FACILITY PERMIT TO OPERATE

NORTHROP GRUMMAN SYSTEMS
3301 1700 AVIATION & ROSECRANS
MANHATTAN BEACH, CA 90266

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

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

FACILITY PERMIT TO OPERATE
NORTHROP GRUMMAN SYSTEMS

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 1: CONTROL EQUIPMENT					
SCRUBBER, PACKED BED, HARRINGTON, MODEL NO. HPH 78-4, WIDTH: 8FT, LENGTH: 6FT 3IN, DEPTH:7FT, WITH A 4FT PACKING DEPTH, A 30-HP EXHAUST FAN AND THREE 2-HP RECIRCULATION PUMPS A/N: 544394 Permit to Construct Issued: 06/11/13	C6	E419 D420 E421 E422 E423 E424 D425 D426 D428 D429 D430 D431 D432 D433 D434 D435 D438 D439 D440 D441 D442 E479 D501 D503 E506 D573 D595 D597		**PM**: (9) [**RULE 404, 2-7-1986**]	C8.3, C8.9, D90.1, E158.1, E159.1, K67.3
SCRUBBER, FS21, HARRINGTON, WITH A MIST ELIMINATOR SECTION A/N: 544407 Permit to Construct Issued: 06/11/13	C160	D97 D189 D211 D371 D373 D374 D375 D378 D382 D386 D388 D390 D391 D394 D395 D403 D404 D462 D478 D511 D516 D537 D574 D613 D617 D623		**PM**: (9) [**RULE 404, 2-7-1986**]	C8.3, C8.9, D90.1, E158.1, E159.1, I331.1, K67.3
SCRUBBER, FS-41, HARRINGTON, MODEL NO. HPH 78- FB, MIST ELIMINATOR, A 15 H.P. EXHAUST FAN, 9 FT 8 IN W. X 15 FT L. X 10 FT 1 IN H., WITH THREE 3-HP WATER CIRCULATION PUMP A/N: 516125 Permit to Construct Issued: 02/08/11	C161	D94 D511 D512 D514 D517 D522 D523 D524		**PM**: (9) [**RULE 404, 2-7-1986**]	C8.5, C8.9, D90.1, E158.1, E159.1, I331.1, K67.3

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(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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Process 1: CONTROL EQUIPMENT					
SCRUBBER, PACKED BED, HARRINGTON, HPH 66-4, LENGTH: 10FT 5IN; WIDTH:7FT 3IN; HEIGHT: 8FT 2IN, WITH A 4FT PACKING DEPTH, A 20-HP EXHAUST FAN, AND THREE 2-HP CIRCULATION PUMPS A/N: 544396 Permit to Construct Issued: 06/11/13	C232	D349 D372 D383 D397 D398 D406 D407 D447 D477 D507 D508 D509 D513 D525 D540 D552 D584 D596 D615 D616 D621 D622 D624		**PM**: (9) [**RULE 404, 2-7-1986**]	C8.1, C8.9, D90.1, E158.1, E159.1, I331.1, K67.3
OXIDIZER, THERMAL, NO. 4, ALLIANCE SYSTEMS, MODEL NO. 306-RTO, 3 BED HOT ROCK TYPE, NATURAL GAS, WITH A 30-HP EXHAUST FAN, 10-HP BYPASS FAN AND A 3.0-HP COMBUSTION BLOWER, 1.5 MMBTU/HR WITH A/N: 554808 Permit to Construct Issued: 11/08/13 BURNER, NATURAL GAS INJECTION, 1.5 MMBTU/HR	C364	D274 D277 D335 D346 D347 D350 D352 D353 D354 D357 D358 D359 D361 D482 D589	NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [**RULE 407, 4-2-1982**]; **NOX**: 130 LBS/MMSCF NATURAL GAS (1) [**RULE 2012, 5-6-2005**]; **PM**: (9) [**RULE 404, 2-7-1986**]; **PM**: 0.1 GRAINS/SCF (5) [**RULE 409, 8-7-1981**]	A72.1, D29.2, D29.3, E193.1, I331.1, K40.1

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Process 1: CONTROL EQUIPMENT					
OXIDIZER, HOT BED, NO. 1, ALLIANCE SYSTEMS, MODEL NO. 308-RTO,, NATURAL GAS, THREE ZONES, 8 FT W. X 30 FT 3 IN L. X 9 FT 1 IN H., 1.5 MMBTU/HR WITH A/N: 554810 Permit to Construct Issued: 11/08/13 BURNER, NATURAL GAS INJECTION, 1.5 MMBTU/HR	C455	D79 D80 D81 D154 D276 D278 D279 D289 D338 D411 D412 D413 D414 D416 D417 D474 D476 D549 D618 D619	NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [**RULE 407, 4-2-1982**]; **NOX**: 130 LBS/MMSCF NATURAL GAS (1) [**RULE 2012, 12-5-2003; RULE 2012, 1-7-2005**]; **PM**: (9) [**RULE 404, 2-7-1986**]; **PM**: 0.1 GRAINS/SCF (5) [**RULE 409, 8-7-1981**]	A72.1, A72.2, C8.8, D29.2, D29.3, E193.1, I331.1, K40.1
OXIDIZER, THERMAL, NO. 2, ALLIANCE SYSTEMS, MODEL NO. 306-RTO, 3 BED HOT ROCK TYPE, NATURAL GAS, WITH A 30-HP EXHAUST FAN, 10-HP BYPASS FAN AND A 3.0-HP COMBUSTION BLOWER, 1.5 MMBTU/HR WITH A/N: 554809 Permit to Construct Issued: 11/08/13 BURNER, NATURAL GAS INJECTION, 1.5 MMBTU/HR	C460	D157 D481 D484 D572 D587 D588	NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [**RULE 407, 4-2-1982**]; **NOX**: 130 LBS/MMSCF NATURAL GAS (1) [**RULE 2012, 5-6-2005**]; **PM**: (9) [**RULE 404, 2-7-1986**]; **PM**: 0.1 GRAINS/SCF (5) [**RULE 409, 8-7-1981**]	A72.1, D29.2, D29.3, E193.1, I331.1, K40.1
Process 4: DEGREASERS					P13.2
DEGREASER, VAPOR, WITH CONDENSER, BARON-BLAKESLEE, MODEL 37-14-21-VLE, WIDTH: 1 FT 6 IN; LENGTH: 3 FT 5 IN; HEIGHT: 4 FT 10 IN; 3 KW A/N: 516126 Permit to Construct Issued: 02/08/11	D612				B59.21, B59.70, D322.2, H339.1

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(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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Process 9: BPL LAB					P13.1
System 1: Photolithographic Processes					S1.2
BENCH, PHOTORESIST COATER NO. 1 A/N: 544402 Permit to Construct Issued: 06/11/13	D411	C455			B59.14
BENCH, PHOTORESIST COATER NO. 2 A/N: 544402 Permit to Construct Issued: 06/11/13	D412	C455			B59.14
BENCH, TRACK DEVELOP/STRIP STATIONS #1 & 2, HEIGHT: 5FT 10IN; LENGTH: 5FT; WIDTH: 3FT 10IN A/N: 544402 Permit to Construct Issued: 06/11/13	D438	C6			B59.20
OVEN, NO. 1, LABLINE, MODEL 3490M A/N: 544402 Permit to Construct Issued: 06/11/13	D413	C455			B59.14
OVEN, NO. 2, LABLINE, MODEL 3490M A/N: 544402 Permit to Construct Issued: 06/11/13	D414	C455			B59.14
OVEN, YES, MODEL YES-10TA A/N: 544402 Permit to Construct Issued: 06/11/13	D597	C6			B59.65, C1.56
OVEN, NO. 22, LAB-LINE 3940M, ELECTRIC A/N: 544402 Permit to Construct Issued: 06/11/13	D618	C455			B59.14

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Process 9: BPL LAB					P13.1
OVEN, NO. 23, LAB-LINE 3940M, ELECTRIC A/N: 544402 Permit to Construct Issued: 06/11/13	D619	C455			B59.14
System 2: Integrated Circuit Fabrication					S1.3
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D428	C6			B59.38
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D429	C6			B59.38
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D430	C6			B59.38
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D431	C6			B59.38
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D432	C6			B59.38

* (1) (1A) (1B) Denotes RECLAIM emission factor
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Process 9: BPL LAB					P13.1
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D433	C6			B59.38
PLASMA ETCHER, MATRIX, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT; 21.4-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D434	C6			B59.38
PLASMA ETCHER, MATRIX, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT; 21.4-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D435	C6			B59.38
PLASMA ETCHER, ICP NO. 1, TRIKON, MODEL OMEGA, LENGTH: 3FT; WIDTH: 4FT; HEIGHT: 6FT; 65-KVA, WITH THREE VACUUM PUMPS, 2.0-HP TOTAL A/N: 544401 Permit to Construct Issued: 06/11/13	D501	C6			B59.38
PLASMA ETCHER, CLEANER, TWO CHAMBER, TECHNIX, MODEL 800-II, LENGTH 3FT 5IN; WIDTH 3FT 5IN; HEIGHT 6FT 5IN; WITH 3 VACUUM PUMPS, 2.0-HP TOTAL A/N: 544401 Permit to Construct Issued: 06/11/13	D503	C6			B59.38

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Process 9: BPL LAB					P13.1
PLASMA ETCHER, STS, MODEL MPX HRM, LENGTH: 6 FT; WIDTH: 2 FT 4 IN; HEIGHT: 6 FT 1.75 IN, WITH TWO VACUUM PUMPS A/N: 544401 Permit to Construct Issued: 06/11/13	D595	C6			B59.38
PLASMA ETCHER, PLASMA THERM, MODEL 790, HEIGHT: 6FT 6IN; LENGTH: 3FT 5IN; WIDTH: 3FT 5IN, 65-KVA A/N: 544401 Permit to Construct Issued: 06/11/13	D426	C6			B59.38
System 4: Solvent Cleaning					
BENCH, SOLVENT, SOLID STATE EQUIP CORP, MODEL M202, 2 FT 9 IN W. X 4 FT 6 IN L. X 6 FT 5 IN H., ELECTRICALLY HEATED A/N: 544405 Permit to Construct Issued: 06/11/13	D338	C455			B27.5, C1.19, H23.2
BENCH, SOLVENT CLEANING STATION NO. 1, WAFER PROCESS SYSTEMS,, 3 FT W. X 4 FT L. X 6 FT 8 IN H. A/N: 544405 Permit to Construct Issued: 06/11/13	D416	C455			B59.15, C1.26
BENCH, SOLVENT CLEANING WET BENCH, WAFER PROCESS SYSTEMS, 3 FT W. X 8 FT L. X 6 FT 8 IN H. A/N: 544405 Permit to Construct Issued: 06/11/13	D417	C455			B59.15, C1.26

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Process 9: BPL LAB					P13.1
DRYER, IPA, AIO MICROSERVICE, MODEL NO. SF-600, 2FT 6IN W X 3FT 6IN L X 6FT 1IN H A/N: 544405 Permit to Construct Issued: 06/11/13	D549	C455			B59.15, C1.26
Process 10: D1 EAST LAB					P13.1
System 2: Integrated Circuit Fabrication					
PLASMA ETCHER, MATRIX #6, MATRIX SYSTEM ONE STRIPPER, MODEL NO. 106 A/N: 544399 Permit to Construct Issued: 06/11/13	D511	C160 C161			B59.4, B59.71
PLASMA ETCHER, PLASMA THERM, MODEL NO. SL720 A/N: 516124 Permit to Construct Issued: 02/08/11	D113				
DEPOSITION REACTOR, CHEMICAL VAPOR DEPOSITION, LOCATED IN BUILDING D1 GAAS PILOT LINE, PECVD TYPE, ELECTROTECH, MODEL DELTA 201, WITH THREE VACUUM PUIMPS A/N: 516124 Permit to Construct Issued: 02/08/11	D306			**PM**: (9) [**RULE 405, 2-7-1986**]	C1.6, K48.4
PLASMA ETCHER, NITRIDE ETCH, VLR II, UNAXIS/PLASMATHERM, MODEL NO. VLR700 A/N: 516124 Permit to Construct Issued: 02/08/11	D512	C161			B59.40

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Process 10: D1 EAST LAB					P13.1
PLASMA ETCHER, NO. 7, MATRIX SYSTEM ONE STRIPPER, MODEL NO. E2053 A/N: 516124 Permit to Construct Issued: 02/08/11	D514	C161			B59.40
PLASMA ETCHER, NITRIDE ETCH, TEGAL, MODEL NO. 901E A/N: 516124 Permit to Construct Issued: 02/08/11	D517	C161			B59.40
PLASMA ETCHER, NO. 3, PLASMA THERM, MODEL NO. SLR SERIES, TWO VACUUM PUMPS A/N: 516124 Permit to Construct Issued: 02/08/11	D522	C161			B59.44, C1.36
BENCH, PLASMA DESCUMMER NO.1, TECHNICS, MODEL NO. PE II/IIA, 2 FT 8 IN L X 2 FT 6 IN W, X 2 FT H, 2.2 KVA, AND 0.8 H.P. VACUUM SYSTEM A/N: 516124 Permit to Construct Issued: 02/08/11	D523	C161			B59.4, B59.43
BENCH, PLASMA DESCUMMER NO. 2,TECHNICS, MODEL NO. PE II/IIA, 2 FT 8 IN L X 2 FT 6 IN W, X 2 FT H, 2.2 KVA AND 0.8 H.P. VACUUM SYSTEM A/N: 516124 Permit to Construct Issued: 02/08/11	D524	C161			B59.4, B59.43
FURNACE, ELECTRIC, MRL INDUSTRIES, MODEL THERMTEC, 80 KW A/N: 516124 Permit to Construct Issued: 02/08/11	D94	C161			

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Process 10: D1 EAST LAB					P13.1
ION IMPLANTER, VARIAN, MODEL EHP 500, HEIGHT: 8FT; LENGTH: 16FT; WIDTH: 10FT 6IN A/N: 516124 Permit to Construct Issued: 02/08/11	D425	C6			B59.12
Process 11: D1 WEST LAB					P13.1
System 1: Photolithographic Processes					S1.1
BENCH, PHOTORESIST COATER NO. 1, LENGTH; 6FT 10IN; WIDTH: 3FT; HEIGHT: 6FT 8IN;, WITH TWO WAFER CONVEYORS, TWO SPINNERS AND FOUR HOT PLATES A/N: 544403 Permit to Construct Issued: 06/11/13	D346	C364			B59.49
BENCH, PHOTORESIST COATER NO. 2, LENGTH; 6FT 10IN; WIDTH: 4FT 4IN; HEIGHT: 6FT 8IN;, WITH TWO WAFER CONVEYORS, TWO SPINNERS AND FOUR HOT PLATES A/N: 544403 Permit to Construct Issued: 06/11/13	D347	C364			B59.49
BENCH, TRACK DEVELOP STATION NO. 1, POTASSIUM HYDROXIDE A/N: 544403 Permit to Construct Issued: 06/11/13	D397	C232			B59.49
BENCH, TRACK DEVELOP STATION NO. 2, POTASSIUM HYDROXIDE A/N: 544403 Permit to Construct Issued: 06/11/13	D398	C232			B59.49

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 11: D1 WEST LAB					P13.1
BENCH, DEVELOPER, C&D SEMICONDUCTOR, MODEL 8800, LENGTH: 4FT 11IN; WIDTH: 3FT 11IN; HEIGHT: 5FT 10IN A/N: 544403 Permit to Construct Issued: 06/11/13	D477	C232			B59.49
BENCH, PHOTORESIST COATER, C&D, SEMICONDUCTOR SERVICES, MODEL 8800, LENGTH: 8FT; WIDTH: 2FT 11IN; HEIGHT:3FT 11IN A/N: 544403 Permit to Construct Issued: 06/11/13	D481	C460			B59.49
OVEN, NO. 2, VAPOR PRIME, LENGTH: 1FT 10IN; WIDTH 2FT; HEIGHT: 2FT 11IN;, ELECTRICALLY HEATED, 2.2 KVA A/N: 544403 Permit to Construct Issued: 06/11/13	D349	C232			
OVEN, NO. 1, PHOTORESIST BAKE, LENGTH: 1FT 10IN; WIDTH: 2FT; HEIGHT: 2FT 11IN;, ELECTRICALLY HEATED A/N: 544403 Permit to Construct Issued: 06/11/13	D350	C364			
OVEN, NO. 3, PHOTORESIST BAKE, LENGTH: 1FT 10IN; WIDTH: 2FT; HEIGHT: 2FT 11IN;, ELECTRICALLY HEATED A/N: 544403 Permit to Construct Issued: 06/11/13	D352	C364			

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 11: D1 WEST LAB					P13.1
OVEN, NO. 4, PHOTORESIST BAKE, LENGTH: 1FT 10IN; WIDTH: 2FT; HEIGHT: 2FT 11IN;, ELECTRICALLY HEATED A/N: 544403 Permit to Construct Issued: 06/11/13	D353	C364			
OVEN, NO. 5, PHOTORESIST BAKE, LENGTH: 1FT 10IN; WIDTH: 2FT; HEIGHT: 2FT 11IN;, ELECTRICALLY HEATED A/N: 544403 Permit to Construct Issued: 06/11/13	D354	C364			
OVEN, LABLINE,, LENGTH: 1FT 10IN; WIDTH: 2FT; HEIGHT: 2FT 11IN; ELECTRICALLY HEATED A/N: 544403 Permit to Construct Issued: 06/11/13	D587	C460			
OVEN, LABLINE,, LENGTH: 1FT 10IN; WIDTH: 2FT; HEIGHT: 2FT 11IN; ELECTRICALLY HEATED A/N: 544403 Permit to Construct Issued: 06/11/13	D588	C460			
OVEN, BARNSTEAD, LABLINE, MODEL 3497M-3 A/N: 544403 Permit to Construct Issued: 06/11/13	D589	C364			
OVEN, TRW, PHOTORESIST BAKE, ELECTRICALLY HEATED A/N: 544403 Permit to Construct Issued: 06/11/13	D277	C364			

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 11: D1 WEST LAB					P13.1
BENCH, PHOTORESIST COATER, C&D, SEMICONDUCTOR SERVICES, MODEL 8800 SERIES A/N: 544403 Permit to Construct Issued: 06/11/13	D572	C460			B59.49
BENCH, MANUAL PHOTORESIST COATER A/N: 544403 Permit to Construct Issued: 06/11/13	D484	C460			B59.49
BENCH, PHOTORESIST STRIPPER, SEMITOOL NO. 8, MODEL NO. SSTC401270, 3 FT 3 IN W. X 5 FT 5 IN L. X 5 FT 7 IN H., 7.2 KW ELECTRICALLY HEATED A/N: 544403 Permit to Construct Issued: 06/11/13	D335	C364			B59.49
BENCH, PHOTORESIST STRIPPER, SEMITOOL NO.3, MODEL NO. SSTC 621270, 18 KVA ELECTRICALLY HEATED, 6 FT 2 IN W. X 3 FT L. X 5 FT 10 IN H, WITH ONE SPINNER A/N: 544403 Permit to Construct Issued: 06/11/13	D274	C364			B59.49
System 2: Integrated Circuit Fabrication					S1.4, S1.5
PLASMA ETCHER, ETCH NO. 1, 65-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D374	C160			B59.4, B59.71
PLASMA ETCHER, ETCH NO. 2, 65-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D375	C160			B59.4, B59.71

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 11: D1 WEST LAB					P13.1
PLASMA ETCHER, CLEAN NO. 1, MATRIX, 6.0-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D378	C160			B59.4, B59.71
PLASMA ETCHER, CLEAN NO. 5, MATRIX, 6.0-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D382	C160			B59.4, B59.71
PLASMA ETCHER, CLEAN NO. 6, MATRIX, 6.0-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D383	C232			B59.4, B59.71
PLASMA ETCHER, CLEAN NO. 9, MATRIX, 6.0-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D386	C160			B59.4, B59.71
PLASMA ETCHER, CLEAN NO. 11, MATRIX, 6.0-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D388	C160			B59.4, B59.71
PLASMA ETCHER, DEPOSITION NO. 1, PLASMA THERM INC. 65-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D390	C160			B59.4, B59.71
PLASMA ETCHER, DEPOSITION NO. 2, PLASMA THERM INC. 65-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D391	C160			B59.4, B59.71
PLASMA ETCHER, CLEAN NO. 1, MATRIX, 21.4-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D403	C160			B59.4, B59.71

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 11: D1 WEST LAB					P13.1
PLASMA ETCHER, CLEAN NO. 2, MATRIX, 21.4-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D404	C160			B59.4, B59.71
PLASMA ETCHER, CLEAN NO. 4, MATRIX, 21.4-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D406	C232			B59.4, B59.71
PLASMA ETCHER, MATRIX, MODEL EHP500,, LENGTH: 3FT; WIDTH: 4FT; HEIGHT: 6FT; WITH THREE VACUUM PUMPS A/N: 544399 Permit to Construct Issued: 06/11/13	D450	C233			B59.4, B59.71
PLASMA ETCHER, ICP NO. 1, TRIKON, MODEL OMEGA, LENGTH: 3FT; WIDTH: 4FT; HEIGHT: 6FT; 65-KVA, WITH THREE VACUUM PUMPS, 2.0-HP TOTAL A/N: 544399 Permit to Construct Issued: 06/11/13	D507	C232			B59.4, B59.71
PLASMA ETCHER, ICP NO. 2, TRIKON, MODEL OMEGA, LENGTH: 3FT; WIDTH: 4FT; HEIGHT: 6FT; 65-KVA, WITH THREE VACUUM PUMPS, 2.0-HP TOTAL A/N: 544399 Permit to Construct Issued: 06/11/13	D508	C232			B59.4, B59.71

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 11: D1 WEST LAB					P13.1
PLASMA ETCHER, ICP NO. 3, TRIKON, MODEL OMEGA, LENGTH: 3FT; WIDTH: 4FT; HEIGHT: 6FT; 65-KVA, WITH THREE VACUUM PUMPS, 2.0-HP TOTAL A/N: 544399 Permit to Construct Issued: 06/11/13	D509	C232			B59.4, B59.71
PLASMA ETCHER, DESCUMMER, BRANSON/IPC, MODEL REACTOR CENTER PM 1813, LENGTH: 3FT; WIDTH: 3FT; HEIGHT: 3FT A/N: 544399 Permit to Construct Issued: 06/11/13	D528	C233			B59.4, B59.71
ION IMPLANTER, ION BEAM MILL VACUUM PUMP A/N: 544399 Permit to Construct Issued: 06/11/13	D182	C233			B59.4, B59.71
DEPOSITION REACTOR, SPUTTERING NO. 1, 21.4-KVA A/N: 544399 Permit to Construct Issued: 06/11/13	D407	C232			B59.4, B59.71
PROCESS TANK, PASS-THRU ACID UNIT A/N: 544399 Permit to Construct Issued: 06/11/13	D189	C160			B59.4, B59.71
PLASMA ETCHER, NO. 14, MATRIX SYSTEM ONE STRIPPER, MODEL NO. 105E A/N: 544399 Permit to Construct Issued: 06/11/13	D516	C160			B59.4, B59.71

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 11: D1 WEST LAB					P13.1
DEPOSITION REACTOR, VAPOR PRIME, Y.E.S., LENGTH: 1FT 8IN; WIDTH: 2FT; HEIGHT: 2FT 4IN;, ELECTRICALLY HEATED A/N: 544399 Permit to Construct Issued: 06/11/13	D552	C232			B59.4, B59.71
PLASMA ETCHER, ICP NO. 3, TRIKON, MODEL OMEGA, LENGTH: 3FT; WIDTH: 4FT; HEIGHT: 6FT; 65-KVA, WITH THREE VACUUM PUMPS, 2.0-HP TOTAL A/N: 544399 Permit to Construct Issued: 06/11/13	D584	C232			B59.4, B59.71
PLASMA ETCHER, NO. 1, MATRIX, MODEL 105E, LENGTH: 3FT; WIDTH:4FT; HEIGHT: 6FT A/N: 544399 Permit to Construct Issued: 06/11/13	D540	C232			B59.4, B59.71
PLASMA ETCHER, TEGAL, MODEL 110, LENGTH: 2 FT 9IN; WIDTH: 6 FT 4 IN; HEIGHT: 6 FT 10IN, WITH TWO VACUUM PUMPS A/N: 544399 Permit to Construct Issued: 06/11/13	D596	C232			B59.4, B59.71, C1.55
PLASMA ETCHER, SURFACE TECHNOLOGY SYSTEMS, MPX A/N: 544399 Permit to Construct Issued: 06/11/13	D613	C160			B59.4, B59.71
BENCH, TRACK DEVELOPER, C & D SEMICONDUCTOR SERVICES, MODEL NO. 8800 SERIES, 4 FT 10 IN, L X 4 FT W X 3 FT 8 IN H A/N: 544399 Permit to Construct Issued: 06/11/13	D525	C232			B59.4, B59.71

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 11: D1 WEST LAB					P13.1
BENCH, DEVELOPER, TRACK, C&D A/N: 544399 Permit to Construct Issued: 06/11/13	D537	C160			B59.4, B59.71
VACUUM METALIZING/VAPOR DEPOSITION, FIJI F200 PLASMA ATOMIC LAYER DEPOSITION(ALD) A/N: 544399 Permit to Construct Issued: 06/11/13	D611				B59.4, B59.71
OVEN, OZONE PHOTOREACTOR, MODEL PR-100 A/N: 544399 Permit to Construct Issued: 06/11/13	D614				B59.4, B59.71
PLASMA ETCHER, DEPOSITION/ETCHER, PLASMATHERM, MODEL DUAL 790 A/N: 544399 Permit to Construct Issued: 06/11/13	D97	C160			B59.4, B59.71
DEPOSITION REACTOR A/N: 544399 Permit to Construct Issued: 06/11/13	D462	C160			B59.4, B59.71
PLASMA ETCHER, MATRIX #6, MATRIX SYSTEM ONE STRIPPER, MODEL NO. 106 A/N: 544399 Permit to Construct Issued: 06/11/13	D511	C160 C161			B59.4, B59.71
VACUUM METALIZING/VAPOR DEPOSITION, EVAP 4, TEMESCAL 2500 A/N: 544399 Permit to Construct Issued: 06/11/13	D615	C232			B59.4, B59.71

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 11: D1 WEST LAB					P13.1
VACUUM METALIZING/VAPOR DEPOSITION, EVAP 10, TEMESCAL 2500 A/N: 544399 Permit to Construct Issued: 06/11/13	D616	C232			B59.4, B59.71
STORAGE CABINET, RULE 219 EXEMPT, GAS CABINETS A/N: 544399 Permit to Construct Issued: 06/11/13	D617	C160			B59.4, B59.71
PLASMA ETCHER, UNAXIS/PLASMATHERM, MODEL NO. VLR700 A/N: 544399 Permit to Construct Issued: 06/11/13	D513	C232			B59.4, B59.71
PLASMA ETCHER, TEGAL 04 A/N: 544399 Permit to Construct Issued: 06/11/13	D624	C232			B59.4, B59.71
VACUUM METALIZING/VAPOR DEPOSITION, EVAP 7, TEMESCAL 2500 A/N: 544399 Permit to Construct Issued: 06/11/13	D621	C232			B59.4, B59.71
PLASMA ETCHER, DESCUMMER, TEGAL 01 A/N: 544399 Permit to Construct Issued: 06/11/13	D622	C232			B59.4, B59.71
DEPOSITION REACTOR, DEP-08, CHEMICAL VAPOR DEPOSITION A/N: 544399 Permit to Construct Issued: 06/11/13	D623	C160			B59.4, B59.71
Process 15: MISCELLANEOUS EQUIPMENT					

* (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
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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
Process 15: MISCELLANEOUS EQUIPMENT					
SOLDER MACHINE, IBL, MODEL NO. BLC809, ELECTRICALLY HEATED WITH A RAPID COOL SECTION, 30 KW A/N: 548681 Permit to Construct Issued: 06/18/13	D625				B59.73, C1.59
Process 18: 441 Research Permit					
INCINERATOR, 441 RESEARCH PERMIT, JP8 FUEL FIRED, 3FT-6IN L. X 3FT-10IN W. X 4FT-0IN H WITH A 1.14 MMBTU/HR BURNER A/N: 551048 Permit to Construct Issued: 08/29/13	D626	C13		**NOX**: 20 LBS/1000 GAL FUEL OIL (1) [**RULE 2012, 5-6-2005**]	C1.60, E57.1, I297.2, L270.1
SCRUBBER, AMERICAN AIR FILTER, WITH TWO MIST ELIMINATOR SECTIONS, WIDTH: 3 FT 6 IN; HEIGHT: 4 FT 7 IN; LENGTH: 1 FT 2 IN A/N: 551049 Permit to Construct Issued: 08/29/13	C13	C14 D626			C8.4, C8.9, D90.1, K67.3
FILTER, CARBON TYPE, CAMBRIDGE FILTER CORP., MODEL STM 20-20, WIDTH: 2 FT 2 IN; HEIGHT: 2 FT 3 IN; LENGTH: 5 FT A/N: 551049 Permit to Construct Issued: 08/29/13	C14	C13			E149.2, E224.2

* (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

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

FACILITY PERMIT TO OPERATE
NORTHROP GRUMMAN SYSTEMS

SECTION H: 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
NORTHROP GRUMMAN SYSTEMS

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	**Section H Page No.**	**Process**	**System**
C6	1	1	0
C13	20	18	0
C14	20	18	0
D94	9	10	2
D97	18	11	2
D113	8	10	2
C160	1	1	0
C161	1	1	0
D182	16	11	2
D189	16	11	2
C232	2	1	0
D274	13	11	1
D277	12	11	1
D306	8	10	2
D335	13	11	1
D338	7	9	4
D346	10	11	1
D347	10	11	1
D349	11	11	1
D350	11	11	1
D352	11	11	1
D353	12	11	1
D354	12	11	1
C364	2	1	0
D374	13	11	2
D375	13	11	2
D378	14	11	2
D382	14	11	2
D383	14	11	2
D386	14	11	2
D388	14	11	2
D390	14	11	2
D391	14	11	2
D397	10	11	1

FACILITY PERMIT TO OPERATE
NORTHROP GRUMMAN SYSTEMS

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	**Section H Page No.**	**Process**	**System**
D398	10	11	1
D403	14	11	2
D404	15	11	2
D406	15	11	2
D407	16	11	2
D411	4	9	1
D412	4	9	1
D413	4	9	1
D414	4	9	1
D416	7	9	4
D417	7	9	4
D425	10	10	2
D426	7	9	2
D428	5	9	2
D429	5	9	2
D430	5	9	2
D431	5	9	2
D432	5	9	2
D433	6	9	2
D434	6	9	2
D435	6	9	2
D438	4	9	1
D450	15	11	2
C455	3	1	0
C460	3	1	0
D462	18	11	2
D477	11	11	1
D481	11	11	1
D484	13	11	1
D501	6	9	2
D503	6	9	2
D507	15	11	2
D508	15	11	2
D509	16	11	2

FACILITY PERMIT TO OPERATE
NORTHROP GRUMMAN SYSTEMS

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	**Section H Page No.**	**Process**	**System**
D511	8	10	2
D511	18	11	2
D512	8	10	2
D513	19	11	2
D514	9	10	2
D516	16	11	2
D517	9	10	2
D522	9	10	2
D523	9	10	2
D524	9	10	2
D525	17	11	2
D528	16	11	2
D537	18	11	2
D540	17	11	2
D549	8	9	4
D552	17	11	2
D572	13	11	1
D584	17	11	2
D587	12	11	1
D588	12	11	1
D589	12	11	1
D595	7	9	2
D596	17	11	2
D597	4	9	1
D611	18	11	2
D612	3	4	0
D613	17	11	2
D614	18	11	2
D615	18	11	2
D616	19	11	2
D617	19	11	2
D618	4	9	1
D619	5	9	1
D621	19	11	2

FACILITY PERMIT TO OPERATE
NORTHROP GRUMMAN SYSTEMS

SECTION H: DEVICE ID INDEX

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D622	19	11	2
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D624	19	11	2
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D626	20	18	0

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

FACILITY CONDITIONS

F2.1 The operator shall limit emissions from this facility as follows:

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than or equal to 833 LBS IN ANY ONE MONTH

To ensure compliance with the monthly Volatile Organic Compound(VOC) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

(1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).

(2) Within 14 calendar days after the end of each month, the operator shall total and record VOC emissions for the month from all equipment and operations covered by the monthly emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.

(3) The operator shall maintain a single list which includes only the name and address of each person from whom the facility acquired VOC-containing material regulated by the District that was used or stored at the facility during the preceding 12 months.

(4) The operator shall retain all purchase invoices for all VOC-containing material used or stored at the facility, and all waste manifests for all waste VOC-containing material removed from the facility, for five years.

For the purpose of this condition, the VOC emission limit shall be from all equipment and operations that are subject to Rule 442.

[**RULE 442, 12-15-2000**]

FACILITY PERMIT TO OPERATE
NORTHROP GRUMMAN SYSTEMS

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

F2.2 The operator shall limit emissions from this facility as follows:

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than or equal to 22 LBS IN ANY ONE MONTH

To ensure compliance with the monthly Volatile Organic Compound(VOC) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

(1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).

(2) Within 14 calendar days after the end of each month, the operator shall total and record VOC emissions for the month from all equipment and operations covered by the monthly emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.

(3) The operator shall maintain a single list which includes only the name and address of each person from whom the facility acquired VOC-containing material regulated by the District that was used or stored at the facility during the preceding 12 months.

(4) The operator shall retain all purchase invoices for all VOC-containing material used or stored at the facility, and all waste manifests for all waste VOC-containing material removed from the facility, for five years.

For the purpose of this condition, the VOC emission limit shall be from all vapor degreasers operating under the Rule 1122 exemption pursuant to Rule 1122(k)(2).

[**RULE 1122, 10-1-2004;** RULE 1122, 5-1-2009]

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

F2.3 The operator shall limit emissions from this facility as follows:

CONTAMINANT	EMISSIONS LIMIT
Single Volatile Hazardous Air Pollutant (VHAP)	Less than 10 TONS IN ANY 12-MONTH PERIOD
Combination of Volatile Hazardous Air Pollutants (VHAPs)	Less than 25 TONS IN ANY 12-MONTH PERIOD

To ensure compliance with the 12-month Volatile Hazardous Air Pollutant (VHAP) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

(1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).

(2) Within 14 calendar days after the end of each month, the operator shall total and record VHAP emissions for the month and for the previous 12 month period from all equipment and operations covered by the 12-month emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.

(3) The operator shall maintain a single list which includes only the name and address of each person from whom the facility acquired VHAP-containing material regulated by the District that was used or stored at the facility during the preceding 12 months.

(4) The operator shall retain all purchase invoices for all VHAP-containing material used or stored at the facility, and all waste manifests for all waste VHAP-containing material removed from the facility, for five years.

[**40CFR 63 Subpart BBBBB, 5-22-2003**]

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

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.

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

F14.2 The operator shall not purchase diesel fuel 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]

F52.1 This facility is subject to the applicable requirements of the following rules or regulation(s):

District Rule 1420

[RULE 1420, 9-11-1992]

PROCESS CONDITIONS

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

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

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1164
VOC	District Rule	109

[**RULE 109, 5-2-2003; RULE 1164, 1-13-1995**]

[Processes subject to this condition : 8, 9, 10, 11, 12, 13]

P13.2 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1122
VOC	District Rule	109

[**RULE 109, 5-2-2003; RULE 1122, 10-1-2004;** RULE 1122, 5-1-2009]

[Processes subject to this condition : 4]

SYSTEM CONDITIONS

S1.1 The operator shall limit the material processed to no more than 790 gallon(s) in any one calendar month.

For the purpose of this condition, material processed shall be defined as materials containing VOC. This limit shall be based on the total combined limit for all equipment in this system.

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

[Systems subject to this condition : Process 11, System 1]

S1.2 The operator shall limit the material processed to no more than 42 gallon(s) per month.

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

For the purpose of this condition, material processed shall be defined as materials with a VOC content of 9.2 lbs per gallon or less. This limit shall be based on the total combined limit for all equipment in this system.

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

[Systems subject to this condition : Process 9, System 1]

S1.3 The operator shall limit the material processed to no more than 89 cubic feet in any one calendar month.

For the purpose of this condition, material processed shall be defined as cholrine gas used in this system.

[RULE 1401, 9-10-2010]

[Systems subject to this condition : Process 9, System 2]

S1.4 The operator shall limit the material processed to no more than 100 lb(s) in any one year.

For the purpose of this condition, material processed shall be defined as ammonia used in this system.

[**RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1401, 9-10-2010]

[Systems subject to this condition : Process 11, System 2]

S1.5 The operator shall limit the material processed to no more than 20 lb(s) in any one year.

For the purpose of this condition, material processed shall be defined as chlorine gas used in this system.

[**RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1401, 9-10-2010]

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NORTHROP GRUMMAN SYSTEMS

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

[Systems subject to this condition : Process 11, System 2]

S13.1 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
HAPs	District Rule	1426

[RULE 1426, 5-2-2003]

[Systems subject to this condition : Process 14, System 2]

DEVICE CONDITIONS

A. Emission Limits

A72.1 The operator shall maintain this equipment to achieve a minimum destruction efficiency of 95 percent for ROG during the normal operation of the equipment it vents.

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

[Devices subject to this condition : C364, C455, C460]

A72.2 The operator shall maintain this equipment to achieve a minimum overall control efficiency of 90 percent for ROG during the normal operation of the equipment it vents.

[**RULE 1164, 1-13-1995; 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]

[Devices subject to this condition : C455]

B. Material/Fuel Type Limits

B27.5 The operator shall not use materials containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401, as amended 12-mar-1999.

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

For the purposes of this condition, toxic air contaminants (TACs) are those in Table I of the above mentioned rule, with an effective date of 12-mar-1999 or earlier.

[RULE 1401, 3-12-1999]

[Devices subject to this condition : D338]

B59.4 The operator shall not use the following material(s) in this device :

Materials containing VOC.

[**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]

[Devices subject to this condition : D97, D182, D189, D374, D375, D378, D382, D383, D386, D388, D390, D391, D403, D404, D406, D407, D450, D462, D507, D508, D509, D511, D513, D516, D523, D524, D525, D528, D537, D540, D552, D584, D596, D611, D613, D614, D615, D616, D617, D621, D622, D623, D624]

B59.12 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 8/13/99 or earlier

[RULE 1401, 8-13-1999]

[Devices subject to this condition : D425]

B59.14 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of May 2, 2003 or earlier except methanol, isopropyl alcohol, and chlorobenzene

[RULE 1401, 8-18-2000]

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

[Devices subject to this condition : D411, D412, D413, D414, D618, D619]

B59.15 The operator shall not use the following material(s) in this device :

toxic air contaminants in table 1 of rule 1401 with a listing date of 8/18/2000 or earlier except isopropyl alcohol, methanol, and trichloroethylene.

[RULE 1401, 8-18-2000]

[Devices subject to this condition : D416, D417, D549]

B59.20 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 3/04/05 or earlier except hydrochloric acid, hexavalent chrome, hydrofluoric acid, nickel sulfamate, nitric acid, and phosphoric acid.

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D438]

B59.21 The operator shall not use the following material(s) in this device :

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

methylene chloride

1,1,1 trichloroethane

chloroform

perchloroethylene

trichloroethylene

carbon tetrachloride

HCFC-141b

The purpose of this condition is to ensure that this equipment is not subject to the degreaser NESHAP 40CFR63 SUBPART T requirements.

[**40CFR 63 Subpart T, 12-8-2000**]

[Devices subject to this condition : D612]

B59.38 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 9/10/2010 or earlier except chlorine

[RULE 1401, 9-10-2010]

[Devices subject to this condition : D426, D428, D429, D430, D431, D432, D433, D434, D435, D501, D503, D595]

B59.40 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 5/02/03 or earlier except chlorine, hydrochloric acid, phosphoric acid, hydrofluoric acid, ammonia and isopropyl alcohol

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

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D512, D514, D517]

B59.43 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 5/02/03 or earlier

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D523, D524]

B59.44 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 5/02/03 or earlier except chlorine, arsenic, and isopropyl alcohol

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D522]

B59.49 The operator shall not use the following material(s) in this device :

Materials containing any toxic air contaminants identified in the Rule 1401, Table 1, with a date of listing of of 9/10/10 or earlier except cresol, isopropyl alcohol, methanol, xylene, phenol , propylene glycol monomethyl ether, cellosolve acetate and chlorobenzene.

[RULE 1401, 9-10-2010]

[Devices subject to this condition : D274, D335, D346, D347, D397, D398, D477, D481, D484, D572]

B59.65 The operator shall not use the following material(s) in this device :

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

Toxic air contaminants (TACs) in table 1 of Rule 1401 with a listing date of 3/07/08 or earlier except ammonia.

Materials containing Volatile Organic Compounds (VOCs)

[**RULE 1164, 1-13-1995; RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1401, 3-7-2008]

[Devices subject to this condition : D597]

B59.70 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 9/10/10 or earlier.

[RULE 1401, 9-10-2010]

[Devices subject to this condition : D612]

B59.71 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 9/10/10 or earlier except chlorine.

[RULE 1401, 9-10-2010]

[Devices subject to this condition : D97, D182, D189, D374, D375, D378, D382, D383, D386, D388, D390, D391, D403, D404, D406, D407, D450, D462, D507, D508, D509, D511, D513, D516, D525, D528, D537, D540, D552, D584, D596, D611, D613, D614, D615, D616, D617, D621, D622, D623, D624]

B59.73 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table 1 of rule 1401 with a listing date of 9/10/10 or earlier except isopropyl alcohol, lead and its compounds, copper and its compounds

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

[RULE 1401, 9-10-2010]

[Devices subject to this condition : D625]

C. Throughput or Operating Parameter Limits

C1.6 The operator shall limit the material processed to no more than 3600 in any one month.

For the purpose of this condition, material processed shall be defined as the total number of wafers processed.

[**RULE 1303(b)(2)-Offset, 5-10-1996**]

[Devices subject to this condition : D306]

C1.19 The operator shall limit the material processed to no more than 300 lb(s) in any one calendar month.

For the purpose of this condition, material processed shall be defined as photoresist coatings and solvents containing VOC.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[**RULE 1303(b)(2)-Offset, 5-10-1996**]

[Devices subject to this condition : D338]

C1.26 The operator shall limit the material processed to no more than 300 gallon(s) per month.

For the purpose of this condition, material processed shall be defined as material containing VOC.

This limit shall be based on the total combined limit for equipment D416, D417 & D549.

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

[**RULE 1303(b)(2)-Offset, 5-10-1996**]

[Devices subject to this condition : D416, D417, D549]

C1.36 The operator shall limit the material processed to no more than 0.50 gallon(s) per month.

For the purpose of this condition, material processed shall be defined as isopropyl alcohol.

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

[Devices subject to this condition : D522]

C1.55 The operator shall limit the material processed to no more than 240 in any one month.

For the purpose of this condition, material processed shall be defined as number of wafers processed in this equipment.

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

[Devices subject to this condition : D596]

C1.56 The operator shall limit the throughput to no more than 480 batch(es) in any one month.

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

[Devices subject to this condition : D597]

C1.59 The operator shall limit the material processed to no more than 1.0 gallon(s) per month.

For the purpose of this condition, material processed shall be defined as materials containing VOC.

[**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 : D625]

C1.60 The operator shall limit the fuel usage to no more than 16 gallon(s) per day.

For the purpose of this condition, fuel usage shall be defined as JP8 used in this device.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 441, 5-7-1976]

[Devices subject to this condition : D626]

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 100 gpm.

To comply with this condition, the operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the recirculating scrubbing solution.

[**RULE 1303(a)(1)-BACT, 5-10-1996**]

[Devices subject to this condition : C232]

C8.3 The operator shall use this equipment in such a manner that the flow rate being monitored, as indicated below, is not less than 150 gpm.

To comply with this condition, the operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the recirculating scrubbing solution.

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

[Devices subject to this condition : C6, C160]

C8.4 The operator shall use this equipment in such a manner that the pressure being monitored, as indicated below, is not less than 10 Psig.

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

To comply with this condition, the operator shall install and maintain a(n) pressure gauge to accurately indicate the pressure of the water supplied to both stages of the scrubber.

[**RULE 1303(a)(1)-BACT, 5-10-1996**]

[Devices subject to this condition : C13]

C8.5 The operator shall use this equipment in such a manner that the flow rate being monitored, as indicated below, is not less than 125 gpm.

To comply with this condition, the operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the scrubbing solution supplied to the spray nozzles.

[**RULE 1303(a)(1)-BACT, 5-10-1996**]

[Devices subject to this condition : C161]

C8.8 The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, is not less than 1500 Deg F.

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

To comply with this condition, the operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the combustion zone of the thermal oxidizer.

The measuring device or gauge shall be accurate to within plus or minus 30 Deg F. It shall be calibrated once every 12 months.

[**RULE 1303(a)(1)-BACT, 5-10-1996**]

[Devices subject to this condition : C455]

C8.9 The operator shall use this equipment in such a manner that the pH being monitored, as indicated below, is not less than 8 of the pH scale.

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

To comply with this condition, the operator shall monitor and record the pH as specified in condition number 90-1.

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

[Devices subject to this condition : C6, C13, C160, C161, C232]

D. Monitoring/Testing Requirements

D29.2 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
VOC	Approved District method	District-approved averaging time	Simultaneous inlet and outlet

The test shall be conducted at least once during the life of the permit but no later than July 9, 2015 unless otherwise approved in writing by the District.

The test shall be conducted to determine the VOC emissions using an approved District method to determine compliance with all applicable permit condition(s), Rules and Regulations.

The test shall be conducted while the oxidizer is operating at a temperature of not less than the minimum operating temperature specified in this permit. If the operating temperature during the source test is greater than the minimum operating temperature specified in the permit, the minimum operating temperature specified in this permit may be increased to reflect the operating temperature during the source test.

The operator shall comply with administrative conditions NOs. 8, 9, and 10 of Section E of this facility permit

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition : C364, C455, C460]

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

D29.3 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	Approved District method	District-approved averaging time	Outlet
CO emissions	Approved District method	District-approved averaging time	Outlet
VOC emissions	Approved District method	District-approved averaging time	Simultaneous inlet and outlet

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

In addition to the source test requirements of Section E of this facility permit, the facility permit holder shall submit the protocol to the AQMD engineer no later than 60 days prior to the proposed test date, and notify the District of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at the inlet and the exhaust of the RTO for (1) VOC in PPMV and lbs/hr. (2) NOx emissions in PPMV and lbs/hr (exhaust only). (3) CO emissions in PPMV and lbs/hr (exhaust only). (4) VOC destruction efficiency. (5) VOC collection efficiency. (6) Usage of all VOC-containing materials during the test. (7) Oxygen content. (8) Moisture content. (9) Flow rate. (10) Temperature.

The test(s) shall be conducted within 60 days after achieving maximum production rate, but no later than 120 days after initial start-up.

The test shall be conducted under start-up conditions with only the start-up burner in operation.

The test shall be conducted with only natural gas injection in operation without the assistance of the start-up burner.

Not withstanding the requirements of Section E conditions, the source test results shall be submitted to the District no later than 60 days after the source test was conducted.

The test shall be conducted while the afterburner is operating at a temperature of not less than the minimum operating temperature specified in this permit. If the operating temperature during the source test is greater than the minimum operating temperature specified in this permit, the minimum operating temperature specified in this permit may be increased to reflect the operating temperature during the source test.

The operator shall comply with administrative conditions Nos 8, 9, and 10 of section E of this permit

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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 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 : C364, C455, C460]

D90.1 The operator shall periodically monitor the pH of the scrubbing solution according to the following specifications:

The operator shall use litmus paper or a portable pH analyzer to monitor the parameter.

The operator shall monitor once every day provided any equipment served by this control system is in operation.

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition : C6, C13, C160, C161, C232]

D322.2 The operator shall perform a monthly inspection of the cover to assure compliance with Rule 1122(c)(2)(A).

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition : D612]

E. Equipment Operation/Construction Requirements

E57.1 The operator shall vent this equipment to C13 whenever it is in operation. It shall be the only device vented to C13 when it is in operation.

[RULE 441, 5-7-1976]

[Devices subject to this condition : D626]

E149.2 The operator shall replace the carbon filters at least once every time there is an accidental leak of chlorine gas or hydrazine from the gas cabinet to the carbon filter.

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

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition : C14]

E158.1 The operator shall maintain a continuous overflow of water from the scrubber sump to prevent build up of contamination.

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

[Devices subject to this condition : C6, C160, C161, C232]

E159.1 The operator shall maintain inspection ports which, when opened, allow the observation of the spray nozzles and the scrubbing solution being sprayed on the packing.

[**RULE 1303(a)(1)-BACT, 5-10-1996**]

[Devices subject to this condition : C6, C160, C161, C232]

E193.1 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 combustion chamber temperature shall be maintained at a minimum of 1,500 degrees Fahrenheit whenever the equipment it serves is in operation

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the combustion chamber temperature pursuant to the operation and maintenance requirements specified in 40 CFR Part 64.7. Such a system shall have an accuracy of within 1% of the temperature being monitored and shall be inspected, maintained, and calibrated on an annual basis in accordance with the manufacturer's specifications

For the purpose of this condition, a deviation shall be defined as when a combustion chamber temperature of less than 1,500 degrees Fahrenheit occurs whenever the equipment it serves is in operation. The operator shall review the records of the combustion chamber temperature on a daily basis to determine if a deviation occurs or shall install an alarm system to alert the operator when a deviation occurs

Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective action to maintain the combustion chamber temperature at or above 1,500 degrees Fahrenheit, and keep records of the duration and cause (including unknown cause, if applicable) of the deviation and the corrective action taken

All deviations shall be reported to the AQMD pursuant to the requirements specified in 40 CFR Part 64.9 and Condition Nos. 22 and 23 in Section K of this permit. The report shall include the total operating time of this equipment and the total accumulated duration of all deviations for each semi-annual reporting period specified in Condition No. 23 in Section K of this permit

The operator shall submit an application with a Quality Improvement Plan (QIP) in accordance with 40 CFR Part 64.8 to the AQMD if an accumulation of deviations exceeds 5 percent duration of this equipment's total operating time for any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report

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

The operator shall inspect and maintain all components of this equipment on an annual basis in accordance with the manufacturer's specifications

The operator shall keep adequate records in a format that is acceptable to the AQMD to demonstrate compliance with all applicable requirements specified in this condition and 40 CFR Part 64.9 for a minimum of five years

[**RULE 1303(a)(1)-BACT, 5-10-1996; 40CFR Part 64, 10-22-1997**]

[Devices subject to this condition : C364, C455, C460]

E224.2 The operator shall replace the carbon filters with a set of fresh carbon filters when D626 becomes operational.

[RULE 441, 5-7-1976]

[Devices subject to this condition : C14]

H. Applicable Rules

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	109

[**RULE 109, 5-2-2003**]

[Devices subject to this condition : D338]

H339.1 The operator shall determine compliance with Rule 1122(e)(1)(B)requirements by measuring the temperature at the center of the air blanket once a month if the freeboard refrigeration device is used, or measuring the temperature at the center of the superheated solvent vapor zone once a month if superheated vapor system is used. In addition to the recordkeeping requirements in Section K of this Facility Permit, the operator shall keep records of the corrective actions taken when the monitoring demonstrates non-compliance.

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

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition : D612]

I. Administrative

I297.2 This equipment shall not be operated unless the facility holds 80 pounds of NOx 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.

In lieu of holding RTCs for the entire duration specified above, RTCs held for the purpose of demonstrating compliance with this condition may be transferred as specified below, provided quarterly emissions do not exceed the corresponding quarterly limit listed in the table below. The amount available for transfer shall be as specified in Rule 2005(f)(3). Such amount may be transferred only after the end of the subject quarter. If the first day of operation does not coincide with the first day of a calendar quarter, the emission limit for that calendar quarter shall be prorated based on the number of days remaining in the calendar quarter as of the first day of operation and the amount available for transfer after that calendar quarter shall be the prorated emission limit minus the actual emissions reportable for that calendar quarter pursuant to RECLAIM Monitoring, Recordkeeping, and Reporting protocols (MRR) and the emission limit for the portion of the first year of operation falling in the fifth calendar quarter shall be prorated based on the number of days of the first year of operation occurring in that calendar quarter and the amount available for transfer after that calendar quarter shall be the prorated emission limit minus the actual emissions reportable for the portion of the first year of operation occurring in that calendar quarter pursuant to RECLAIM MRR. If the quarterly certified emissions for any quarter (or portion of a quarter occurring within the first year of operation) exceed the corresponding quarterly emission limit or prorated quarterly emission limit, as applicable, the facility may only sell RTCs held pursuant to Rule 2005(f) after the first calendar quarter ending at least one year after operation commences.

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

Calendar Quarter	Emission Limit (Pounds of NOx RTCs)
January 1 through March 31	20
April 1 through June 30	20
July 1 through September 30	20
October 1 through December 31	20

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : D626]

I331.1 The conditions and requirements for this device in Section H shall take effect, and shall supersede those in Section D, when the modifications authorized in Section H are completed. The operator shall notify the AQMD when the modifications are completed.

[**RULE 202, 5-7-1976**]

[Devices subject to this condition : C160, C161, C232, C364, C455, C460]

K. Record Keeping/Reporting

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

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

[**RULE 1164, 1-13-1995; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2012, 5-6-2005**]

[Devices subject to this condition : C364, C455, C460]

K48.4 The operator shall maintain records in a manner approved by the District, to demonstrate compliance with the following condition number(s):

Condition Number C 1- 6

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

[**RULE 109, 5-2-2003**]

[Devices subject to this condition : D306]

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

pH of scrubbing solution on a daily basis

flow rate of recirculating scrubbing solution on a daily basis

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition : C6, C13, C160, C161, C232]

L. Expiration Date

L270.1 The operator shall use this equipment for research and development purposes only and shall cease operation of this equipment after 09/01/2014.

[RULE 441, 5-7-1976]

[Devices subject to this condition : D626]