cummins	DQFAD-A061Y200	B190508151	20300101
		1,490 hp		QST30	37277632	
FMC06	Cooling Tower, 2-Cell	2,400 gpm/cell	Evapco	USS224-4P20	18-849683	38500101
FMC07	Cooling Tower, 2-Cell	2,400 gpm/cell	Evapco	USS224-4P20	18-849684	38500101

¹Like-in-kind replacement

Note: The "N" and "M" superscripts denote modified emission units.

B. APPLICABILITY EMISSIONS

Permitting applicability is determined by calculating the emissions for all proposed emission units using 8,760 hours of operation (except for emergency generators or fire pumps, which use 500 hours), any inherent controls, any inherent throughput limitations, and the emission factors provided by the manufacturer, by source test results, by EPA AP-42, or by other approved methods.

Table III-B-1: Applicability Emissions Evaluation (tons per year)

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	H ₂ S	Pb	HAP	GHG ²
Applicability thresholds	5	5	5	25	25	5	1	0.3	N/A	

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	H ₂ S	Pb	HAP	GHG ²
Major source thresholds	100	100	100	100	100	100	N/A	100	10/25 ¹	75,000
Nonattainment NSR thresholds			100			100	N/A		N/A	
PSD thresholds	250	250		250	250		N/A	250	N/A	
Applicability emissions total	76.13	74.30	442.33	188.96	2.34	30.27	0	0	7.34	357674.76

¹10 tons for any single HAP, or 25 tons for any combination of HAP pollutants.

²In units of CO_{2e}

As Table III-B-1 shows, applicability emissions are above major source thresholds for NO_x, CO, and GHG pollutants which qualifies this source as a major source for the aforementioned pollutants. It is a minor source for all other regulated pollutants.

C. SOURCE-WIDE PTE

Table III-C-1: Source-wide PTE (tons per year)

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	H ₂ S	Pb	GHG
PTE	70.36	70.36	439.96	186.97	2.29	27.23	5.92	0	0	354,845.18

As shown in Table III-C-2, none of the regulated pollutants exceed the minor new source review (NSR) significance thresholds. Therefore, a RACT analysis is not required.

Table III-C-2: Emissions Increase (tons per year)

Description	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	GHG ¹
Current Permitting Action	70.36	70.36	439.96	186.97	2.29	27.23	5.92	354,845.18
Minor Revision Issued 07/06/2023	70.57	70.57	453.11	188.16	2.26	27.47	5.90	322,775.70
Difference	-0.21	-0.21	-13.15	-1.19	0.03	-0.24	0.02	32,069.48
Emissions Increase	0	0	0	0	0.03	0	0.02	32,069.48
AQR 12.5.1(d) Minor NSR Significance Levels	7.5	5.0	20	50	20	20		N/A
AQR 12.2.2(uu) Significance Thresholds	15	10	40	100	40	40	10	N/A
RACT/BACT Analysis Required	No	No	No	No	No	No	No	No

¹In units of CO_{2e}

D. OPERATIONAL LIMITS

There are no additional operational limitations associated with this permitting action. All operational limitations established with previous permitting actions remain enforceable.

E. CONTROL TECHNOLOGY

Compliance with permit requirements shall be met through the following:

1. Each boiler shall be operated with burners that have a manufacturer's maximum emission concentration of 120 parts per million (ppm) NO_x, corrected to 3 percent oxygen (EUs: IP01 – IP03).

2. The boiler shall be operated with burners that have a manufacturer's maximum emission concentration of 10 ppm for NO_x and 50 ppm for CO, corrected to 3 percent oxygen (EU: CP25).
3. Each boiler shall be operated with burners that have a manufacturer's maximum emission concentration of 9 ppm NO_x, corrected to 3% oxygen (EUs: PH03 and PH04).
4. Each boiler shall be operated with burners that have a manufacturer's maximum emission concentration of 50 ppm CO, corrected to 3% oxygen (EUs: PH03 and PH04).

All other BACT and RACT requirements established with previous permitting actions remain enforceable.

F. MONITORING

There are no additional monitoring requirements associated with this permitting action. All monitoring requirements established with previous permitting actions remain enforceable.

G. PERFORMANCE TESTING

There are no additional testing requirements associated with this permitting action. All testing requirements established with previous permitting actions remain enforceable.

IV. REGULATORY REVIEW

A. LOCAL REGULATORY REQUIREMENTS

There are no additional local regulatory requirements associated with this permitting action. All requirements established with previous permits remain applicable.

B. FEDERALLY APPLICABLE REGULATIONS

There are no additional applicable federal regulations associated with this permitting action. All requirements established with previous permits remain applicable.

V. COMPLIANCE

The permittee is required to monitor and keep records for all limitations specified in the permit.

VI. EMISSION REDUCTION CREDITS (OFFSETS)

The source is not subject to offset requirements.

VII. MODELING

Facility Location: 664450, 3998350 (Universal Transverse Mercator (UTM) NAD83)

Caesar's Entertainment Corporation is a major source in Hydrographic Area 212 (the Las Vegas Valley). Permitted emission units include 61 boilers, 49 generators and 28 cooling towers. Since minor source baseline dates for NO_x (October 21, 1988) and SO₂ (June 29, 1979) have been triggered, Prevention of Significant Deterioration (PSD) increment analysis is required.

DAQ modeled the source using AERMOD to track the increment consumption. Average actual emissions (2022-2023) were used in the NO_x modeling. Stack data submitted by the applicant were supplemented with information available for similar emission units. Five years (2011 to 2015) of meteorological data from the McCarran Station were used in the model. U.S. Geological Survey National Elevation Dataset terrain data were used to calculate elevations. Table VII-1 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

Table VII-1: PSD Increment Consumption

Pollutant	Averaging Period	Source's PSD Increment Consumption (µg/m ³)	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
SO ₂	3-hour	3.67 ¹	664450	3997650
SO ₂	24-hour	1.45 ¹	663850	3998650
SO ₂	Annual	0.78	663850	3998650
NO _x	Annual	5.38	663950	3998650

¹ Highest Second High Concentration.

VIII. ENVIRONMENTAL JUSTICE

The map and statistical tables included in this section were obtained from the EJ Screen website. As a means to obtain reasonable demographic data, a two mile radius from the center of the source was selected. The area within this circle equates to 12.56 square miles and represents a residential population of 52,655. The proposed modification results in less than one ton of total emissions for all criteria pollutants. As a result, this permitting action will not have an adverse or disparate effect on an underserved population when compared to the general population of Las Vegas. Therefore, an extensive assessment wasn't performed.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	4
Water Dischargers	183
Air Pollution	10
Brownfields	2
Toxic Release Inventory	8

Other community features within defined area:

Schools	7
Hospitals	1
Places of Worship	8

Other environmental data:

Air Non-attainment	Yes
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for 2 miles Ring Centered at 36.116368,-115.175009

Map of Selected Area



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	52%
Spanish	31%
French, Haitian, or Cajun	1%
Russian, Polish, or Other Slavic	1%
Other Indo-European	2%
Korean	1%
Chinese (including Mandarin, Cantonese)	3%
Vietnamese	1%
Tagalog (including Filipino)	5%
Other Asian and Pacific Island	2%
Other and Unspecified	2%
Total Non-English	48%

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	22%	20%	66	20%	73
Heart Disease	7.3	6.4	74	6.1	72
Asthma	10.9	10.3	72	10	75
Cancer	4.7	5.7	32	6.1	21
Persons with Disabilities	14.9%	13.2%	68	13.4%	65

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	5%	6%	66	12%	39
Wildfire Risk	0%	33%	0	14%	0

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	26%	13%	85	14%	84
Lack of Health Insurance	23%	12%	90	9%	94
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	6.58	5.65	82	8.08	13
Ozone (ppb)	66.5	64.1	94	61.6	83
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.91	0.446	94	0.261	97
Air Toxics Cancer Risk* (lifetime risk per million)	30	24	51	25	52
Air Toxics Respiratory HI*	0.45	0.34	51	0.31	70
Toxic Releases to Air	37	1,400	36	4,600	15
Traffic Proximity (daily traffic count/distance to road)	300	200	81	210	83
Lead Paint (% Pre-1960 Housing)	0.043	0.063	73	0.3	24
Superfund Proximity (site count/km distance)	0.0047	0.014	48	0.13	0
RMP Facility Proximity (facility count/km distance)	0.12	0.29	47	0.43	36
Hazardous Waste Proximity (facility count/km distance)	3.7	1.8	90	1.9	84
Underground Storage Tanks (count/km ²)	12	3.3	93	3.9	90
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.089	7	87	22	81
SOCIOECONOMIC INDICATORS					
Demographic Index	64%	41%	84	35%	86
Supplemental Demographic Index	25%	16%	85	14%	89
People of Color	75%	50%	79	39%	80
Low Income	54%	33%	83	31%	84
Unemployment Rate	8%	7%	66	6%	74
Limited English Speaking Households	17%	6%	89	5%	91
Less Than High School Education	21%	14%	75	12%	82
Under Age 5	5%	5%	56	6%	55
Over Age 64	13%	17%	45	17%	38
Low Life Expectancy	22%	20%	66	20%	73

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

IX. PERMIT SHIELD

The permittee did not request a permit shield.

X. PUBLIC PARTICIPATION

This permitting action is for a significant revision to an AQR 12.5 operating permit. As a result, public participation is required in accordance with AQR 12.5.2.17.

XI. ATTACHMENTS

Table X-1: Source PTE Summary (tons per year)

Property	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	GHG ¹
Harrah's	3.89	3.89	39.17	14.90	0.17	2.87	0.43	23,757.26
Flamingo	6.02	6.02	36.86	18.17	0.23	2.41	0.6	35,293.33
Horseshoe	4.95	4.95	47.05	13.22	0.23	2.66	0.57	32,170.43
Cromwell	0.97	0.97	9.14	4.05	0.08	0.78	0.14	9,933.93
Caesars	23.02	23.02	131.26	33.76	0.69	8.29	1.95	120,380.45
Paris	9.78	9.78	45.84	35.68	0.29	3.01	0.74	44,449.07
Linq	2.14	2.14	37.85	18.67	0.18	1.84	0.38	20,513.72
Planet Hollywood	12.62	12.62	63.78	37.74	0.24	3.45	0.66	40,996.31
High Roller	5.59	5.59	22.84	6.49	0.09	1.10	0.24	14,618.62
Forum Meeting Center	1.38	1.38	6.17	4.29	0.09	0.82	0.21	12,732.06
Total	70.36	70.36	439.96	186.97	2.29	27.23	5.92	354,845.18

¹GHG expressed as CO₂e.

Table X-2: Source Applicability Summary (tons per year)

Property	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	GHG ¹
Harrah's	3.89	3.89	39.17	14.9	0.17	2.87	0.43	23,757.26
Flamingo	6.02	6.02	36.86	18.17	0.23	2.41	0.6	35,293.33
Horseshoe	4.95	4.95	47.05	13.22	0.23	2.66	0.57	32,170.43
Cromwell	0.97	0.97	9.14	4.05	0.08	0.78	0.14	9,933.93
Caesars	23.02	23.02	131.26	33.76	0.69	8.29	1.95	120,380.45
Paris	9.78	9.78	45.84	35.68	0.29	3.01	0.74	44,449.07
Linq	2.14	2.14	37.85	18.67	0.18	1.84	0.38	20,513.72
Planet Hollywood	12.62	12.62	63.78	37.74	0.24	3.45	0.66	40,996.31
High Roller	5.59	5.59	22.84	6.49	0.09	1.1	0.24	14,618.62
Forum Meeting Center	1.38	1.38	6.17	4.29	0.09	0.82	0.21	12,732.06
Insignificant Activities	5.77	3.94	2.37	1.99	0.05	3.04	1.42	2829.58
Total	76.13	74.30	442.33	188.96	2.34	30.27	7.34	357674.76

¹GHG expressed as CO₂e.

Table X-3: PTE for Modified Natural Gas-Fired Boilers

EU#:	IP01, IP02, & IP03		Emission Factor (lb/mmBtu)	PTE (per unit)			
				lb/hr	lb/day	ton/yr	
Make:	Ajax						
Model:	WG-1250D		PM10	0.0075	0.01	0.23	0.04
S/N:	See Table III-A-1		PM2.5	0.0075	0.01	0.23	0.04
			NOx	0.1458	0.18	4.37	0.80
1.25	mmBtu/hr		CO	0.0821	0.10	2.46	0.45
24.0	hr/day		SO ₂	6.00E-04	0.01	0.02	0.01
8760	hr/yr		VOC	0.0054	0.01	0.16	0.03
			HAP	1.90E-03	0.01	0.06	0.01
Concentrations:	%O ₂		Lead	4.90E-07	6.13E-07	1.47E-05	2.68E-06
120	ppm NOx	3.0					
111	ppm CO	3.0					
Fuel:	Natural Gas						

Table X-4: PTE for Like-in-Kind Replacement Natural Gas-Fired Boiler

EU#:	CP25		Emission Factor (lb/mmBtu)	Potential Emissions (per unit)			
				lb/hr	lb/day	ton/yr	
Make:	RBI						
Model:	FW1500		PM10	0.0075	0.01	0.27	0.05
S/N:	42393736		PM2.5	0.0075	0.01	0.27	0.05
			NOx	0.0122	0.02	0.44	0.08
1.50	mmBtu/hr		CO	0.037	0.06	1.33	0.24
24.0	hr/day		SO ₂	6.00E-04	0.01	0.02	0.01
8760	hr/yr		VOC	0.0054	0.01	0.19	0.04
			HAP	1.900E-03	0.01	0.07	0.01
BACT:	%O ₂		Lead	4.90E-07	7.35E-07	1.76E-05	3.22E-06
10	ppm NOx	3.0					
50	ppm CO	3.0					
Fuel:	Natural Gas						

Table X-5: PTE for Natural Gas-Fired Boilers Reintroduced into Permit

EU#:	PH03 & PH04		Emission Factor (lb/mmBtu)	PTE (per unit)		
				lb/hr	lb/day	ton/yr
Make:	RBI					
Model:	FW1750		PM10	0.0075	0.01	0.06
S/N:	See Table III-A-1		PM2.5	0.0075	0.01	0.06
			NOx	0.0109	0.02	0.08
	1.75 mmBtu/hr		CO	0.0370	0.06	0.28
	24.0 hr/day		SO₂	6.00E-04	0.01	0.01
	8760 hr/yr		VOC	0.0054	0.01	0.04
			HAP	1.90E-03	0.01	0.01
Concentrations:		%O₂	Lead	4.90E-07	8.58E-07	2.06E-05
	9 ppm NOx	3.0				
	50 ppm CO	3.0				
Fuel:	Natural Gas					

Table X-6: PTE for Cooling Towers with Revised Values for this Permitting Action

EU	Drift Loss %	Flow Rate (gal/min)	TDS (mg/l)	Hours of Operation		PM10 ton/yr	PM2.5 ton/yr
				hr/day	hr/yr		
CP19a	0.005%	10,650	5000	24	8760	2.74	2.74
CP19b	0.005%	10,650	5000	24	8760	2.74	2.74
CP19c	0.005%	10,650	5000	24	8760	2.74	2.74
CP20	0.005%	5750	5000	24	8760	1.48	1.48
CP21	0.005%	5750	5000	24	8760	1.48	1.48
CP22	0.005%	5750	5000	24	8760	1.48	1.48
FL28	0.005%	9600	5000	24	8760	2.47	2.47
PA20	0.005%	4725	5000	24	8760	1.22	1.22
PA21	0.005%	4725	5000	24	8760	1.22	1.22
PA22	0.005%	4725	5000	24	8760	1.22	1.22
PA23	0.005%	4725	5000	24	8760	1.22	1.22
PH14	0.005%	33,360	5000	24	8760	8.60	8.60
LI08	0.005%	6000	5000	24	8760	1.55	1.55
LI09	0.005%	6000	5000	24	8760	1.55	1.55
LI10	0.005%	6000	5000	24	8760	1.55	1.55