



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

December 19, 2012

Mark Sedlacek  
Director of Environmental Affairs  
Los Angeles Department of Water and Power  
111 North Hope Street, Room 1050  
Los Angeles, CA 90012

Dear Mr. Sedlacek:

Please find attached the Title Page, Table of Contents, and the revised Section D of your Title V facility permit (ID# 800074). The revised permit reflects the approval of the Title V minor permit revision requested in your Title V application A/N541986, for the equipment at the Haynes Generating Station. The proposed permit was sent to EPA on October 26, 2012 for the 45-day review. The review period ended on December 11, 2012 with no comments from EPA. The following is a summary of the approved revisions:

Equipment	Application #	Device #	Process	Permit Type
SCR and CO catalyst for Boiler #1	541988	C73	1	PO
SCR and CO catalyst for Boiler #1	541989	C75	1	PO

Please review the attached Section D carefully, then insert the enclosed section into your Facility Permit and discard the earlier version. Questions concerning changes to your permit should be directed to Mr. Li Chen at (909) 396-2426.

Very truly yours,

Brian L. Yeh  
Senior Manager  
Mechanical, Chemical and Public Services  
Engineering & Compliance

#### Attachments

cc: Gerardo Rios, US EPA Region IX  
Ed Pupka, Compliance



## FACILITY PERMIT TO OPERATE

**LA CITY, DWP HAYNES GENERATING STATION  
6801 2ND ST  
LONG BEACH, CA 90803**

### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

Mohsen Nazemi, P.E.  
Deputy Executive Officer  
Engineering & Compliance



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
<b>System 1: BOILERS</b>					
BOILER, UNIT NO. 1, FUEL OIL, NATURAL GAS, COMBUSTION ENGINEERING, FRONT FIRED, AIR PREHEATED, WITH OXYGEN CONTENT CONTROL, 2240 MMBTU/HR WITH A/N: 410730	D1	C73 S96	NOX MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 5 PPMV (5A) [RULE 2009, 5-11-2001]; NOX: 12.37 LBS/1000 GAL FUEL OIL (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SO <sub>2</sub> : (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 500 PPMV FUEL OIL (5) [RULE 407, 4-2-1982]	A195.5, B59.1, D182.1, D371.1, E202.1, E204.1, E204.2, K171.1
GENERATOR, 230 MW					
INJECTOR, MAGNESIUM COMPOUNDS, FUEL OIL ADDITIVE SYSTEM					
SELECTIVE CATALYTIC REDUCTION, NO 1, TWO BABCOCK & WILCOX REACTORS, WITH 72 FULL MODULES AND 6 HALF MODULES. CATALYST VOLUME 3850 CU. FT., WIDTH: 19 FT 3 IN; HEIGHT: 23 FT 9 IN; LENGTH 9 FT 10 IN WITH A/N: 541988	C73	D1		NH <sub>3</sub> : 10 PPMV FUEL OIL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NH <sub>3</sub> : 20 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A99.1, D12.2, D12.3, D28.3, D29.8, E73.1, E179.1, E179.2
AMMONIA INJECTION, UNIT NO 1, TWO AMMONIA/AIR INJECTION GRIDS, EACH HAVING 1104 INJECTION NOZZLES	C74				

- (1) (1A) (1B) Denotes RECLAIM emission factor
  - (2) (2A) (2B) Denotes RECLAIM emission rate
  - (3) Denotes RECLAIM concentration limit
  - (4) Denotes BACT emission limit
  - (5) (5A) (5B) Denotes command and control emission limit
  - (6) Denotes air toxic control rule limit
  - (7) Denotes NSR applicability limit
  - (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
  - (9) See App B for Emission Limits
  - (10) See section J for NESHAP/MACT requirements
- Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
STACK, BOILER NO. 1 A/N: 410730	S96	D1			
BOILER, UNIT NO. 2, FUEL OIL, NATURAL GAS, COMBUSTION ENGINEERING, FRONT FIRING, AIR PREHEATED, WITH OXYGEN CONTENT CONTROL, 2240 MMBTU/HR WITH A/N: 410732	D4	C75 S97	NOX: MAJOR SOURCE**	CO: 2060 PPMV (5) [RULE 407, 4-2-1982], NOX: 5 PPMV (5A) [RULE 2009, 5-11-2001]; NOX: 12.37 LBS/1000 GAL FUEL OIL (1) [RULE 2012, 5-6-2005]; PM 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 500 PPMV FUEL OIL (5) [RULE 407, 4-2-1982]	A195.5, B59.1, D182.1, D371.1, E202.1, E204.1, E204.2, K171.1
INJECTOR, MAGNESIUM COMPOUNDS, FUEL OIL ADDITIVE SYSTEM					
GENERATOR, 230 MW					
SELECTIVE CATALYTIC REDUCTION, NO. 2, TWO BABCOCK & WILCOX REACTORS, WITH 72 FULL MODULES AND 6 HALF MODULES, CATALYST VOLUME 3850 CU. FT., WIDTH: 19 FT 3 IN; HEIGHT: 23 FT 9 IN; LENGTH: 9 FT 10 IN WITH A/N: 541989	C75	D4		NH3: 10 PPMV FUEL OIL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NH3: 20 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A99.1, D12.2, D12.3, D28.3, E73.1, E179.1, E179.2
AMMONIA INJECTION, UNIT NO. 2, TWO AMMONIA/AIR INJECTION GRIDS, EACH HAVING 1104 INJECTION NOZZLES	C76				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device



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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions <sup>*</sup> And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
STACK, BOILER NO. 2 A/N: 410732	S97	D4			
BOILER, UNIT NO. 5, FUEL OIL, NATURAL GAS, BABCOCK AND WILCOX, OPPOSED FIRING, SUPERCRITICAL, AIR PREHEATED, WITH OXYGEN CONTENT CONTROL, 3240 MMBTU/HR WITH A/N: 410734  GENERATOR, 343 MW  INJECTOR, MAGNESIUM COMPOUNDS, FUEL OIL ADDITIVE SYSTEM	D7	C77 S98	NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 5 PPMV (5A) [RULE 2009, 5-11-2001]; NOX: 12.37 LBS/1000 GAL FUEL OIL (1) [RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SO <sub>2</sub> : (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 500 PPMV FUEL OIL (5) [RULE 407, 4-2-1982]	A195.5, B59.1, D182.1, D371.1, E202.1, E204.1, E204.2, K171.1
SELECTIVE CATALYTIC REDUCTION, UNIT NO. 5, NOELL REACTOR, 3339 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 39 FT., HEIGHT: 30 FT.; LENGTH: 53 FT. 4 IN WITH A/N: 274319	C77	D7		NH <sub>3</sub> : 20 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NH <sub>3</sub> : 20 PPMV FUEL OIL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	D12.2, D12.3, D28.3, E73.1, E179.1, E179.2
AMMONIA INJECTION, UNIT NO. 5, AMMONIA/AIR INJECTION GRID, HAVING 480 INJECTION NOZZLES	C78				

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (3) Denotes RECLAIM concentration limit
- (4) Denotes BACT emission limit
- (5) (5A) (5B) Denotes command and control emission limit
- (6) Denotes air toxic control rule limit
- (7) Denotes NSR applicability limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (9) See App B for Emission Limits
- (10) See section J for NESHAP/MACT requirements

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The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
STACK, BOILER NO. 5 A/N: 410734	S98	D7			
BOILER, UNIT NO. 6, FUEL OIL, NATURAL GAS. BABCOCK AND WILCOX. OPPOSED FIRING, SUPERCRITICAL. AIR PREHEATED, STEAM PIPE ID: 6.17", OD: 10.75", WITH OXYGEN CONTENT CONTROL. 2510 MMBTU/HR WITH A/N: 471457  GENERATOR, RATED 261 MW, LIMITED TO 243 MW BY CEC  INJECTOR, MAGNESIUM COMPOUNDS, FUEL OIL ADDITIVE SYSTEM	D9	C79 S99	NOX MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982], NOX: 5 PPMV NATURAL GAS (5) [RULE 2009, 1-7-2005]; NOX: 12.37 LBS/1000 GAL FUEL OIL (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SO <sub>2</sub> : (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 500 PPMV FUEL OIL (5) [RULE 407, 4-2-1982]	B59.1, D182.1, D371.1, E193.5, E202.1, E204.1, E204.2, K171.1
SELECTIVE CATALYTIC REDUCTION, UNIT NO. 6. NOELL REACTOR, 3539 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 39 FT., HEIGHT: 30 FT., LENGTH: 53 FT. 4 IN WITH A/N: 274321  AMMONIA INJECTION, UNIT NO. 6, AMMONIA/AIR INJECTION GRID, HAVING 480 INJECTION NOZZLES	C79  C80	D9		NH <sub>3</sub> : 20 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NH <sub>3</sub> : 20 PPMV FUEL OIL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.2, D12.3, D28.3, E73.1, E179.1, E179.2, K40.4

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

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<b>Process 1: POWER GENERATION</b>					
STACK, BOILER NO. 6 A/N: 471457	S99	D9			
<b>System 2: TURBINES</b>					

- (1) (1A) (1B) Denotes RECLAIM emission factor
  - (2) (2A) (2B) Denotes RECLAIM emission rate
  - (3) Denotes RECLAIM concentration limit
  - (4) Denotes BACT emission limit
  - (5) (5A) (5B) Denotes command and control emission limit
  - (6) Denotes air toxic control rule limit
  - (7) Denotes NSR applicability limit
  - (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
  - (9) See App B for Emission Limits
  - (10) See section J for NESHAP/MACT requirements
- \*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.





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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
GENERATOR, HEAT RECOVERY STEAM  STEAM TURBINE, STEAM, UNIT NO. 8, COMMON TO GAS TURBINES NO. 9 AND NO. 10, 257 MW (AT 65 DEG. F)					
BURNER, DUCT, NATURAL GAS, LOCATED IN THE HRSG OF TURBINE NO. 9, 286.6 MMBTU/HR A/N: 517866	D129	C130	NOX: MAJOR SOURCE**	CO: 4 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.2 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart Da, 10-4-1991]; NOX: 2 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.03 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart Da, 10-4-1991]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]; PM: 11 LBS/HR (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.2 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart Da, 10-4-1991]; VOC: 2 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A63.3, A99.2, A99.3, A195.1, A195.2, A195.3, A327.1, A433.1, B75.1, D29.4, D29.5, D82.1, D82.2, D372.1, E57.1, E193.1, K40.3, K67.4

\* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate  
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit  
 (5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit  
 (7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
 (9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
STACK, SERVING UNIT NO. 9, HEIGHT: 140 FT ; DIAMETER: 19 FT A/N: 517866	S133	C131			
CO OXIDATION CATALYST, SERVING UNIT NO. 9, HITACHI, MITSUBISHI, PEERLESS OR EQUAL, HEIGHT: 61 FT; LENGTH: 26 FT; WIDTH: 4 FT; WITH 6344 CUBIC FEET OF CATALYST VOLUME A/N: 432467	C130	D125 D129 C131			
SELECTIVE CATALYTIC REDUCTION, SERVING UNIT NO. 9, HITACHI, MITSUBISHI, PEERLESS OR EQUAL, HEIGHT: 61 FT; LENGTH: 26 FT; WIDTH: 5 FT, WITH 7930 CU FEET OF CATALYST VOLUME WITH A/N: 432467  AMMONIA INJECTION, INJECTION GRID	C131	C130 S133		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]	A195.4, D12.6, D12.7, D12.8, D29.2, E73.2, E179.3, E179.4

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
GAS TURBINE, UNIT NO. 10. DIESEL FUEL, NATURAL GAS, GENERAL ELECTRIC, MODEL PG7241FA, COMBINED CYCLE, WATER INJECTION (DIESEL FIRING ONLY), WITH LOW NOX BURNER, 1757 MMBTU/HR WITH A/N: 518035	D134	C138	NOX: MAJOR SOURCE**	CO: 4 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]. CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 2 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]; NOX 22 16 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX: 111 PPMV NATURAL GAS (8) [40CFR 60 Subpart GG, 3-6-1981]; NOX: 121 PPMV DIESEL (8) [40CFR 60 Subpart GG, 3-6-1981]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]; PM: 11 LBS/HR (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO <sub>2</sub> : (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 150 PPMV (8) [40CFR 60 Subpart GG, 3-6-1981]; SOX: 500 PPMV FUEL OIL (5) [RULE 407, 4-2-1982]; VOC: 2 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A63.2, A99.2, A99.3, A195.1, A195.2, A195.3, A327.1, A433.1, B75.1, D29.4, D29.5, D82.1, D82.2, D372.1, E57.1, E193.1, K40.3, K67.4
GENERATOR, (MAX GROSS OUTPUT AT 65 DEG. F), 169.9 MW					

- (1) (1A) (1B) Denotes RECLAIM emission factor
  - (3) Denotes RECLAIM concentration limit
  - (5) (5A) (5B) Denotes command and control emission limit
  - (7) Denotes NSR applicability limit
  - (9) See App B for Emission Limits
  - (2) (2A) (2B) Denotes RECLAIM emission rate
  - (4) Denotes BACT emission limit
  - (6) Denotes air toxic control rule limit
  - (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
  - (10) See section J for NESHAP/MACT requirements
- \*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



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The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
GENERATOR, HEAT RECOVERY STEAM  STEAM TURBINE, STEAM UNIT NO. 8, COMMON TO GAS TURBINES NO. 9 AND NO. 10, 257 MW (AT 65 DEG F)					
BURNER, DUCT, NATURAL GAS, LOCATED IN THE HRSG OF TURBINE NO. 10, 286.6 MMBTU/HR A/N: 518035	D142	C138	NOX MAJOR SOURCE**	CO: 4 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.2 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart Da, 10-4-1991]; NOX: 2 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.03 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart Da, 10-4-1991]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]; PM: 11 LBS/HR (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.2 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart Da, 10-4-1991]; VOC: 2 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A63.2, A99.2, A99.3, A195.1, A195.2, A195.3, A327.1, A433.1, B75.1, D29.4, D29.5, D82.1, D82.2, D372.1, E57.1, E193.1, K40.3, K67.4

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
- (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
- (5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
- (7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
STACK, SERVING UNIT NO. 10, HEIGHT: 140 FT ; DIAMETER: 19 FT A/N: 518035	S141	C139			
CO OXIDATION CATALYST, SERVING UNIT NO. 10, HITACHI, MITSUBISHI, PEERLESS OR EQUAL, HEIGHT: 61 FT; LENGTH: 26 FT; WIDTH: 4 FT; WITH 6344 CUBIC FEET OF CATALYST VOLUME A/N: 432466	C138	D134 C139 D142			
SELECTIVE CATALYTIC REDUCTION, SERVING UNIT NO. 10, HEIGHT: 61 FT; LENGTH: 26 FT; WIDTH: 5 FT, WITH 7930 CU FEET OF CATALYST VOLUME WITH A/N: 432466  AMMONIA INJECTION, INJECTION GRID	C139	C138 S141		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]	A195.4, D12.6, D12.7, D12.8, D29.2, E73.2, E179.3, E179.4

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, LEAN BURN, #1, TURBOCHARGED, DIESEL FUEL, CATERPILLAR, MODEL 3516C, WITH A JOHNSON MATTHEY CRT PARTICULATE FILTER, WITH HIGH EFFICIENCY PARTICULATE AIR FILTER, TURBOCHARGER, 3622 HP WITH A/N: 530957	D195		NOX: PROCESS UNIT**	CO: 0.67 GRAM/BHP-HR (4) [RULE 1703 - PSD Analysis, 10-7-1988; 40CFR 60 Subpart IIII, 7-11-2006]; NOX: 3.7 GRAM/BHP-HR (4) [RULE 1703 - PSD Analysis, 10-7-1988; RULE 2005, 5-6-2005]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM10: 0.007 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; VOC: 0.25 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	B61.1, C1.6, D12.12, D12.13, E116.2, E193.6, E193.10, E448.1, E448.2, E448.3, I297.2, K67.7
TANK, DIESEL STORAGE, 2,800 GALLONS, SHARED WITH D196	E202				

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (3) Denotes RECLAIM concentration limit  
 (5) (5A) (5B) Denotes command and control emission limit  
 (7) Denotes NSR applicability limit  
 (9) See App B for Emission Limits  
 (2) (2A) (2B) Denotes RECLAIM emission rate  
 (4) Denotes BACT emission limit  
 (6) Denotes air toxic control rule limit  
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
 (10) See section J for NESHAP/MACT requirements

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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, LEAN BURN, #2, TURBOCHARGED, DIESEL FUEL, CATERPILLAR, MODEL 3516C, WITH A JOHNSON MATTHEY CRT PARTICULATE FILTER, WITH HIGH EFFICIENCY PARTICULATE AIR FILTER, TURBOCHARGER, 3622 HP WITH A/N: 530958	D196		NOX: PROCESS UNIT**	CO: 0.67 GRAM/BHP-HR (4) [RULE 1703 - PSD Analysis, 10-7-1988; 40CFR 60 Subpart III, 7-11-2006]; NOX: 3.7 GRAM/BHP-HR (4) [RULE 1703 - PSD Analysis, 10-7-1988; RULE 2005, 5-6-2005]; NOX: 469 LBS/1000 GAL (1) [RULE 2012, 5-6-2005]; PM: 0.007 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; VOC: 0.25 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	B61.1, C1.6, D12.12, D12.13, E116.2, E193.6, E193.10, E448.1, E448.2, E448.3, I297.3, K67.7
TANK, DIESEL STORAGE, 2,800 GALLONS, SHARED WITH D195	E203				
WASTE WATER SEPARATOR, MAKE: PSI, MODEL: PSC-1000, UNDERGROUND, 6000 GALS/HR, 1000 GALS; DIAMETER: 4 FT ; LENGTH: 15 FT 8 IN A/N: 530981	D201				
<b>Process 2: INORGANIC CHEMICAL STORAGE</b>					
STORAGE TANK, NO. 1, AQUEOUS AMMONIA, CARBON STEEL, 38233 GALS; DIAMETER: 14 FT ; HEIGHT: 38 FT 6 IN A/N: 272086	D34	C40 C41			C157.1, E144.1

- (1) (1A) (1B) Denotes RECLAIM emission factor
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (3) Denotes RECLAIM concentration limit
- (4) Denotes BACT emission limit
- (5) (5A) (5B) Denotes command and control emission limit
- (6) Denotes air toxic control rule limit
- (7) Denotes NSR applicability limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (9) See App B for Emission Limits
- (10) See section J for NESHAP/MACT requirements

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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 2: INORGANIC CHEMICAL STORAGE</b>					
STORAGE TANK, NO. 2, AQUEOUS AMMONIA, CARBON STEEL, 38233 GALS; DIAMETER: 14 FT ; HEIGHT: 38 FT 6 IN A/N: 272087	D35	C40 C41			C157.1, E144.1
STORAGE TANK, NO. 3, AQUEOUS AMMONIA, 38233 GALS; DIAMETER: 14 FT ; HEIGHT: 38 FT 6 IN A/N: 272088	D36	C40 C41			C157.1, E144.1
STORAGE TANK, NO. 4, AQUEOUS AMMONIA, 38233 GALS. DIAMETER: 14 FT ; HEIGHT: 38 FT 6 IN A/N: 272089	D37	C40 C41			C157.1, E144.1
STORAGE TANK, NO. 5, AQUEOUS AMMONIA, 38233 GALS; DIAMETER: 14 FT ; HEIGHT: 38 FT 6 IN A/N: 272090	D38	C40 C41			E144.1
STORAGE TANK, NO. 6, AQUEOUS AMMONIA, 38233 GALS; DIAMETER: 14 FT ; HEIGHT: 38 FT 6 IN A/N: 272091	D39	C40 C41			C157.1, E144.1
SCRUBBER, PACKED BED, NO. 1, VERTICAL PACKED TYPE, POLYPROPYLENE PACKING, HEIGHT: 9 FT 3 IN, DIAMETER: 8 IN A/N: 272090	C40	D34 D35 D36 D37 D38 D39			C8.1, D12.1, K67.2

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc )
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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2: INORGANIC CHEMICAL STORAGE</b>					
SCRUBBER, PACKED BED, NO. 2, VERTICAL PACKED TYPE, POLYPROPYLENE PACKING, HEIGHT: 9 FT 3 IN; DIAMETER: 8 IN A/N: 272090	C41	D34 D35 D36 D37 D38 D39			D12.1, K67.2
STORAGE TANK, UNIT NO. 1, MAGNESIUM COMPOUNDS, FUEL OIL ADDITIVE, 350 GALS A/N: 410730	D21				
STORAGE TANK, UNIT NO. 2, MAGNESIUM COMPOUNDS, FUEL OIL ADDITIVE, 350 GALS A/N: 410732	D22				
STORAGE TANK, UNIT NO. 5, MAGNESIUM COMPOUNDS, FUEL OIL ADDITIVE, 350 GALS A/N: 410734	D25				
STORAGE TANK, UNIT NO. 6, MAGNESIUM COMPOUNDS, FUEL OIL ADDITIVE, 350 GALS A/N: 471457	D26				
<b>Process 3: PETROLEUM STORAGE</b>					
STORAGE TANK, EXTERNAL FLOATING ROOF, STEAM HEATED, NO. 500,003, FUEL OIL, SINGLE SEAL, 500000 BBL; DIAMETER: 255 FT ; HEIGHT: 56 FT WITH A/N: G02233  FLOATING ROOF  PRIMARY SEAL, METALLIC SHOE	D44				B22.2, H23.1

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 3: PETROLEUM STORAGE</b>					
STORAGE TANK, FIXED ROOF, STEAM HEATED, NO. 172,003-A, FUEL OIL, 172000 BBL; DIAMETER: 160 FT ; HEIGHT: 48 FT A/N: C25861	D46				H23.1
STORAGE TANK, FIXED ROOF, STEAM HEATED, NO. 172,001-B, FUEL OIL, 172000 BBL; DIAMETER: 160 FT ; HEIGHT: 48 FT A/N: C25859	D47				H23.1
STORAGE TANK, FIXED ROOF, STEAM HEATED, NO. 172,002-C, FUEL OIL, 172000 BBL; DIAMETER: 160 FT ; HEIGHT: 48 FT A/N: C25860	D48				H23.1
STORAGE TANK, FIXED ROOF, STEAM HEATED, NO. 200,001-D, FUEL OIL, 200000 BBL; DIAMETER: 160 FT ; HEIGHT: 56 FT A/N: C25862	D49				H23.1
STORAGE TANK, FIXED ROOF, STEAM HEATED, NO. 300,001-E, FUEL OIL, 300000 BBL; DIAMETER: 200 FT ; HEIGHT: 56 FT A/N: C25863	D50				H23.1
TANK, UNIT NO. 1, TURBINE LUBE OIL RESERVOIR A/N: 122505	D11	C27		PM: (9) [RULE 404, 2-7-1986]	
TANK, UNIT NO. 1, TURBINE GOVERNOR OIL RESERVOIR A/N: 122505	D12	C27		PM: (9) [RULE 404, 2-7-1986]	

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
(3) Denotes RECLAIM concentration limit  
(5) (5A) (5B) Denotes command and control emission limit  
(7) Denotes NSR applicability limit  
(9) See App B for Emission Limits  
(2) (2A) (2B) Denotes RECLAIM emission rate  
(4) Denotes BACT emission limit  
(6) Denotes air toxic control rule limit  
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: PETROLEUM STORAGE</b>					
ELECTROSTATIC PRECIPITATOR, NO. 1, SMOG HOG, MODEL SH-10-PE, TWO STAGE, PENNY TYPE, 60 KW A/N: 122505	C27	D11 D12			D323.1
TANK, UNIT NO. 2, TURBINE LUBE OIL RESERVOIR A/N: 122506	D13	C28		PM: (9) [RULE 404, 2-7-1986]	
TANK, UNIT NO. 2, TURBINE GOVERNOR OIL RESERVOIR A/N: 122506	D14	C28		PM: (9) [RULE 404, 2-7-1986]	
ELECTROSTATIC PRECIPITATOR, NO. 2, SMOG HOG, MODEL SH-10-PE, TWO STAGE, PENNY TYPE, 60 KW A/N: 122506	C28	D13 D14			D323.1
TANK, UNIT NO. 3, TURBINE LUBE OIL RESERVOIR A/N: 122507	D15	C29		PM: (9) [RULE 404, 2-7-1986]	
TANK, UNIT NO. 3, TURBINE GOVERNOR OIL RESERVOIR A/N: 122507	D16	C29		PM: (9) [RULE 404, 2-7-1986]	
ELECTROSTATIC PRECIPITATOR, NO. 3, SMOG HOG, MODEL SH-10-PE, TWO STAGE, PENNEY TYPE, 60 KW A/N: 122507	C29	D15 D16			D323.1
TANK, UNIT NO. 4, TURBINE LUBE OIL RESERVOIR A/N: 122508	D17	C30		PM: (9) [RULE 404, 2-7-1986]	
TANK, UNIT NO. 4, TURBINE GOVERNOR OIL RESERVOIR A/N: 122508	D18	C30		PM: (9) [RULE 404, 2-7-1986]	

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 3: PETROLEUM STORAGE</b>					
ELECTROSTATIC PRECIPITATOR, NO. 4, SMOG HOG, MODEL SH-10-PE, TWO STAGE, PENNEY TYPE, 60 KW A/N: 122508	C30	D17 D18			D323.1
TANK, UNIT NO. 5, TURBINE LUBE OIL RESERVOIR A/N: 122509	D19	C31		PM: (9) [RULE 404, 2-7-1986]	
ELECTROSTATIC PRECIPITATOR, NO. 5, SMOG HOG, MODEL SH-10-PE, TWO STAGE, PENNEY TYPE, 60 HP A/N: 122509	C31	D19			D323.1
TANK, UNIT NO. 6, TURBINE LUBE OIL RESERVOIR A/N: 122510	D100	C32		PM: (9) [RULE 404, 2-7-1986]	
ELECTROSTATIC PRECIPITATOR, NO. 6, SMOG HOG, MODEL SH-10-PE, TWO STAGE, PENNEY TYPE, 60 KW A/N: 122510	C32	D100			D323.1
<b>Process 4: EMERGENCY POWER</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, ALCO, MODEL 251, 16 CYLINDERS, WITH AFTERCOOLER, TURBOCHARGER, 2500 HP WITH A/N: 451776  GENERATOR, 2000 KW	D53		NOX: PROCESS UNIT**	NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]; PM: (9) [RULE 404, 2-7-1986]	B59.3, C1.3, C177.1, D12.5, E116.1, K67.5
<b>Process 5: ABRASIVE BLASTING</b>					
ABRASIVE BLASTING, OPEN, KELCO, MODEL 124, 600 LBS CAPACITY, TWO NOZZLES, DIAMETER: .31 IN A/N: 123171	D56			PM: (9) [RULE 1140, 2-1-1980; RULE 1140, 8-2-1985; RULE 405, 2-7-1986]	D323.2

- \* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate  
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit  
(5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit  
(7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
(9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 6: BULK TERMINALS</b>					
SUMP, RAINWATER, UNDERGROUND, 420 BBL; WIDTH: 17 FT 6 IN; DEPTH: 7 FT 9 IN, LENGTH: 17 FT 6 IN A/N: 451886	D69				
<b>Process 7: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES</b>					
RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, <= 53 FT3, WITH DUST FILTER	E112			PM: (9) [RULE 1140, 2-1-1980; RULE 1140, 8-2-1985; RULE 404, 2-7-1986; RULE 405, 2-7-1986]	D322.1, D381.1, K67.1
RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS	E113				H23.5
RULE 219 EXEMPT EQUIPMENT, REFRIGERATION UNITS	E114				H23.6
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E124			ROG: (9) [RULE 1113, 11-8-1996; RULE 1113, 7-13-2007; RULE 1171, 11-7-2003; RULE 1171, 2-1-2008]	K67.3
<b>Process 8: OIL/WATER SEPARATION</b>					
STORAGE TANK, FIXED ROOF, SETTLING TANK, LUBE OIL/WATER, VENTED TO ATMOSPHERE, 6400 GALS; DIAMETER: 12 FT ; HEIGHT: 8 FT WITH A/N: 465115  HEATER, 1 KW	D116				H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate  
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit  
(5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit  
(7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
(9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

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### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 8: OIL/WATER SEPARATION</b>					
STORAGE TANK, FIXED ROOF, RETENTION, LUBE OIL/WATER, VENTED TO ATMOSPHERE, 70 GALS; DIAMETER: 2 FT ; HEIGHT: 3 FT 8 IN WITH A/N: 465115  HEATER, 1 KW	D117				H23.3
STORAGE TANK, FIXED ROOF, MECHANICAL SKIMMER, LUBE OIL/WATER, VENTED TO ATMOSPHERE, 595 GALS; DIAMETER: 4 FT 3.24 IN; HEIGHT: 5 FT 7 IN A/N: 465115	D118				H23.3
STORAGE TANK, FIXED ROOF, SKIM, LUBE OIL/WATER, VENTED TO ATMOSPHERE, 90 GALS; WIDTH: 1 FT 6 IN; HEIGHT: 5 FT ; LENGTH: 2 FT A/N: 465115	D119				H23.3
SUMP, WASTE WATER, VENTED TO ATMOSPHERE, 3800 GALS; WIDTH: 6 FT ; HEIGHT: 9 FT 8.4 IN; LENGTH: 8 FT 7 IN WITH A/N: 465115  PUMP, VENTED TO ATMOSPHERE	D120				H23.3
SUMP, WASTE OIL, VENTED TO ATMOSPHERE, 4700 GALS; WIDTH: 5 FT 9.6 IN; HEIGHT: 9 FT 8.4 IN; LENGTH: 11 FT 6 IN A/N: 465115	D122				H23.3

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 8: OIL/WATER SEPARATION</b>					
STORAGE TANK, WASTE WATER, VENTED TO ATMOSPHERE, 6400 GALS; DIAMETER: 12 FT ; HEIGHT: 8 FT WITH A/N: 465115  HEATER, 1 KW	D123				H23.3
SUMP, CONTAMINATED WATER, COVERED, 3200 GALS; 2 TOTAL A/N: 465115	D154				H23.3
TANK, BOILER FRONT WASTE, 250 GALS A/N: 465115	D155				H23.3

\* (1) (1A) (1B) Denotes RECLAIM emission factor  
 (2) (2A) (2B) Denotes RECLAIM emission rate  
 (3) Denotes RECLAIM concentration limit  
 (4) Denotes BACT emission limit  
 (5) (5A) (5B) Denotes command and control emission limit  
 (6) Denotes air toxic control rule limit  
 (7) Denotes NSR applicability limit  
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
 (9) See App B for Emission Limits  
 (10) See section J for NESHAP/MACT requirements

\*\* Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



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**FACILITY PERMIT TO OPERATE  
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**SECTION D: DEVICE ID INDEX**

**The following sub-section provides an index  
to the devices that make up the facility  
description sorted by device ID.**



**FACILITY PERMIT TO OPERATE  
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**SECTION D: DEVICE ID INDEX**

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D18	17	3	0
D19	18	3	0
D21	15	2	0
D22	15	2	0
D25	15	2	0
D26	15	2	0
C27	17	3	0
C28	17	3	0
C29	17	3	0
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C31	18	3	0
C32	18	3	0
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D39	14	2	0
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C41	15	2	0
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**SECTION D: DEVICE ID INDEX**

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C75	2	1	1
C76	2	1	1
C77	3	1	1
C78	3	1	1
C79	4	1	1
C80	4	1	1
S96	2	1	1
S97	3	1	1
S98	4	1	1
S99	5	1	1
D100	18	3	0
E112	19	7	0
E113	19	7	0
E114	19	7	0
D116	19	8	0
D117	20	8	0
D118	20	8	0
D119	20	8	0
D120	20	8	0
D122	20	8	0
D123	21	8	0
E124	19	7	0
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**FACILITY PERMIT TO OPERATE  
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**SECTION D: DEVICE ID INDEX**

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## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

#### FACILITY CONDITIONS

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

F14.1 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

The .05 percent sulfur limit shall not apply to existing supplies of any liquid fuel in storage as of October 1, 1993 until such supply is exhausted.

[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

F14.2 The operator shall not purchase fuel oil containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

[RULE 431.2, 9-15-2000]

F16.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

purchase records of fuel oil and sulfur content of the fuel

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

F18.1 Acid Rain SO<sub>2</sub> Allowance Allocation for affected units are as follows:

Device ID	Boiler ID	Contaminant	Tons in any year
1	Boiler No. 1	SO <sub>2</sub>	677
4	Boiler No. 2	SO <sub>2</sub>	335
71	Boiler No. 3	SO <sub>2</sub>	1234
5	Boiler No. 4	SO <sub>2</sub>	994
7	Boiler No. 5	SO <sub>2</sub>	1391
9	Boiler No. 6	SO <sub>2</sub>	1516

a). The allowance allocation(s) shall apply to calendar years 2000 through 2009.

b). The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (see 40 CFR 72.84)

[40CFR 73 Subpart B, 1-11-1993]



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

### DEVICE CONDITIONS

#### A. Emission Limits

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 18842 LBS IN ANY ONE MONTH
PM10	Less than or equal to 10784 LBS IN ANY ONE MONTH
VOC	Less than or equal to 4409 LBS IN ANY ONE MONTH
SOX	Less than or equal to 327 LBS IN ANY ONE MONTH



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

The operator shall calculate the emission limit(s) by using calendar monthly fuel use data and the following emission factors: Natural Gas: PM10 = 7.50 lbs/MMscf, VOC = 2.58 lbs/MMscf, and SOx = 0.21 lbs/MMscf. Diesel Fuel: PM10 = 1.67 lbs/Mgal, VOC = 0.52 lbs/Mgal, and SOx = 0.21 lbs/Mgal.

The operator shall calculate the emission limit(s) , after the CO CEMS certification, based on the readings from the certified CO CEMS. In the event the CO CEMS is not operating, has been certification tested but is not certified, or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan. During diesel readiness testing, the CO shall be calculated using the fuel use data and a 24.2 lbs/Mgal emission factor

The operator shall calculate the emission limit(s) for CO in the absence of valid CEMS data, by using the monthly fuel use data and the following factor: Natural Gas: 9.03 lbs/MMscf

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from combined cycle gas turbine No. 10 and it's associated duct burner during any calendar month. The duct burner shall not be operated when the turbine is firing diesel fuel.

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D134, D142]

A63.3 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 18842 LBS IN ANY ONE MONTH
PM10	Less than or equal to 10784 LBS IN ANY ONE MONTH
VOC	Less than or equal to 4409 LBS IN ANY ONE MONTH
SOX	Less than or equal to 327 LBS IN ANY ONE MONTH



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

The operator shall calculate the emission limit(s) by using calendar monthly fuel use data and the following emission factors: Natural Gas: PM10 = 7.50 lbs/MMscf, VOC = 2.58 lbs/MMscf, and SOx = 0.21 lbs/MMscf. Diesel Fuel: PM10 = 1.67 lbs/Mgal, VOC = 0.52 lbs/Mgal, and SOx = 0.21 lbs/Mgal.

The operator shall calculate the emission limit(s) , after the CO CEMS certification, based on the readings from the certified CO CEMS. In the event the CO CEMS is not operating, has been certification tested but is not certified, or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan. During diesel readiness testing, the CO shall be calculated using the fuel use data and a 24.2 lbs/Mgal emission factor

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from combined cycle gas turbine No. 9 and it's associated duct burner during any calendar month. The duct burner shall not be operated when the turbine is firing diesel fuel.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D125, D129]

- A99.1 The 10 PPM NH3 emission limit(s) shall not apply when ammonia injection has not commenced. (NH3 emissions).

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C73, C75]

- A99.2 The 2 PPM NOX emission limit(s) shall not apply during turbine startups, diesel readiness testing, or shutdowns. Shutdowns shall not exceed 30 minutes/event. Written records of startups and shutdowns shall be maintained and made available to the AQMD upon request.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

For the purposes of this condition, cold start up shall be defined as a start up which occurs after the steam turbine has been shutdown for 72 hours or more. A non-cold start up shall be defined as a start up which occurs after the steam turbine has been shutdown for less than 72 hours. The beginning of start up occurs at initial fire in the combustor and the end of start up occurs when the BACT levels are achieved. No more than one turbine shall be in cold start-up mode at any one time. The turbines shall not be started on diesel fuel.

For the purposes of this condition, steam turbine shutdown period shall be defined as the number of hours between the closing and reopening of the steam stop valve. The operator shall keep records of the date and time of the steam stop valve opening and closing, and make these records available to AQMD personnel upon request.

**[RULE 2005, 5-6-2005]**

[Devices subject to this condition : D125, D129, D134, D142]

- A99.3** The 4 PPM CO emission limit(s) shall not apply during turbine startups, diesel readiness testing, or shutdowns. Shutdowns shall not exceed 30 minutes/event. Written records of startups and shutdowns shall be maintained and made available to the AQMD upon request.

For the purposes of this condition, cold start up shall be defined as a start up which occurs after the steam turbine has been shutdown for 72 hours or more. A non-cold start up shall be defined as a start up which occurs after the steam turbine has been shutdown for less than 72 hours. The beginning of start up occurs at initial fire in the combustor and the end of start up occurs when the BACT levels are achieved. No more than one turbine shall be in cold start-up mode at any one time. The turbines shall not be started on diesel fuel.

For the purposes of this condition, steam turbine shutdown period shall be defined as the number of hours between the closing and reopening of the steam stop valve. The operator shall keep records of the date and time of the steam stop valve opening and closing, and make these records available to AQMD personnel upon request.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D125, D129, D134, D142]

A195.1 The 2 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry.

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D125, D129, D134, D142]

A195.2 The 4 PPMV CO emission limit(s) is averaged over 60 minutes, at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D125, D129, D134, D142]

A195.3 The 2 PPMV VOC emission limit(s) is averaged over 60 minutes, at 15 percent oxygen, dry. The limit does not apply during diesel readiness tests.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D125, D129, D134, D142]

A195.4 The 5 PPMV NH3 emission limit(s) is averaged over 60 minutes at 15 percent O2 dry. The operator shall calculate and continuously record the NH3 slip concentration using the following:  $NH_3(ppmv) = [a - b * c / 1E6] * 1E6 / b$ , where a=NH3 injection rate (lb/hr)/17 (lb/lb/mole), b=dry exhaust gas flow rate (lb/hr)/29(lb/lb/mole), and c=change in measured NOx across the SCR (ppmvd at 15 percent O2). The operator shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppm accurate to within +/- 5 percent calibrated at least once every 12 months.



## **FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

**The operator shall comply with the terms and conditions set forth below:**

The operator shall use the method described above or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

[Devices subject to this condition : C131, C139]

A195.5 The 5 PPMV NOX emission limit(s) is averaged over 720 operating hours (heat input weighted average).



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

A data acquisition system shall be installed and maintained to continuously calculate and record the NO<sub>x</sub> ppm based on the 720 operating hour average.

The average shall be calculated based on emissions during all boiler operating hours except during:

1. startups defined as whenever the unit is being brought up to normal operating temperature from an inactive status and the exhaust temperature entering the SCR catalyst is less than 530 degrees F;
2. shutdowns defined as whenever the unit is allowed to cool from a normal operating temperature to inactive status and the exhaust temperature entering the SCR catalyst is less than 530 degrees F;
3. calibration and maintenance periods, Part 75 linearity testing, RATA testing, equipment breakdown periods as defined in Rule 2004, and periods of zero fuel flow.

The heat input weighted average NO<sub>x</sub> concentration shall be calculated using the following equation, or other equivalent equation.

$PPMV(3\%O_2) = (Et/Qt)*K$ ; where PPMV(3%O<sub>2</sub>) = the concentration of NO<sub>x</sub> in PPMV at 3%O<sub>2</sub>; K = a conversion factor from lbs/MMBtu to PPM, which can be determined using EPA 40 CFR60 Method 19. The default K value is 819; Et = Total reported NO<sub>x</sub> emissions during the averaging period including emissions reported as a result of missing data procedures pursuant to Rule 2012; Qt = Total heat input during the averaging period.

[RULE 2009, 5-11-2001]

[Devices subject to this condition : D1, D4, D7]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

[RULE 475, 10-8-1976; RULE 475, 8-7-1978]

[Devices subject to this condition : D125, D129, D134, D142]

A433.1 The operator shall comply at all times with the 2.0 ppm 1 hour BACT limit for NOx, except as specified in Conditions A99.2, and for the following operating scenarios::

Operating Scenario	Maximum Hourly Emission Limit	Operational Limit
Cold Start	225 lbs/hr	NOx emissions not to exceed 600 lbs total per cold start. Cold start not to exceed 360 minutes total, 4 starts per month, and 48 starts per year per turbine
Non-Cold Start	170 lbs/hr	NOx emissions not to exceed 300 lbs total per non cold start. Non cold start not to exceed 180 minutes total, 27 starts per month, and 324 starts per year per turbine

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D125, D129, D134, D142]

#### **B. Material/Fuel Type Limits**

B22.2 The operator shall not use this equipment with materials having a(n) true vapor pressure of 1.5 psia or greater under actual operating conditions.



**FACILITY PERMIT TO OPERATE  
LA CITY, DWP HAYNES GENERATING STATION**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

**The operator shall comply with the terms and conditions set forth below:**

[RULE 463, 3-11-1994]

[Devices subject to this condition : D44]

B59.1 The operator shall only use the following material(s) in this device :

Air preheater elements that are made of corrosion resistant stainless steel, type 409 or equivalent

A gunite lining in the flue gas duct surfaces between the air preheaters and exhaust stack, except for the turning vanes, expansion joints, and related parts

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

[Devices subject to this condition : D1, D4, D7, D9]

B59.3 The operator shall only use the following material(s) in this device :

Diesel which meets the specifications of Rule 431.2

[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

[Devices subject to this condition : D53]

B61.1 The operator shall only use fuel oil containing the following specified compounds:

Compound	is	ppm by weight



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

total sulfur | less than | 15  
compounds  
calculated as  
H2S

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 6-3-2011; RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

[Devices subject to this condition : D195, D196]

B75.1 The operator shall not use fuel oil in this equipment except under the following circumstance(s):

Interruption in natural gas service due to unforeseeable failure, malfunction, or natural disaster, not resulting from an intentional or negligent act or omission on the part of the owner or operator

For diesel fuel readiness testing not to exceed 60 minutes per turbine per month.

Fuel oil shall be low nitrogen, low sulfur diesel. Sulfur content shall not exceed 15 ppm by weight, or other more stringent limit specified in Rule 431.2. The operator shall keep records of the date diesel was used, the amount of diesel used, and the reason for use. These records shall be kept for a minimum of 5 years and be made available for AQMD inspection upon request.

Vendor specification for the initial and each subsequent shipment of diesel shall be maintained to verify sulfur and nitrogen content. If the vendor information is not available, the operator shall have a sample of each shipment of fuel analyzed by an independent lab for sulfur and nitrogen concentration. These records shall be kept for a minimum of 5 years and be made available for AQMD inspection upon request.

For the above circumstances, diesel fuel shall not be used in this equipment unless water injection is fully employed.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 4-9-1999; RULE 2005, 4-20-2001]

[Devices subject to this condition : D125, D129, D134, D142]

#### C. Throughput or Operating Parameter Limits

C1.3 The operator shall limit the operating time to no more than 199 hour(s) in any one year.

The 199 hours per year shall include no more than 50 hours in any one year for maintenance and testing purposes.

The operation of the engine beyond the 50 hr/yr allotted for engine maintenance and testing shall be allowed only in the event of a loss of grid power or up to 30 minutes prior to a rotating outage, provided that the grid operator or electric utility has ordered rotating outages in the control area where the engine is located or has indicated that it expects to issue such an order at a certain time, and the engine is located in a utility service block that is subject to the rotating outage..

Engine operation shall be terminated immediately after the utility distribution company advises that a rotating outage is no longer imminent or in effect..

[RULE 1110.2, 2-1-2008; RULE 1470, 6-1-2007; RULE 2012, 5-6-2005]

[Devices subject to this condition : D53]

C1.6 The operator shall limit the operating time to no more than 200 hour(s) in any one year.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

The operation includes no more than 50 hours per year and 1 hour per week for maintenance and testing as required in rule 1470(c)(2).

The operation of the engine beyond the 50 hours per year allotted for engine maintenance and testing shall be allowed only in the event of a loss of grid power or up to 30 minutes prior to a rotating outage, provided that the electrical grid operator or electric utility has ordered rotating outages in the control area where the engine is located or has indicated that it expects to issue such an order at a certain time, and the engine is located in a utility service block that is subject to the rotating outage. Engine operation shall be terminated immediately after the utility distribution company advises that a rotating outage is no longer imminent or in effect.

[**RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002;**  
**RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1470,**  
**5-4-2012; 40CFR 60 Subpart III, 7-11-2006]**

[Devices subject to this condition : D195, D196]

C8.1 The operator shall use this equipment in such a manner that the flow rate being monitored, as indicated below, is not less than 2.5 gpm.

To comply with this condition, the operator shall monitor the flow rate as specified in condition number 12-1.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

[Devices subject to this condition : C40]

C157.1 The operator shall install and maintain a pressure relief valve set at 15 psig.

[**RULE 402, 5-7-1976]**



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

[Devices subject to this condition : D34, D35, D36, D37, D39]

- C177.1 The operator shall set and maintain the fuel injection timing of the engine at 4 degrees retarded relative to standard timing.

[RULE 2009, 5-11-2001]

[Devices subject to this condition : D53]

#### **D. Monitoring/Testing Requirements**

- D12.1 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the incoming scrubbing (city) water.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C40, C41]

- D12.2 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature at the inlet of each selective catalytic reduction reactor.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]

[Devices subject to this condition : C73, C75, C77, C79]

- D12.3 The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the ammonia injection rate of the ammonia injection system.

The operator shall also install and maintain a device to continuously record the parameter being measured.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

[Devices subject to this condition : C73, C75, C77, C79]

- D12.5 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

**[RULE 1110.2, 2-1-2008; RULE 2012, 5-6-2005]**

[Devices subject to this condition : D53]

- D12.6 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]**

[Devices subject to this condition : C131, C139]

- D12.7 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]

[Devices subject to this condition : C131, C139]

D12.8 The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the ammonia injection rate of the ammonia injection system.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C131, C139]

D12.12 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[RULE 1304(c)-Offset Exemption, 6-14-1996; RULE 1470, 6-1-2007; 40CFR 60 Subpart III, 7-11-2006]

[Devices subject to this condition : D195, D196]

D12.13 The operator shall install and maintain a(n) non-resettable totalizing fuel flow meter to accurately indicate the fuel usage of the engine.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D195, D196]



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**The operator shall comply with the terms and conditions set forth below:**

D28.3 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted quarterly during the first 12 months after the initial source test, and once a year thereafter.

The District shall be notified of the date and time of the test at least 7 days prior to the test.

Source test shall be conducted when this equipment is using natural gas.

The test shall be conducted by a testing laboratory certified by the California Air Resources Board in the required test methods, and in compliance with District Rule 304 (no conflict of interest).

The test shall be conducted to determine the NH<sub>3</sub> emissions using District method 207.1 measured over a 60 minute averaging time period.

The test shall be conducted to determine the NH<sub>3</sub> emissions using either District method 5.3 or EPA method 17 measured over a 60 minute averaging time period.

The test shall be conducted when the equipment is operating at 80 percent load or greater.

The test shall be conducted and the results submitted to the District within 45 days after the test date.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C73, C75, C77, C79]

D29.2 The operator shall conduct source test(s) for the pollutant(s) identified below.



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**The operator shall comply with the terms and conditions set forth below:**

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet of the SCR serving this equipment

The test(s) shall be conducted at least once each calendar quarter during the first 12 months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit.

The test shall be conducted when the equipment is operating at 80 percent load or greater.

The test shall be conducted and the results submitted to the AQMD permitting engineer within 45 days after the test date.

The test shall be conducted during natural gas firing.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C131, C139]

D29.4 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
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The operator shall comply with the terms and conditions set forth below:

SOX emissions	Approved District method	District-approved averaging time	Fuel sample
ROG emissions	Approved District method	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District method 5.2	District-approved averaging time	Outlet of the SCR serving this equipment



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**The operator shall comply with the terms and conditions set forth below:**

The test(s) shall be conducted at least once every three years.

For gas turbines only the VOC test shall use the following method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to having less than 0.05 ppmv total hydrocarbons as carbon, and c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the canisters temperature when extracting samples for analysis is not to be below 70 deg F.

The use of this alternative VOC test method is solely for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. Because the BACT level was set using data derived from various source test methods, this alternate method provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test results must be reported with two significant digits.

The test shall be conducted and the results submitted to the AQMD within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and emissions limit.

The test shall be conducted when the turbine and duct burner are operating simultaneously at 100 percent of full rated load, when the turbine is operating alone at 100 percent of full rated load, and when the turbine is operating alone at 75 and 50 percent of full rated load for NOx, CO, ROG, and NH3 source tests.

The test shall be conducted when firing natural gas.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002**]



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**The operator shall comply with the terms and conditions set forth below:**

[Devices subject to this condition : D125, D129, D134, D142]

D29.5 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	30 minutes	Outlet of the SCR serving this equipment

The test shall be conducted when the unit is firing diesel fuel in order to determine the emissions profile of the unit. A minimum of 6 tests shall be performed and the operator shall record the turbine output, ammonia injection rate, and temperature of the exhaust during each test, based on a 30 minute averaging time. Test results shall also include the fuel flow rate (CFH), the flue gas flow rate, and the duct burner fuel use during the test.

The test shall be conducted in order to generate a load curve for NOx (lbs/MW) vs. MW output over the span of tested loads. The operator may, after receiving approval from the AQMD, use this curve to report NOx emissions during the monthly 60 minute (total) diesel readiness testing periods.

**[RULE 2012, 5-6-2005]**

[Devices subject to this condition : D125, D129, D134, D142]

D29.8 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1 or EPA method 17	1 hour	Outlet of the SCR serving this equipment



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**The operator shall comply with the terms and conditions set forth below:**

The test shall be conducted and the results submitted to the District within 90 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test..

The test(s) shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NO<sub>x</sub> concentration, as determined by the certified CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, a test shall be conducted to determine the NO<sub>x</sub> emissions using District Method 100.1 measured over a 60 minute averaging time period..

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit..

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C73]

D82.1 The operator shall install and maintain a CEMS to measure the following parameters:



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**The operator shall comply with the terms and conditions set forth below:**

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated no later than 90 days after initial start up of the turbine, and in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD. Within two weeks of the turbine start up date, the operator shall provide written notification to the AQMD of the exact start up.

The CEMS shall be installed and operated to measure CO concentration over a 15 minute averaging time period.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 218, 8-7-1981; RULE 218, 5-14-1999]**

[Devices subject to this condition : D125, D129, D134, D142]

**D82.2 The operator shall install and maintain a CEMS to measure the following parameters:**

NOX concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated no later than 12 months after initial start up of the turbine and shall comply with the requirements of Rule 2012. During the interim period between the initial start up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h) (2) and 2012(h)(3). Within two weeks prior to the turbine start up date, the operator shall provide written notification to the AQMD of the exact date of start up.



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**The operator shall comply with the terms and conditions set forth below:**

**[RULE 2012, 5-6-2005]**

[Devices subject to this condition : D125, D129, D134, D142]

D182.1 The operator shall test this equipment in accordance with the following specifications:

The operator shall collect samples using a 1983 District-approved induct fallout monitor (IFM) every 24 hours beginning from all startups, except for natural gas firing, where if three 24-hour IFM samples show no abnormal collection, subsequent samples can be taken once a week.

The operator shall analyze the IFM samples for acidity, weight, increase of particle size, volume, and appearance, and use the results of the analysis to determine the necessary operational changes to minimize the fallouts, such as, but not limited to, increasing the fuel oil additives and lancing frequencies.

**[RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

[Devices subject to this condition : D1, D4, D7, D9]

D322.1 The operator shall perform annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : E112]



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### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a daily basis, at least, unless the equipment did not operate during the entire daily period. The routine daily inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

#### SUGGESTED CHAR

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.



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**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

**The operator shall comply with the terms and conditions set forth below:**

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

**[Devices subject to this condition : C27, C28, C29, C30, C31, C32]**



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

D323.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.



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**The operator shall comply with the terms and conditions set forth below:**

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D56]

D371.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever this equipment has combusted one million gallons of diesel fuel, to be counted cumulatively over a five year period. The inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall:

Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three working days (or during the next fuel oil firing period if the unit ceases firing on fuel oil within the three working day time frame) and report any deviations to AQMD.

In addition, the operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- a). Stack or emission point identification;
- b). Description of any corrective actions taken to abate visible emissions;
- c). Date and time visible emission was abated; and
- d). Visible emission observation record by a certified smoke reader.

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D1, D4, D7, D9]



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**The operator shall comply with the terms and conditions set forth below:**

D372.1 The operator shall determine compliance with the particulate matter (PM) emission limit by conducting a source test at the outlet of the exhaust stack annually using AQMD Method 5.1. Each test shall include:

(a) One test using natural gas operating at minimum load under normal operating conditions, if natural gas is burned more than 120 consecutive hours or 200 hours accumulated over any 12 consecutive months. The test shall be conducted no later than six months after the time limit has been exceeded;

(b) One test using natural gas operating at maximum load under normal operating conditions, if natural gas is burned more than 120 consecutive hours or 200 hours accumulated over any 12 consecutive months. The test shall be conducted no later than six months after the time limit has been exceeded;

(c) One test using fuel oil operating at maximum load under normal operating conditions, if fuel oil is burned more than 120 consecutive hours or 200 hours accumulated over any twelve consecutive months. The test shall be conducted no later than six months after the time limit has been exceeded.

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D125, D129, D134, D142]



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**The operator shall comply with the terms and conditions set forth below:**

D381.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions; and
- 3). Date and time visible emission was abated.

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : E112]

#### **E. Equipment Operation/Construction Requirements**

E57.1 The operator shall vent this equipment to the SCR and CO control whenever this equipment is in operation.

Ammonia injection shall be used at all times at an injection rate which minimizes NOx emissions whenever the exhaust temperature prior to the inlet of the SCR catalyst is 450 degrees F or greater as measured by the temperature gauge required by condition D12.6



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The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]

[Devices subject to this condition : D125, D129, D134, D142]

E73.1 Notwithstanding the requirements of Section E conditions, the operator shall not use ammonia injection if any of the following requirement(s) are met:

1. Whenever the inlet exhaust temperature prior to the SCR reactor is less than 530 degrees Fahrenheit.

[RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]

[Devices subject to this condition : C73, C75, C77, C79]

E73.2 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use ammonia injection if all of the following requirement(s) are met:

The inlet exhaust temperature to the SCR is 450 degrees F or less, not to exceed 360 minutes during a cold startup or 180 minutes during a non-cold startup.

During diesel readiness testing.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 4-9-1999; RULE 2005, 4-20-2001]

[Devices subject to this condition : C131, C139]

E116.1 This engine shall not be used as part of a demand response program using interruptible service contract in which a facility receives a payment or reduced rates in return for reducing its electric load on the grid when requested to do so by the utility or the grid operator.



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**The operator shall comply with the terms and conditions set forth below:**

[RULE 1470, 6-1-2007]

[Devices subject to this condition : D53]

- E116.2 This engine shall not be used as part of a demand response program using interruptible service contract in which a facility receives a payment or reduced rates in return for reducing its electric load on the grid when requested to do so by the utility or the grid operator.

[RULE 1470, 5-4-2012]

[Devices subject to this condition : D195, D196]

- E144.1 The operator shall vent this equipment, during filling, only to the vessel from which it is being filled.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D34, D35, D36, D37, D38, D39]

- E179.1 For the purpose of the following condition number(s), "continuous monitoring" shall be defined as measuring at least once every 15 minutes, except as allowed by Rule 2000.

Condition Number D 12- 3

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C73, C75, C77, C79]



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**The operator shall comply with the terms and conditions set forth below:**

E179.2 For the purpose of the following condition number(s), "continuously record" shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition Number D 12- 3

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]**

[Devices subject to this condition : C73, C75, C77, C79]

E179.3 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that month.

Condition Number D 12- 7

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]**

[Devices subject to this condition : C131, C139]

E179.4 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition Number D 12- 6

Condition Number D 12- 8

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]**



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**The operator shall comply with the terms and conditions set forth below:**

[Devices subject to this condition : C131, C139]

E193.1 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In compliance with all mitigation measures as stipulated by the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" and final Environmental Impact Report dated July 16, 2002 (SCH No. 2001121013), and addendum to the FEIR

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D125, D129, D134, D142]

E193.5 The operator shall operate and maintain this equipment according to the following requirements:

The electrical output of Unit 6 shall be limited to 243 MW.

[RULE 1304(c)-Offset Exemption, 6-14-1996]

[Devices subject to this condition : D9]

E193.6 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In accordance with all air quality mitigation measures stipulated in the Environmental Impact Report (EIR), State Clearing House #2005061111.

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D195, D196]



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**The operator shall comply with the terms and conditions set forth below:**

E193.10 The operator shall operate and maintain this equipment according to the following requirements:



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**The operator shall comply with the terms and conditions set forth below:**

The operator shall not commence operation of any of the new Units 11-16 until the AQMD certifies that one of the following conditions has been satisfied:

A, The facility has provided 292 lbs/day of federally enforceable PM2.5 emission reduction credits unless a different amount associated with the Repower Project modification at this facility as determined to be required according to the federal New Source Review (NSR) requirements (40CFR Part 51 Subpart Z Appendix S), as approved by both AQMD and EPA.

B. The operator shall comply with a federally enforceable limit of 100 tons per year of PM2.5 emissions.

For purposes of demonstrating compliance with the 100 ton per year limit the operator shall determine the PM2.5 emissions for each of the major sources at the facility by calculating a 12-month rolling average using the following formula:

$$PM2.5 = (FF1*EF1+ FF2*EF2+ FF9*EF9+ FF10*EF10+ FF11*EF11+ FF12*EF12+ FF13*EF13+ FF14*EF14+ FF15*EF15+ FF16*EF16+FFD1*EFD1+FFD2*EFD2)/2000$$

Where: PM2.5 = PM2.5 emissions in tons per year, FF1= fuel flow for Unit 1 in MMscf, FF2= fuel flow for Unit 2 in MMscf, FF9= fuel flow for Unit 9 in MMscf, FF10= fuel flow for Unit 10 in MMscf, FF11 to FF16= fuel flow for Units 11 to 16 in MMscf, FFD1 to FFD2 = diesel usage for two black start generator in Mgal.

EF1= emission factor for Unit 1 = 7.14 lb/MMscf, EF2= emission factor for Unit 2 = 6.61 lb/MMscf, EF9= emission factor for Unit 9 = 1.238 lb/MMscf, EF10= emission factor for Unit 10 = 0.968 lb/MMscf, EF11 to EF16 = emission factor for Units 11 to 16 = 6.423 lb/MMscf, EFD1 to EFD2 = emission factor for two standby generators = 0.32 lb/Mgal.

Any changes to these emission factors must be approved in advance by the District in writing and be based on unit specific source tests performed using a District approved testing protocol.



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**The operator shall comply with the terms and conditions set forth below:**

**[40CFR Part 51, Appendix S, 10-20-2010]**

[Devices subject to this condition : D195, D196]

E202.1 The operator shall clean and maintain this equipment according to the following specifications:

The operator shall wash and/or vacuum and then inspect the boiler ducts, stack, and air preheaters during each shutdown in which a boiler is cooled. The operator shall reinspect and perform additional cleaning on these areas as necessary prior to startup.

The operator shall install and maintain a permanent stack washing system in the boiler stack

The operator shall wash the stack prior to start-up each time the boiler is shut down for 48 hours or more

**[RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

[Devices subject to this condition : D1, D4, D7, D9]

E204.1 The operator shall employ the fuel oil additive system according to the following specifications:



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**The operator shall comply with the terms and conditions set forth below:**

The operator shall inject District-approved additives at a rate between 6,500 and 10,500 parts of oil per part of additive, based on volume.

The operator shall inject District-approved additives into the fuel oil whenever fuel oil is burned, as soon as fuel oil firing has stabilized.

The operator shall take corrective action as expeditiously as practicable if there is a failure to comply with either of the above requirements, so that compliance is achieved within 48 hours of such failure; the operator shall switch the unit to natural gas fuel, provided such fuel is available, if such failure is longer than 48 hours, and will remain on natural gas until such time as the failure is corrected.

The operator shall check the flow of fuel oil additive at least once a shift by recording the level of the additive in the holding tank.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

[Devices subject to this condition : D1, D4, D7, D9]

E204.2 The operator shall perform a boiler lancing according to the following specifications:

The operator shall cycle the boiler and air preheater lancing continuously while burning fuel oil and shall commence as soon as oil firing has stabilized; the operator shall continue the lancing cycle for the first 24 hours following a change from fuel oil to natural gas.

The operator shall cycle the air preheater lances and boiler lances once daily and once weekly, respectively, during periods of natural gas burning.

The operator shall repair and return to services individual lances as soon as practicable; the operator shall switch the unit to natural gas, provided such fuel is available, in the event that five or more lances are out of service simultaneously for more than 48 hours, and shall keep the unit on natural gas until such time as the repairs have been completed so that no more than two lances remain out of service.



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

[Devices subject to this condition : D1, D4, D7, D9]

E448.1 The operator shall comply with the following requirements:

The engine and the Johnson Matthey CRT+ diesel particulate filter shall be operated in accordance with CARB Executive Order DE-08-009-04.

The engine shall operate at the load level required to achieve 240 °C for a minimum of 40% of the engine's operating time and a NOx/PM ratio of 15 @  $\geq 300$  °C and 20 @  $\leq 300$  °C. The NOx/PM ratio shall be at least 8 with a preference for 20 or higher.

The engine shall not operate below passive regeneration temperature for more than 720 consecutive minutes. Regeneration is required after 24 consecutive cold starts and 30-minute idle sessions.

Filter cleaning is required after 150 half-hour cold starts with associated regeneration or 1000 hours of emergency use. The CRTdm, which monitors engine exhaust back pressure and temperature will determine the actual cleaning interval and provide an alert when filter cleaning is required.

The operator shall keep records of any corrective action taken after the CRTdm has notified the operator that a high pressure limit is reached.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1470, 5-4-2012]

[Devices subject to this condition : D195, D196]



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### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

E448.2 The operator shall comply with the following requirements:

Removal of the diesel particulate filter's filter media for cleaning may only occur under the following conditions:

A. The internal combustion engine shall not be operated for maintenance and testing or any other non-emergency use while the diesel particulate filter media is removed; and

B. The diesel particulate filter's filter media shall be returned and re-installed within 10 working days from the date of removal; and

C. The owner or operator shall maintain records indicating the date(s) the diesel particulate filter's filter media was removed for cleaning and the date(s) the filter media was re-installed. Records shall be retained for a minimum period of 36 months.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1470, 5-4-2012]

[Devices subject to this condition : D195, D196]

E448.3 The operator shall comply with the following requirements:



**FACILITY PERMIT TO OPERATE  
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**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

**The operator shall comply with the terms and conditions set forth below:**

The engine shall comply with the emission standards specified in 40 CFR 60.4204(b) and 4205(b). The operator must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), or 4205(b) or (c), as applicable, for the model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

The engine and the control device shall be operated and maintained in accordance with the manufacturer's written emission-related instructions or procedures developed by the operator that are approved by the engine manufacturer. Changes to those emission-related settings that are set by the manufacturer are not allowed.

[40CFR 60 Subpart IIII, 7-11-2006]

[Devices subject to this condition : D195, D196]

**H. Applicable Rules**

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	463

[RULE 463, 3-11-1994]

[Devices subject to this condition : D44, D46, D47, D48, D49, D50]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	464



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**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

**The operator shall comply with the terms and conditions set forth below:**

**[RULE 464, 12-7-1990]**

[Devices subject to this condition : D116, D117, D118, D119, D120, D122, D123, D154, D155]

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Refrigerants	District Rule	1415

**[RULE 1415, 10-14-1994]**

[Devices subject to this condition : E113]

H23.6 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Refrigerants	40CFR82, SUBPART	B
Refrigerants	District Rule	1411

**[RULE 1411, 3-1-1991; 40CFR 82 Subpart B, 7-14-1992]**

[Devices subject to this condition : E114]

**I. Administrative**



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

#### The operator shall comply with the terms and conditions set forth below:

I297.2 This equipment shall not be operated unless the facility holds 4064 pounds of NO<sub>x</sub> RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 5-6-2005; RULE 2005, 6-3-2011]

[Devices subject to this condition : D195]

I297.3 This equipment shall not be operated unless the facility holds 4064 pounds of NO<sub>x</sub> RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 5-6-2005; RULE 2005, 6-3-2011]

[Devices subject to this condition : D196]

#### K. Record Keeping/Reporting

K40.3 The operator shall provide to the District a source test report in accordance with the following specifications:



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen, dry basis.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

Source test results shall also include fuel flow and exhaust gas rate under which the test was conducted.

Source test results shall also include turbine and generator output under which the test was conducted.

Emission data shall be expressed in terms of lbs/MM cubic feet.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 2005, 4-9-1999; RULE 2005, 4-20-2001]**

[Devices subject to this condition : D125, D129, D134, D142]

K40.4 The operator shall provide to the District a source test report in accordance with the following specifications:



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

Source test results shall be submitted to the District no later than 180 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 3 percent oxygen, dry basis.

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

Source test results shall also include the fuel flow rate (CFM) under which the test was conducted.

Source test results shall also include the flue gas flow rate (SCFM) under which the test was conducted.

Source test results shall also include the utility boiler exhaust temperature (degrees Fahrenheit), before the SCR reactors, under which the test was conducted.

Source test results shall also include the NH<sub>3</sub> injection rate (lb/hr), upstream of the SCR reactor, under which the test was conducted.

Source test results shall also include the NH<sub>3</sub>/NO<sub>x</sub> molar ratio under which the test was conducted.

Source test results shall also include the net utility boiler and steam turbine electric generator output (MW) under which the test was conducted.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 2012, 5-6-2005]**

[Devices subject to this condition : C79]



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

the name of the person performing the inspection and/or maintenance of the dust collector

the date, time and results of the inspection

the date, time and description of any maintenance or repairs resulting from the inspection

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : E112]

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

The operator shall monitor and record on a daily basis the flowrate of the incoming scrubbing (city) water when this scrubber is operated

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : C40, C41]

K67.3 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

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**The operator shall comply with the terms and conditions set forth below:**

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : E124]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas and Diesel fuel usage after CEMS certification.

The date, time, duration, and CEMS minute data for start-ups. These records shall be maintained and made available upon request from AQMD

**[RULE 2012, 5-6-2005]**

[Devices subject to this condition : D125, D129, D134, D142]

K67.5 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

Date of operation, the elapsed time, in hours, and the reason for operation. Records shall be kept and maintained on file for a minimum of two years and made available to district personnel upon request.

An engine operating log listing on a monthly basis the emergency use hours of operation, maintenance and testing hours of operation, and any other hours of use with a description of the reason for operation. Additionally, each time the engine is started manually, the log shall include the date of operation and the timer reading in hours at the beginning and end of operation.

The log shall be kept for a minimum of three calendar years prior to the current year and be made available to District personnel upon request. The total hours of operation for the previous calendar year shall be recorded sometime during the first 15 days of January of each year.

[RULE 1110.2, 2-1-2008; RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996;  
RULE 1470, 6-1-2007]

[Devices subject to this condition : D53]

K67.7 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):



## FACILITY PERMIT TO OPERATE LA CITY, DWP HAYNES GENERATING STATION

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**The operator shall comply with the terms and conditions set forth below:**

The operator shall keep a log of engine operations documenting the total time the engine is operated each month and the specific reason for operation as: A) Emergency Use, B) Maintenance and Testing, or C) Other (be specific)

In addition, for each time the engine is manually started, the log shall include the date of engine operation, the specific reason for operation, and the totalizing hour meter reading (in hours and tenths of hours) at the beginning and the end of the operation.

On or before January 15th of each year the operator shall record in the engine operating log: A) the total hours of engine operation for the previous calendar year, and B) the total hours of engine operation for maintenance and testing for the previous calendar year.

Records shall be kept and maintained on file for a minimum of five years and made available to district personnel upon request.

**[RULE 1304(c)-Offset Exemption, 6-14-1996; RULE 1470, 5-4-2012; RULE 3004(a)(4)  
-Periodic Monitoring, 12-12-1997; 40CFR 60 Subpart III, 7-11-2006]**

[Devices subject to this condition : D195, D196]

K171.1 The operator shall notify the District if any of the following situations occur:

When fuel oil is fired in this equipment

This notification shall be provided to the District no later than 48 hours after fuel oil is fired in this boiler.

**[RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

[Devices subject to this condition : D1, D4, D7, D9]