

## **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 \_\_\_\_\_  
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Engineering & Compliance

## FACILITY PERMIT TO OPERATE NORTHROP GRUMMAN SYSTEMS

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## 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
<b>Process 1: CONTROL EQUIPMENT</b>					
SCRUBBER, PACKED BED, HARRINGTON, MODEL NO. HPH 55-4 A/N: 515057 Permit to Construct Issued: 12/07/10	C4	D545 D546		PM: (9) [RULE 404, 2-7-1986]	C8.2, C8.9, D90.1, E158.1, E159.1, K67.3
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: 502641 Permit to Construct Issued: 08/24/10	C6	D428 D429 D430 D431 D432 D433 D434 D435 D438 D501 D502 D503 D537 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: 516486 Permit to Construct Issued: 02/08/11	C160	D183 D189 D374 D375 D378 D382 D386 D388 D390 D391 D403 D404 D528 D613			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 D96 D97 D510 D511 D512 D513 D514 D516 D517 D522 D523 D524 E611			C8.5, C8.9, D90.1, E158.1, E159.1, I331.1, K67.3

\* (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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<b>Process 1: CONTROL EQUIPMENT</b>					
SCRUBBER, PACKED BED, HARRINGTON, HPH 66-4, WIDTH: 7FT 3IN; HEIGHT: 8FT 2IN; LENGTH: 10FT 5IN; WITH A 4FT PACKING DEPTH, A20-HP EXHAUST FAN, AND THREE 2-HP CIRCULATION PUMPS A/N: 503380 Permit to Construct Issued: 01/05/10	C232	D349 D383 D397 D398 D406 D407 D477 D507 D508 D509 D552 D584 D596		PM: (9) [RULE 404, 2-7-1986]	C8.1, C8.9, D90.1, E158.1, E159.1, I331.1, K67.3
SCRUBBER, PACKED BED, HARRINGTON, HPH 78-4 A/N: 455307 Permit to Construct Issued: 11/16/06	C233	D540		PM: (9) [RULE 404, 2-7-1986]	C8.3, C8.9, D90.1, E158.1, 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 A/N: 474064 Permit to Construct Issued: 03/25/08	C364	D346 D347 D350 D352 D353 D354 D355 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, E193.1, 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 A/N: 445656 Permit to Construct Issued: 11/16/06	C460	D157 D301 D481 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, E193.1, K40.1

\* (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

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

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<b>Process 1: CONTROL EQUIPMENT</b>					
OXIDIZER, HOT BED, NO. 3, GRACE TEC SYSTEMS, MODEL NO. ENTERPRISE IIL-060, NATURAL GAS, TWO ZONES, 8 FT W. X 18 FT L. X 10 FT H., 1.5 MMBTU/HR A/N: 455305 Permit to Construct Issued: 11/09/06	C305	D76 D77 D78 D82 D274 D299 D333 D337 D484 D498 D571 D572	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, A72.3, D29.2, E193.1, K40.1
<b>Process 4: DEGREASERS</b>					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, H23.7, H339.1
<b>Process 9: BPL LAB</b>					P13.1
<b>System 1: Photolithographic Processes</b>					
BENCH, PHOTORESIST COATER NO. 1 A/N: 499348 Permit to Construct Issued: 09/11/09	D411	C455			B59.14, C1.24
BENCH, PHOTORESIST COATER NO. 2 A/N: 499348 Permit to Construct Issued: 09/11/09	D412	C455			B59.14, C1.24
BENCH, TRACK DEVELOP/STRIP STATIONS #1 & 2, HEIGHT: 5FT 10IN; LENGTH: 5FT; WIDTH: 3FT 10IN A/N: 499348 Permit to Construct Issued: 09/11/09	D438	C6			B59.20

- \* (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 9: BPL LAB</b>					P13.1
OVEN, NO. 1, LABLINE, MODEL 3490M A/N: 499348 Permit to Construct Issued: 09/11/09	D413	C455			B59.14, C1.24
OVEN, NO. 2, LABLINE, MODEL 3490M A/N: 499348 Permit to Construct Issued: 09/11/09	D414	C455			B59.14, C1.24
OVEN, YES, MODEL YES-10TA A/N: 499348 Permit to Construct Issued: 09/11/09	D597	C6			B59.65, C1.56
<b>System 2: Integrated Circuit Fabrication</b>					
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 499350 Permit to Construct Issued: 09/11/09	D428	C6			B59.38
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 499350 Permit to Construct Issued: 09/11/09	D429	C6			B59.38
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 499350 Permit to Construct Issued: 09/11/09	D430	C6			B59.38
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 499350 Permit to Construct Issued: 09/11/09	D431	C6			B59.38

- \* (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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<b>Process 9: BPL LAB</b>					P13.1
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 499350 Permit to Construct Issued: 09/11/09	D432	C6			B59.38
PLASMA ETCHER, BACKSIDE VIA ETCH, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT, 65-KVA A/N: 499350 Permit to Construct Issued: 09/11/09	D433	C6			B59.38
PLASMA ETCHER, MATRIX, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT; 21.4-KVA A/N: 499350 Permit to Construct Issued: 09/11/09	D434	C6			B59.12
PLASMA ETCHER, MATRIX, HEIGHT: 6FT; LENGTH: 3FT; WIDTH: 4FT; 21.4-KVA A/N: 499350 Permit to Construct Issued: 09/11/09	D435	C6			B59.12
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: 499350 Permit to Construct Issued: 09/11/09	D501	C6			B59.38
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: 499350 Permit to Construct Issued: 09/11/09	D502	C6			B59.38

- \* (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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<b>Process 9: BPL LAB</b>					P13.1
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: 499350 Permit to Construct Issued: 09/11/09	D503	C6			B59.38
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: 499350 Permit to Construct Issued: 09/11/09	D595	C6			B59.55
<b>Process 10: D1 EAST LAB</b>					P13.1
<b>System 1: Photolithographic Processes</b>					
BENCH, PHOTORESIST COATER, SILICON VALLEY GROUP, MODEL NO. 8626, 3 FT W. X 4 FT 10 IN L. X 3 FT 7 IN H., WITH TWO TRACKS A/N: 455548 Permit to Construct Issued: 11/16/06	D76	C305			
BENCH, PHOTORESIST COATER, SILICON VALLEY GROUP, MODEL NO. 8626, 3 FT W. X 4 FT 10 IN L. X 3 FT 7 IN H., WITH TWO TRACKS A/N: 455548 Permit to Construct Issued: 11/16/06	D77	C305			
BENCH, PHOTORESIST COATER, SILICON VALLEY GROUP, MODEL NO. 8626, 3 FT W. X 4 FT 10 IN L. X 3 FT 7 IN H., WITH TWO TRACKS A/N: 455548 Permit to Construct Issued: 11/16/06	D78	C305			

- \* (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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<b>Process 10: D1 EAST LAB</b>					P13.1
BENCH, PHOTORESIST STRIPPER, SEMITOOL NO.4, 3 FT W. X 5 FT L. X 3 FT H., ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D154	C455			
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: 455548 Permit to Construct Issued: 11/16/06	D274	C305			
BENCH, PHOTORESIST COATER/DEVELOPER, NO.1, MODEL SCORPIO 839, 4 FT 4 IN W. X 5 FT 10 L. X 5 FT 4 IN H., WITH TWO SPINNERS AND SIX BAKING OVENS A/N: 455548 Permit to Construct Issued: 11/16/06	D299	C305			
BENCH, PHOTORESIST COATER/DEVELOPER, NO.2, MODEL SCORPIO 839, 4 FT 4 IN W. X 5 FT 10 IN L. X 5 FT 4 IN H., WITH TWO SPINNERS AND SIX BAKING OVENS A/N: 455548 Permit to Construct Issued: 11/16/06	D300	C161			B59.4

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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.)  
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<b>Process 10: D1 EAST LAB</b>					P13.1
BENCH, PHOTORESIST STRIPPER, SEMITOOL NO.7, MODEL NO. EQP222SR, 16.2 KVA ELECTRICALLY HEATED, 4 FT 6 IN W. X 4 FT L. X 5 FT 6 IN H. A/N: 455548 Permit to Construct Issued: 11/16/06	D333	C305			B27.4, C1.15
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: 455548 Permit to Construct Issued: 11/16/06	D335	C455			B27.4, C1.17
BENCH, PHOTORESIST COATER/DEVELOPER, NO.4, MODEL SCORPIO 839, 4 FT 4 IN W. X 4 FT 3 IN L. X 5 FT 11 IN H., WITH TWO SPINNERS AND SIX BAKING OVENS A/N: 455548 Permit to Construct Issued: 11/16/06	D337	C305			B27.5, C1.18, H23.2
BENCH, PHOTORESIST STRIPPER, SEMITOOL NO.6, MODEL NO. EQ22PR, 9.36 KVA ELECTRICALLY HEATED, 4 FT W. X 4 FT 8 IN L. X 5 FT 5 IN H. A/N: 455548 Permit to Construct Issued: 11/16/06	D520	C161			B59.4, B59.43

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 (5) (5A) (5B) Denotes command and control emission limit  
 (6) Denotes air toxic control rule limit  
 (7) Denotes NSR applicability limit  
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<b>Process 10: D1 EAST LAB</b>					P13.1
BENCH, PHOTORESIST DEVELOPER TRACK, SILICON VALLEY GROUP, MODEL NO. SVG-8632 CTD, 5 FT L. X 3 FT W. X 2 FT 8 IN H. A/N: 455548 Permit to Construct Issued: 11/16/06	D521	C161			B59.4, B59.43
OVEN, PHOTORESIST BAKE, LABLINE MODEL NO. 3490M, 2 FT W. X 1 FT 9 IN L. X 2 FT 11 IN H., 2 KW ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D79	C455			
OVEN, PHOTORESIST BAKE, LABLINE, MODEL NO. 3490M, 2 FT W. X 1 FT 9 IN L. X 2 FT 11 IN H., 2 KW ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D80	C455			
OVEN, PHOTORESIST BAKE, LABLINE, MODEL NO. 3490M, 2 FT W. X 1 FT 9 IN L. X 2 FT 11 IN H., 2 KW ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D81	C455			
OVEN, TRW NO. 1, PHOTORESIST BAKE, ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D276	C455			
OVEN, TRW NO. 2, PHOTORESIST BAKE, ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D277	C455			

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 (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.)  
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<b>Process 10: D1 EAST LAB</b>					P13.1
OVEN, TRW NO. 3, PHOTORESIST BAKE, ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D278	C455			
OVEN, TRW NO. 7, PHOTORESIST BAKE, ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D279	C455			
OVEN, VAPOR PRIME, YEILD ENGINEERING, MODEL NO. YES-6, 1 FT 9 IN W. X 2 FT 11 IN L. X 1 FT 9 IN H., ELECTRICALLY HEATED A/N: 455548 Permit to Construct Issued: 11/16/06	D82	C305			
BENCH, PHOTORESIST COATER, C&D, SEMICONDUCTOR SERVICES, MODEL 8800 SERIES A/N: 455548 Permit to Construct Issued: 11/16/06	D571	C305			B59.53, C1.51
BENCH, PHOTORESIST COATER, C&D, SEMICONDUCTOR SERVICES, MODEL 8800 SERIES A/N: 455548 Permit to Construct Issued: 11/16/06	D572	C305			B59.53, C1.51
OVEN, VAPOR PRIME, YIELD ENGINEERING SERVICES, MODEL NO. 310TA A/N: 455548 Permit to Construct Issued: 11/16/06	D573	C6			B59.53
BENCH, MANUAL PHOTORESIST COATER A/N: 455548 Permit to Construct Issued: 11/16/06	D484	C305			B59.60, C1.53

- \* (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.

## 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
<b>Process 10: D1 EAST LAB</b>					P13.1
BENCH, DEVELOPER, TRACK, C&D A/N: 455548 Permit to Construct Issued: 11/16/06	D537	C6			B59.4, B59.55
<b>System 2: Integrated Circuit Fabrication</b>					
PLASMA ETCHER, PLASMATHERM WAFER BATCH 730 A/N: 516124 Permit to Construct Issued: 02/08/11	D96	C161			
PLASMA ETCHER, DEPOSITION/ETCHER, PLASMATHERM, MODEL DUAL 790 A/N: 516124 Permit to Construct Issued: 02/08/11	D97	C161			
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 PUMPS A/N: 516124 Permit to Construct Issued: 02/08/11	D306			<b>PM: (9) [RULE 405, 2-7-1986]</b>	C1.6, K48.4
PLASMA ETCHER, PLASMATHERM, BACKSIDE VIA ETCH A/N: 516124 Permit to Construct Issued: 02/08/11	D510	C161			B59.40

- \* (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.

## 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
<b>Process 10: D1 EAST LAB</b>					P13.1
PLASMA ETCHER, MATRIX #6, ,MATRIX SYSTEM ONE STRIPPER, MODEL NO. 106 A/N: 516124 Permit to Construct Issued: 02/08/11	D511	C161			B59.40
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
PLASMA ETCHER, UNAXIS/PLASMATHERM, MODEL NO. VLR700 A/N: 516124 Permit to Construct Issued: 02/08/11	D513	C161			B59.40
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, NO. 14, MATRIX SYSTEM ONE STRIPPER, MODEL NO. 105E A/N: 516124 Permit to Construct Issued: 02/08/11	D516	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

- \* (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
<b>Process 10: D1 EAST LAB</b>					P13.1
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			
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
PLASMA ETCHER, PLASMA THERM, MODEL 790, HEIGHT: 6FT 6IN; LENGTH: 3FT 5IN; WIDTH: 3FT 5IN, 65-KVA A/N: 516124 Permit to Construct Issued: 02/08/11	D426				
DEPOSITION REACTOR A/N: 516124 Permit to Construct Issued: 02/08/11	D462				

- \* (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
<b>Process 10: D1 EAST LAB</b>					P13.1
VACUUM METALIZING/VAPOR DEPOSITION, FIJI F200 PLASMA ATOMIC LAYER DEPOSITION(ALD) Permit to Construct Issued: 02/08/11	E611	C161			B59.70
<b>System 4: Solvent Cleaning</b>					
BENCH, SOLVENT STRIP/LIFTOFF, WAFER PROCESS SYSTEM, MODEL NO. SLFFH-600-SS, 4FT 7IN W X 5FT 10IN L X 5FT 10IN H, ELECTRICALLY HEATE A/N: 455303 Permit to Construct Issued: 06/23/06	D474	C455			B59.47, C1.44
BENCH, SOLVENT STRIP/LIFTOFF, WAFER PROCESS SYSTEM, MODEL NO. SLFFH-600-SS, 4FT 7IN W X 5FT 10IN L X 5FT 10IN H, ELECTRICALLY HEATE A/N: 455303 Permit to Construct Issued: 06/23/06	D476	C455			B59.47, C1.44
BENCH, PHOTORESIST DEVELOPER, PHOTORESIST DEVELOPER, CHLOROBENZENE SINK, WAFER PROCESS SYSTEMS, MODEL NO. WPS-, 400-FA-SS, 3 FT 4 IN W. X 3 FT 10 IN L. X 6 FT 4 IN H., HEATED 5.4 KVA A/N: 455303 Permit to Construct Issued: 06/23/06	D498	C305			B59.34, C1.47
<b>Process 11: D1 WEST LAB</b>					P13.1
<b>System 1: Photolithographic Processes</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.

## 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
<b>Process 11: D1 WEST LAB</b>					P13.1
BENCH, PHOTORESIST COATER/DEVELOPER, NO.3, MODEL SCORPIO 841, 4 FT 4 IN W. X 5 FT 10 IN L. X 5 FT 4 IN H., WITH TWO SPINNERS AND ONE BAKING OVEN A/N: 455302 Permit to Construct Issued: 11/16/06	D301	C460			
BENCH, PHOTORESIST COATER NO. 1, 82 IN L. X 36 IN W. X 80 IN H., WITH TWO WAFER CONVEYORS, TWO SPINNERS AND FOUR HOT PLATES A/N: 455302 Permit to Construct Issued: 11/16/06	D346	C364			B59.50, C1.42
BENCH, PHOTORESIST COATER NO. 2, 82 IN L. X 52 IN W. X 80 IN H., WITH TWO WAFER CONVEYORS, TWO SPINNERS AND FOUR HOT PLATES A/N: 455302 Permit to Construct Issued: 11/16/06	D347	C364			B59.50, C1.42
BENCH, TRACK DEVELOP STATION NO. 1, POTASSIUM HYDROXIDE A/N: 455302 Permit to Construct Issued: 11/16/06	D397	C232			B59.9
BENCH, TRACK DEVELOP STATION NO. 2, POTASSIUM HYDROXIDE A/N: 455302 Permit to Construct Issued: 11/16/06	D398	C232			B59.9

\* (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
<b>Process 11: D1 WEST LAB</b>					P13.1
BENCH, DEVELOPER, C&D SEMICONDUCTOR, MODEL 8800, WIDTH: 3FT 11 IN, HEIGHT: 5FT 10 IN, LENGTH: 4FT 11 IN A/N: 455302 Permit to Construct Issued: 11/16/06	D477	C232			B59.4, B59.36
BENCH, PHOTORESIST COATER, C&D, SEMICONDUCTOR SERVICES, MODEL 8800, WIDTH: 2 FT 11 IN, LENGTH: 8 FT, HEIGHT: 3 FT 11 IN A/N: 455302 Permit to Construct Issued: 11/16/06	D481	C460			B59.49, C1.37, C1.42
OVEN, NO. 2, VAPOR PRIME, 21.625 IN L. X 24.25 IN W. X 35 IN H., ELECTRICALLY HEATED, 2.2 KVA A/N: 455302 Permit to Construct Issued: 11/16/06	D349	C232			B59.52, C1.46
OVEN, NO. 1, PHOTORESIST BAKE, 21.6 IN L. X 24.25 IN W. X 35 IN H., ELECTRICALLY HEATED A/N: 455302 Permit to Construct Issued: 11/16/06	D350	C364			B59.5, C1.42
OVEN, NO. 3, PHOTORESIST BAKE, 21.6 IN L. 24.25 IN W. X 35 IN H., ELECTRICALLY HEATED A/N: 455302 Permit to Construct Issued: 11/16/06	D352	C364			B59.5, C1.42
OVEN, NO. 4, PHOTORESIST BAKE, 21.6 IN L. X 24.25 IN W. X 35 IN H., ELECTRICALLY HEATED A/N: 455302 Permit to Construct Issued: 11/16/06	D353	C364			B59.5, C1.42

\* (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
<b>Process 11: D1 WEST LAB</b>					P13.1
OVEN, NO. 5, PHOTORESIST BAKE, 21.6 IN L. X 24.25 W. X 35 IN H., ELECTRICALLY HEATED A/N: 455302 Permit to Construct Issued: 11/16/06	D354	C364			B59.5, C1.42
OVEN, NO. 6, PHOTORESIST BAKE, 21.6 IN L. X 24.25 IN W. X 35 IN H., ELECTRICALLY HEATED A/N: 455302 Permit to Construct Issued: 11/16/06	D355	C364			B59.5, C1.42
OVEN, NO. 1, VAPOR PRIME, 19.5 IN L. X 23.75 IN W. X 27.5 IN H., ELECTRICALLY HEATED, 2.2 KVA A/N: 455302 Permit to Construct Issued: 11/16/06	D348	C233			B59.4, B59.57, C1.42
OVEN, LABLINE,, LENGTH: 21.6 IN, WIDTH: 24.25 IN, HEIGHT: 35 IN, ELECTRICALLY HEATED A/N: 455302 Permit to Construct Issued: 11/16/06	D587	C460			B59.62, C1.42
OVEN, LABLINE,, LENGTH: 21.6 IN, WIDTH: 24.25 IN, HEIGHT: 35 IN, ELECTRICALLY HEATED A/N: 455302 Permit to Construct Issued: 11/16/06	D588	C460			B59.62, C1.42
OVEN, BARNSTEAD, LABLINE, MODEL 3497M-3 A/N: 455302 Permit to Construct Issued: 11/16/06	D589	C364			B59.62, C1.42
<b>System 2: Integrated Circuit Fabrication</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.

## 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
<b>Process 11: D1 WEST LAB</b>					P13.1
PLASMA ETCHER, ETCH NO. 1, 65-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D374	C160			B59.8
PLASMA ETCHER, ETCH NO. 2, 65-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D375	C160			B59.8
PLASMA ETCHER, CLEAN NO. 1, MATRIX, 6.0-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D378	C160			B59.8
PLASMA ETCHER, CLEAN NO. 5, MATRIX, 6.0-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D382	C160			B59.8
PLASMA ETCHER, CLEAN NO. 6, MATRIX, 6.0-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D383	C232			B59.8
PLASMA ETCHER, CLEAN NO. 9, MATRIX, 6.0-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D386	C160			B59.8
PLASMA ETCHER, CLEAN NO. 11, MATRIX, 6.0-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D388	C160			B59.8
PLASMA ETCHER, DEPOSITION NO. 1, PLASMA THERM INC. 65-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D390	C160			B59.8

- \* (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
<b>Process 11: D1 WEST LAB</b>					P13.1
PLASMA ETCHER, DEPOSITION NO. 2, PLASMA THERM INC. 65-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D391	C160			B59.8
PLASMA ETCHER, CLEAN NO. 1, MATRIX, 21.4-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D403	C160			B59.52
PLASMA ETCHER, CLEAN NO. 2, MATRIX, 21.4-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D404	C160			B59.52
PLASMA ETCHER, CLEAN NO. 4, MATRIX, 21.4-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D406	C232			B59.52
PLASMA ETCHER, MATRIX, MODEL EHP500,, WIDTH: 4FT, LENGTH: 3FT, HEIGHT: 6FT, WITH THREE VACUUM PUMPS A/N: 516129 Permit to Construct Issued: 02/08/11	D450	C233			B59.13
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: 516129 Permit to Construct Issued: 02/08/11	D507	C232			B59.52

\* (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
<b>Process 11: D1 WEST LAB</b>					P13.1
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: 516129 Permit to Construct Issued: 02/08/11	D508	C232			B59.52
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: 516129 Permit to Construct Issued: 02/08/11	D509	C232			B59.52
PLASMA ETCHER, DESCUMMER, BRANSON/IPC, MODEL REACTOR CENTER PM 1813, DIMENSIONS: HEIGHT: 3FT; LENGTH: 3FT; WIDTH: 3FT A/N: 516129 Permit to Construct Issued: 02/08/11	D528	C160			B27.7
FURNACE, PHOTORESIST COATER/DEVELOPER, THERMCO A/N: 516129 Permit to Construct Issued: 02/08/11	D183	C160			
ION IMPLANTER, ION BEAM MILL VACUUM PUMP A/N: 516129 Permit to Construct Issued: 02/08/11	D182	C233			
EVAPORATOR, CHA MK50 A/N: 516129 Permit to Construct Issued: 02/08/11	D191				

- \* (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
<b>Process 11: D1 WEST LAB</b>					P13.1
DEPOSITION REACTOR, SPUTTERING NO. 1, 21.4-KVA A/N: 516129 Permit to Construct Issued: 02/08/11	D407	C232			B59.52
PROCESS TANK, PASS-THRU ACID UNIT A/N: 516129 Permit to Construct Issued: 02/08/11	D189	C160			
DEPOSITION REACTOR, VAPOR PRIME, Y.E.S., LENGTH: 19.5IN; WIDTH: 23.75IN; HEIGHT: 27.5IN;; ELECTRICALLY HEATED A/N: 516129 Permit to Construct Issued: 02/08/11	D552	C232			B59.52, C1.46
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: 516129 Permit to Construct Issued: 02/08/11	D584	C232			B59.58
DEPOSITION REACTOR, PECVD DIELECTRIC, TRIKON TECHNOLGIES, DELTA 201,65-KVA,, LENGTH: 5FT; WIDTH: 3FT 4IN; HEIGHT: 6FT 1IN, WITH 3 VACUUM PUMPS, 4-HP TOTAL A/N: 516129 Permit to Construct Issued: 02/08/11	D585				B59.59
PLASMA ETCHER, NO. 1, MATRIX, MODEL 105E, WIDTH:4FT;LENGTH: 3FT; HEIGHT: 6FT A/N: 516129 Permit to Construct Issued: 02/08/11	D540	C233			B59.55

- \* (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.

## 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
<b>Process 11: D1 WEST LAB</b>					P13.1
PLASMA ETCHER, TEGAL, MODEL 110, LENGTH: 2 FT 9IN; WIDTH: 6 FT 4 IN; HEIGHT: 6 FT 10IN, WITH TWO VACUUM PUMPS A/N: 516129 Permit to Construct Issued: 02/08/11	D596	C232			B59.66, C1.55
PLASMA ETCHER, SURFACE TECHNOLOGY SYSTEMS, MPX A/N: 516129 Permit to Construct Issued: 02/08/11	D613	C160			B59.71
<b>System 4: Solvent Cleaning</b>					
BENCH, COATER/DEVELOPER, DEXON, 2 KVA ELECTRICALLY HEATED, 2 FT 6 IN W. X 6 FT L. X 3 FT H. A/N: 474053 Permit to Construct Issued: 03/25/08	D157	C460			B59.16, E54.1, K48.5
BENCH, SOLVENT CLEANING STATION NO. I, ONE SINK, 3 FT W. X 4 FT L. X 6 FT 8 IN H., UNHEATED A/N: 474053 Permit to Construct Issued: 03/25/08	D357	C364			B59.19, C1.41
BENCH, SOLVENT CLEANING STATION NO. A, THREE SINKS, 3 FT W. X 5 FT L. X 6 FT 8 IN H., UNHEATED A/N: 474053 Permit to Construct Issued: 03/25/08	D358	C364			B59.47, C1.41
BENCH, SOLVENT CLEANING STATION NO. B, SIX SINKS, 3 FT W. X 4 FT L. X 6 FT 8 IN H., UNHEATED A/N: 474053 Permit to Construct Issued: 03/25/08	D359	C364			B59.19, C1.41

- \* (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.

## 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
<b>Process 11: D1 WEST LAB</b>					P13.1
BENCH, SOLVENT CLEANING STATION NO. D, THREE SINKS, 3 FT W. X 6 FT L. X 6 FT 8 IN H., UNHEATED A/N: 474053 Permit to Construct Issued: 03/25/08	D361	C364			B59.47, C1.41
BENCH, SOLVENT STRIP/LIFTOFF, WAFER PROCESS SYSTEMS, 2-KVA ELECTRICALLY HEATED A/N: 474053 Permit to Construct Issued: 03/25/08	D482	C364			B59.47, C1.41
<b>Process 13: 3D LAB</b>					P13.1
<b>System 2: Integrated Circuit Fabrication</b>					
PLASMA ETCHER, NO. 1, MATRIX, MODEL 105E, WIDTH:4FT;LENGTH: 3FT; HEIGHT: 6FT A/N: 516129 Permit to Construct Issued: 02/08/11	D540	C233			B59.55
<b>Process 14: SURFACE PREPARATION</b>					
<b>System 1: Etching Line</b>					
BENCH, WET STATION, HBT, NO. 1, 6FT, UNHEATED A/N: 515056 Permit to Construct Issued: 12/07/10	D545	C4			B59.4, B59.69, L341.1
BENCH, WET STATION, HBT, NO. 2, 6FT, UNHEATED A/N: 515056 Permit to Construct Issued: 12/07/10	D546	C4			B59.4, B59.63

\* (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

<b>Device Index For Section H</b>			
<b>Device ID</b>	<b>Section H Page No.</b>	<b>Process</b>	<b>System</b>
C4	1	1	0
C6	1	1	0
D76	6	10	1
D77	6	10	1
D78	6	10	1
D79	9	10	1
D80	9	10	1
D81	9	10	1
D82	10	10	1
D94	13	10	2
D96	11	10	2
D97	11	10	2
D113	11	10	2
D154	7	10	1
D157	22	11	4
C160	1	1	0
C161	1	1	0
D182	20	11	2
D183	20	11	2
D189	21	11	2
D191	20	11	2
C232	2	1	0
C233	2	1	0
D274	7	10	1
D276	9	10	1
D277	9	10	1
D278	10	10	1
D279	10	10	1
D299	7	10	1
D300	7	10	1
D301	15	11	1
C305	3	1	0
D306	11	10	2
D333	8	10	1

## FACILITY PERMIT TO OPERATE NORTHROP GRUMMAN SYSTEMS

### SECTION H: DEVICE ID INDEX

<b>Device Index For Section H</b>			
<b>Device ID</b>	<b>Section H Page No.</b>	<b>Process</b>	<b>System</b>
D335	8	10	1
D337	8	10	1
D346	15	11	1
D347	15	11	1
D348	17	11	1
D349	16	11	1
D350	16	11	1
D352	16	11	1
D353	16	11	1
D354	17	11	1
D355	17	11	1
D357	22	11	4
D358	22	11	4
D359	22	11	4
D361	23	11	4
C364	2	1	0
D374	18	11	2
D375	18	11	2
D378	18	11	2
D382	18	11	2
D383	18	11	2
D386	18	11	2
D388	18	11	2
D390	18	11	2
D391	19	11	2
D397	15	11	1
D398	15	11	1
D403	19	11	2
D404	19	11	2
D406	19	11	2
D407	21	11	2
D411	3	9	1
D412	3	9	1
D413	4	9	1

## FACILITY PERMIT TO OPERATE NORTHROP GRUMMAN SYSTEMS

### SECTION H: DEVICE ID INDEX

<b>Device Index For Section H</b>			
<b>Device ID</b>	<b>Section H Page No.</b>	<b>Process</b>	<b>System</b>
D414	4	9	1
D425	13	10	2
D426	13	10	2
D428	4	9	2
D429	4	9	2
D430	4	9	2
D431	4	9	2
D432	5	9	2
D433	5	9	2
D434	5	9	2
D435	5	9	2
D438	3	9	1
D450	19	11	2
C460	2	1	0
D462	13	10	2
D474	14	10	4
D476	14	10	4
D477	16	11	1
D481	16	11	1
D482	23	11	4
D484	10	10	1
D498	14	10	4
D501	5	9	2
D502	5	9	2
D503	6	9	2
D507	19	11	2
D508	20	11	2
D509	20	11	2
D510	11	10	2
D511	12	10	2
D512	12	10	2
D513	12	10	2
D514	12	10	2
D516	12	10	2

## FACILITY PERMIT TO OPERATE NORTHROP GRUMMAN SYSTEMS

### SECTION H: DEVICE ID INDEX

<b>Device Index For Section H</b>			
<b>Device ID</b>	<b>Section H Page No.</b>	<b>Process</b>	<b>System</b>
D517	12	10	2
D520	8	10	1
D521	9	10	1
D522	12	10	2
D523	13	10	2
D524	13	10	2
D528	20	11	2
D537	11	10	1
D540	21	11	2
D540	23	13	2
D545	23	14	1
D546	23	14	1
D552	21	11	2
D571	10	10	1
D572	10	10	1
D573	10	10	1
D584	21	11	2
D585	21	11	2
D587	17	11	1
D588	17	11	1
D589	17	11	1
D595	6	9	2
D596	22	11	2
D597	4	9	1
E611	14	10	2
D612	3	4	0
D613	22	11	2

## 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:**

#### 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]**

## 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:**

F2.3 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]**

## 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:

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:

## 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:

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]**

[Processes subject to this condition : 4]

### SYSTEM CONDITIONS

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

## **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:**

#### **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 : C305, C364, C460]

A72.3 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]**

[Devices subject to this condition : C305]

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

B27.4 The operator shall not use materials containing any carcinogenic compounds identified in the SCAQMD Rule 1401, as amended 07-dec-1990.

For the purposes of this condition, carcinogenic compounds are those in Table I of the above mentioned rule, with an effective date of 07-dec-1990 or earlier.

**[RULE 1401, 12-7-1990]**

[Devices subject to this condition : D333, D335]

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.

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 : D337]

## 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:

B27.7 The operator shall not use materials containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401, as amended 05-02-2003.

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D528]

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 : D300, D348, D477, D520, D521, D523, D524, D537, D545, D546]

B59.5 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 except nitric acid and hydrofluoric acid

[RULE 1401, 8-13-1999]

[Devices subject to this condition : D350, D352, D353, D354, D355]

B59.8 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 3/17/00 or earlier except ammonia

[RULE 1401, 3-17-2000]

[Devices subject to this condition : D374, D375, D378, D382, D383, D386, D388, D390, D391]

## 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:**

B59.9 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 3/17/00 or earlier except hydrochloric acid

[RULE 1401, 3-17-2000]

[Devices subject to this condition : D397, D398]

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, D434, D435]

B59.13 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 8/18/00 or earlier

[RULE 1401, 8-18-2000]

[Devices subject to this condition : D450]

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]

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

## 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:

B59.16 The operator shall not use the following material(s) in this device :

Materials containing any carcinogenic air contaminants identified in Rule 1401, Table 1 with an effective date of December 7, 1990 or earlier.

[RULE 1401, 12-7-1990]

[Devices subject to this condition : D157]

B59.19 The operator shall not use the following material(s) in this device :

Toxic air contaminants in table one of rule 1401 with a listing date of 8/13/99 or earlier except isopropyl alcohol, phenol, methanol and naphthalene

[RULE 1401, 8-13-1999]

[Devices subject to this condition : D357, D359]

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 :

## 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:**

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]

B59.34 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 5/02/03 or earlier except chlorobenzene, isopropyl alcohol, and methanol.

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D498]

B59.36 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 hydrochloric acid and hydrofluoric acid

[RULE 1401, 5-2-2003]

## 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:**

[Devices subject to this condition : D477]

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 5/02/03 or earlier except chlorine

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D428, D429, D430, D431, D432, D433, D501, D502, D503]

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

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D510, D511, D512, D513, D514, D516, 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 : D520, D521, 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

## 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:**

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D522]

B59.47 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 5/02/03 or earlier except isopropyl alcohol, methanol, phenol and naphtalene.

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D358, D361, D474, D476, D482]

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 5/02/03 or earlier except cresol, isopropyl alcohol, methanol, xylene, phenol and chlorobenzene.l

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D481]

B59.50 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 5/02/03 or earlier except nitric acid, hydrofluoric acid, cresol, xylene, isopropyl alcohol, methanol, and chlorobenzene.

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D346, D347]

B59.52 The operator shall not use the following material(s) in 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:

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

[RULE 1401, 5-2-2003]

[Devices subject to this condition : D349, D403, D404, D406, D407, D507, D508, D509, D552]

B59.53 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 xylene, cresol, isopropyl alcohol and ammonia

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D571, D572, D573]

B59.55 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

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D537, D540, D595]

B59.57 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 nitric acid, hydrofluoric acid and ammonia

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D348]

## 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:**

B59.58 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 3/4/05 or earlier except hydrofluoric acid or chlorine

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D584]

B59.59 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 ammonia

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D585]

B59.60 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 xylene, cresol, chlorobenzene and formaldehyde

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D484]

B59.62 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 xylene, cresol, and cellosolve acetate

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D587, D588, D589]

## 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:

B59.63 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 nitric acid and hydrofluoric acid.

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D546]

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

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]

B59.66 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 3/07/08 or earlier.

[RULE 1401, 3-7-2008]

[Devices subject to this condition : D596]

B59.69 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 nitric acid and hydrofluoric acid.

## 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:**

[RULE 1401, 9-10-2010]

[Devices subject to this condition : D545]

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 : E611, D612]

B59.71 The operator shall EXACT CHAR use the following material(s) EXACT CHAR :  
CONDITION PARAMETER NOT SET UP

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 : D613]

#### **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]

C1.15 The operator shall limit the material processed to no more than 180 gallon(s) in any one calendar month.

## 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:

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 : D333]

- C1.17 The operator shall limit the material processed to no more than 93 gallon(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 : D335]

- C1.18 The operator shall limit the material processed to no more than 430 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 : D337]

- C1.24 The operator shall limit the material processed to no more than 42 gallon(s) per month.

## 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:**

This limit shall be based on the total combined limit for equipment D411 - D414.

For the purpose of this condition, material processed shall be defined as material with a VOC content of 9.2 lbs/gal or less.

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

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

- 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]

- C1.37 The operator shall limit the material processed to no more than 80 lb(s) in any one month.

For the purpose of this condition, material processed shall be defined as photoresist coatings (Microposit 1822 / 1813).

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; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1401, 5-2-2003]**

[Devices subject to this condition : D481]

- C1.41 The operator shall limit the material processed to no more than 1836 gallon(s) per month.

## **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:**

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 equipment D357, D358, D359, D361 and D482.

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

[Devices subject to this condition : D357, D358, D359, D361, D482]

C1.42 The operator shall limit the material processed to no more than 649 gallon(s) per 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 equipment D346 through D348, D350, D352 through D355, D481, D587 through D589..

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

[Devices subject to this condition : D346, D347, D348, D350, D352, D353, D354, D355, D481, D587, D588, D589]

C1.44 The operator shall limit the material processed to no more than 660 gallon(s) per 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 equipment D474 and D476.

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

[Devices subject to this condition : D474, D476]

C1.46 The operator shall limit the material processed to no more than 2.0 gallon(s) in any one calendar month.

## **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:**

For the purpose of this condition, material processed shall be defined as material containing VOC. The limit shall be based on the total combined limit for equipment D349 and D552.

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

[Devices subject to this condition : D349, D552]

- C1.47 The operator shall limit the material processed to no more than 325 gallon(s) in any one calendar month.

For the purpose of this condition, material processed shall be defined as 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 : D498]

- C1.51 The operator shall limit the material processed to no more than 282 gallon(s) in any one calendar month.

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

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

[Devices subject to this condition : D571, D572]

- C1.53 The operator shall limit the material processed to no more than 2 gallon(s) in any one calendar month.

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

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

## **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:**

[Devices subject to this condition : D484]

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]

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]

C8.2 The operator shall use this equipment in such a manner that the flow rate being monitored, as indicated below, is not less than 60 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 : C4]

## 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:**

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, C233]

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]

C8.9 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.

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 : C4, C6, C160, C161, C232, C233]

#### **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

## 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:

VOC		Approved District method		District-approved averaging time		Simultaneous inlet and outlet
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The test shall be conducted at least once during the life of the permit but no later than July 9, 2010 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 : C305, C364, 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 : C4, C6, C160, C161, C232, C233]

## **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:**

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**

E54.1 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: C460 [OXIDIZER, RTO, 1.5 MMBTU/HR]

Requirement number 1: On days where the total VOC emissions from semiconductor manufacturing and related operations subject to District Rule 1164 at this facility are less than 5 pounds.

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

[Devices subject to this condition : D157]

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 : C4, C6, C160, C161, C232, C233]

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 : C4, C6, C160, C161, C232]

E193.1 The operator shall operate and maintain this equipment according to the following requirements:

## **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:**

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

## 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:**

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 : C305, C364, C460]

#### **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 : D337]

H23.7 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1122

**[RULE 1122, 10-1-2004]**

[Devices subject to this condition : D612]

## **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:**

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.

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

[Devices subject to this condition : D612]

#### **I. Administrative**

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]

#### **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 30 days after the source test was conducted.

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

[Devices subject to this condition : C305, C364, C460]

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

## 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:

Condition Number C 1- 6

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

[Devices subject to this condition : D306]

- K48.5 The operator shall maintain records in a manner approved by the District, to demonstrate compliance with the following condition number(s):

Condition Number E 54- 1

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

[Devices subject to this condition : D157]

- 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 : C4, C6, C160, C161, C232, C233]

#### **L. Expiration Date**

- L341.1 Within 7 days after start-up of this equipment, the following device(s) shall be removed from operation:

D38

[Devices subject to this condition : D545]