



Plant Name: Northrop Grumman Systems Corporation

Synthetic Minor Operating Condition

Condition No. 14049

Plant No. B0861

Application No. 23509

Condition # 14049

SYNTHETIC MINOR OPERATING PERMIT

Northrop Grumman Systems Corporation
401 East Hendy Avenue
Sunnyvale, CA 94088
Plant #10861

PERMITTED SOURCES

S5, Wickes Boiler, (41-19), 124 MM BTU/hr, max
S6, Infra Red Oven, Fostoria C4-65J (electric)
S8, Paint Spray Booth, Binks PFA
S9, Paint Spray Booth and Cure Booth
S10, Paint Spray Booth, Binks
S11, Paint Spray Booth, Binks NPB 10-10
S12, Paint Spray Booth, DeVilbiss
S13, Paint Spray Booth, DeVilbiss
S19-S21, Parts Washers, Graymills Model 300
S25, Paint Spray Booth, Newcomb-McDonald
S29, Paint Bake Oven, Ross Air System, 1.25 MM BTU/hr max
S31, Shot Blast Booth (21-1)
S33, Down Draft Spray Booth, Binks
S34, Sand Blast Operation, Binks #1984
S37, Air Stripping Column
S41, Paint Booth, DeVilbiss Model #DR-X-1610-150
S56, Steam Generator, 410 MM BTU/hr, max
S57, Shot Blast Room
S59, Plastic Media Blast Facility, Aerolyte Model SC-2462
S61, Abrasive Blast Booth
S62, Composite Sanding Booth
S63, Rust Preventative Spray Booth
S106, Wipe Cleaning Operation, Building 11
S107, Wipe Cleaning Operation, Building 16
S108, Wipe Cleaning Operation, Building 21
S109, Wipe Cleaning Operation, Building 31
S111, Wipe Cleaning Operation, Building 33
S112, Wipe Cleaning Operation, Building 41
S113, Wipe Cleaning Operation, Building 44
S114, Wipe Cleaning Operation, Building 55
S115, Wipe Cleaning Operation, Building 61
S116, Wipe Cleaning Operation, Building 81
S118, Wipe Cleaning Operation, Building 134
S131, Heat Treat Oven, 14.4 MM BTU/hr, Bldg. 61
S132, Diesel Generator, 250 kW
S134, Automatic Blast Booth, Bldg 162
S135, Wipe Cleaning Operation, Bldg 123, 124, 162, 163,165
S136, Adhesive Coating Operations (Facility-Wide)
S138, Feedwater Heater, 12.3 MM BTU/hr
S139, Feedwater Heater, 12.3 MM BTU/hr
S152, Emergency Standby Generator



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S153, Fire Pump Driver Engine
S155, Urethane Casting Machine
S156, Urethane Casting Machine
S157, Fire Pump Driver Engine
S158, Vapor Degreaser
S159, Emergency Generator
S160, Dry Filter Spray Booth
S161, Paint Spray Booth with Dry Filter

FUTURE SOURCES

S162, Paint Spray Booth with Dry Filter

EXEMPT SOURCES

S122, Groundwater Treatment System (Reg 1-110.6)
S123, Fixed Roof Storage Tank (Reg 2-1-123.2)
S124, Ammonia Storage Tank (Reg 2-1-123.3.1)
S128, Superheater, 9.8 MM BTU/hr max, Twyman Model 2113-1
(Reg 2-1-114.2)
S129, Superheater, 7 MM BTU/hr max, Twyman Model 21182
(Reg 2-1-114.2)
S141, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S142, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S143, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S144, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S145, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S146, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S147, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S148, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S149, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S150, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S151, Paint Gun Washer, <50 g/l VOC solvent (Reg 2-1-118.4)
S154, Steam Boiler (Pickling Process), 5.25 MM BTU/hr (Reg 2-1-114.2)
4 Clayton Boilers, 7.3 MM BTU/hr each, Model RG-175-2, Bldg 41, (Reg 2-1-114.2)

ABATEMENT DEVICES

A1, Diesel Particulate Filter



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A32, Baghouse for S31
A34, Baghouse for S34
A56, SCR System for S56
A61, Dust Collector for S61
A124, Baghouse for S57
A125, Dust Collector for S59
A126, Ammonia Gas Scrubber for S124
A132, Level 3 Catalyzed Diesel Particulate Filter
A134, Dust Collector for S134
A135, Carbon Adsorption System for S9
A158, Carbon Adsorption System for S158

This facility, Site # B0861, has a synthetic minor operating permit. This operating permit covers all equipment existing at this facility as of permit issuance. The sources and abatement devices are listed above.

The following conditions establish the federally enforceable permit terms that ensure this plant is classified as a Synthetic Minor Facility under District Regulation 2, Rule 6, Major Facility Review, and ensure it is not subject to the permitting requirements of Title V of the Federal Clean Air Act as amended in 1990 and 40 CFR Part 70. All applications submitted by the applicant and all modifications to the plant's equipment after issuance of the synthetic minor permit must be evaluated to ensure that the facility will not exceed the synthetic minor general limits below, and that sufficient monitoring, recordkeeping, and reporting requirements are imposed to ensure enforceability of the limits.

Any revision to a condition establishing this plant's status as a Synthetic Minor Facility or any new permit term that would limit emissions of a new or modified source for the purpose of maintaining the facility as a synthetic minor must undergo the procedures specified by Rule 2-6, section 423. The basis for the synthetic minor conditions is an emission limit of 95 tons per year for regulated air pollutants, of 90,000 tons per year for greenhouse gases (on a CO₂ equivalent basis), an emission limit for a single hazardous air pollutant of 9 tons per year, and an emission limit for a combination of hazardous air pollutants of 23 tons per year.

Any District conditions that do not establish this facility as a synthetic minor are marked with an asterisk. The facility must comply with all conditions, regardless of asterisks, and must comply with all District requirements for new and modified sources regardless of its status as a synthetic minor.

1. In no event shall the emissions from this site exceed



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any of the emission limits listed below. The owner/operator shall demonstrate compliance with these emission limits by complying with all emission limits, monitoring procedures, and record keeping requirements identified in Parts 4-16 below. (Basis: Regulation 2-6-423)

NOx	95 tons/year
CO	95 tons/year
POC	95 tons/year
PM10	95 tons/year
SO2	95 tons/year
Any Single HAP	9 tons/year
Combination of HAPs	23 tons/year
CO2e	90,000 tons/year

2. The owner/operator shall maintain the following records in a District-approved log:
 - a. Records of the date, type, and quantity of each VOC- or HAP-containing material distributed from the storerooms on an event basis, summarized monthly;
 - b. Purchase records of the date, type, and quantity of materials containing VOCs or HAPs, which are not distributed from the storerooms (such as materials used for special projects), on an event basis, summarized monthly; and
 - c. The date, quantity, and type of waste solvent (multiple or single component) collected for offsite recycle or disposal on an event basis, summarized monthly.

Summaries shall be completed within twenty business days after the end of each month. The log shall be retained for at least five years from the last date of entry and be available for review by the District upon request. (Basis: Cumulative Increase; Regulation 2, Rule 5, and Regulation 2-6-423.2.3)

3. The owner/operator shall calculate the monthly and rolling 12-month sums of VOC, each HAP, and total HAP emissions from all coating and solvent usage operations each month.
 - a. The calculations shall be based upon the quantities reported in Part 2 above, and the chemical composition information from Material Safety Data Sheets or other manufacturer content certifications.
 - b. The VOC (and/or HAP) emissions calculated in Part 3(a) may be reduced by the quantity of material collected for recycle or disposal the previous month multiplied by the corresponding VOC (and/or HAP) content of the material.
 - c. To adjust VOC emissions as described in Part 3(b),



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the VOC content of all offsite waste solvent shipments must be determined through a District-approved lab analysis; likewise, to adjust HAP emissions, the specific HAP content must be determined through a District-approved lab analysis. Analysis is not required for offsite disposal of single component waste or virgin material.

- d. Where analysis of the VOC (and/or HAP) content of waste solvent indicates a range of weight percents, rather than an exact percentage, the lowest figure of the range shall be used in the adjustment of VOC (and/or HAP) emissions in Part 3(b).
- e. The emission factor for VOCs and HAPs shall be one pound of VOC per pound of VOC content and one pound of HAP per pound of HAP content, respectively.
- f. If a compound is both a HAP and a VOC, then it shall be included in the emission totals for both. The calculations shall be complete within twenty business days after the end of each month, shall be kept onsite for a period of five years, and shall be made available to District staff upon request. (Basis: Cumulative Increase; Regulation 2, Rule 5; and Regulation 2-6-423.2.3)

COMBUSTION OPERATIONS:

4. All combustion units shall be fired exclusively on natural gas, except that Source S132, In-Use Stationary Prime Use Generator, Sources S153 and S157, Fire Pump Driver Engines, and Source S159, Emergency Standby Diesel Generator may be fired with diesel fuel. (Basis: Regulations 9-7-113, 9-8-331.3)
5. NO_x emissions from Source S5 shall not exceed 30 ppmv, dry, at 3% O₂ at any firing rate. Upon the effective date for Regulation 9-7-307.6 as specified in Regulation 9-7-308, NO_x emissions from Source S5 shall not exceed 5 ppmv, dry at 3% O₂, except during startup and shutdown periods as defined in Regulations 9-7-219-220 and complying with Regulation 9-7-115. (Basis: Cumulative Increase; BACT, and Regulations 9-7-115, 9-7-307.6, and 9-7-308)
6. Emissions from Sources S138 and S139 shall not exceed the following limits at any firing rate:
NO_x: 25 ppmv, dry, at 3% O₂
CO: 50 ppmv, dry, at 3% O₂
Upon the effective date for Regulation 9-7-307.3 as specified in Regulation 9-7-308, NO_x emissions from



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Sources S138 or S139 shall not exceed 15 ppmv, dry at 3% O₂, except during startup and shutdown periods as defined in Regulations 9-7-219-220 and complying with Regulation 9-7-115. (Basis: Cumulative Increase; BACT, and Regulations 9-7-115, 9-7-307.3, and 9-7-308)

7. The owner/operator shall perform an annual source test on Source S5 to demonstrate compliance with Part 5 above. The results shall be maintained onsite for five years from the date of the test and shall be made available for review by the District upon request. (Basis: Cumulative Increase; 40 CFR 60 Subpart Db, and Regulations 2-6-423.2.3 and 9-7-506)

8. Natural gas usage at the following sources shall not exceed the designated amounts in any consecutive 12-month period:

Source(s)	Maximum Natural Gas Usage Per Consecutive 12-month Period
S5	833 million standard cubic feet
S56	910 million standard cubic feet
S138/S139 combined	90 million standard cubic feet

(Basis: Regulation 2-6-423.2.3)

9. The gas lines to Sources S5, S56 and S-138/139 (combined) shall each be equipped with a separate dedicated, standard natural gas meter to monitor the gas flow to each source. (Basis: Regulation 2-6-423.2.3)
10. Source S56, Steam Generator Boiler, shall not be operated unless the flue-gas recirculation fan is operating. (Basis: Regulations 1-207 and 2-6-423.2.3)
11. The facility-wide natural gas usage shall not exceed 1,450 million standard cubic feet in any consecutive 12-month period. (Basis: Regulation 2-6-423.2.3)
- *12. Sources S132, In-Use Stationary Prime Engine, and S153 and S157, Fire Pump Driver Engines, and S159, Emergency Standby Diesel Generator shall be fired exclusively on diesel fuel having a sulfur content less than 0.0015% by weight. The sulfur content of the fuel oil shall be certified by the fuel oil vendor. (Basis: Title 17, CCR, 93115: CARB ATCM for Stationary Compression-Ignition Engines)
- *13. Sources S153 and S157 shall only be operated to operate fire pump engines during fires or for reliability-related activities. Operation for reliability-related activities shall not exceed 34 hours for S153 and 34 hours for S157 in any calendar year. Operation while



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mitigating emergency conditions is subject to facility-wide limits on diesel-fuel usage set out in Part 18 below. (Basis: Title 17, CCR, 93115: CARB ATCM for Stationary Compression-Ignition Engines)

- *14. Source S159, Emergency Stand-by Diesel Generator, shall only be operated to mitigate emergency conditions or for reliability-related operations. Operation for reliability-related activities shall not exceed 50 hours per year. Operation while mitigating emergency conditions is subject to facility-wide limits on diesel-fuel usage set out in Part 18 below. (Basis: Title 17, CCR, 93115: CARB ATCM for Stationary Compression-Ignition Engines)
- *15. Emergency conditions are as defined in the CARB ATCM for Stationary Compression-Ignition Engines. (Basis: Title 17, CCR, 93115: CARB ATCM for Stationary Compression-Ignition Engines)
- *16. Reliability-related activities are as defined in the CARB ATCM for Stationary Compression-Ignition Engines. (Basis: Title 17, CCR, 93115: CARB ATCM for Stationary Compression-Ignition Engines)
- 17. Diesel usage at S132, In-Use Stationary Prime Engine, S153 and S157, Fire Pump Engines, and S159, Emergency Standby Diesel Generator, shall not exceed 40,000 gallons (combined) in any consecutive 12-month period for non-emergency use. (Basis: Regulation 2, Rule 5; Cumulative Increase; and Regulation 2-6-423.2.3)
- 18. Facility-wide diesel fuel usage for all activities including any emergency use of S153, S157, or S159 shall not exceed 220,000 gallons in any consecutive 12-month period. (Basis: Regulation 2-6-423.2.3)
- 19. The following records shall be maintained in a District-approved log.
 - a. Monthly natural gas throughput to S5, S56, and S138/S139 on a source-specific basis;
 - b. Monthly records of the natural gas usage for the remainder of the facility;
 - c. Monthly records of diesel deliveries for S132, S153, S157, and S159;
 - d. Total natural gas usage at: S-5, S-56, and S138/S139 on a rolling 12-month basis;
 - e. Total diesel fuel usage at: S-132, S-153, S-157, and S159 on a rolling 12-month basis for non-emergency use;
 - f. Total diesel fuel usage at: S-132, S-153, S-157,



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and S159 on a rolling 12-month basis for all activities including any emergency use;

- g. For S159: hours of operation for the previous month.

Records shall be retained for at least five years from the last date of entry and shall be made available for review by the District upon request. (Basis: Regulations 1-402; 1-420; 1-441; 1-544; 2-6-423.2.3, 9-7-503; 9-8-530; Title 17, CCR, 93115: CARB ATCM for Stationary Compression-Ignition Engines)

PARTICULATE OPERATIONS

20. The spent blast material and other residual products from the each of the following sources shall be abated by the corresponding baghouse(s) whenever the booth is operating:

Source	Abatement
S31	A32
S34	A34
S57	A124
S59	A125
S61	A61

(Basis: Regulation 2-2-301)

21. The baghouses shall be kept in good working condition. (Basis: Regulations 1-207; 2-2-301)
22. The particulate emissions at the outlets of the baghouses A18, A32, A34, A124, A125, and A61 shall not exceed 0.02 gr/dscf. (Basis: Regulations 1-207; 2-2-301; 40 CFR 63 Subpart M))
23. The total suspended and dissolved solids in the cooling water processed at the two Cooling Towers shall not exceed 5000 ppmw. (Basis: Cumulative Increase)

REPORTING REQUIREMENTS

24. The owner/operator shall notify the District within five working days of determining that the facility has exceeded a rolling 12-month limit or any other operational limit. (Basis: Regulations 1-402; 1-441; 1-544)
25. The owner/operator shall prepare and submit an annual report to the Compliance and Enforcement Division of the District. This report shall contain the following information:
- The monthly summaries from Parts 2(a-c) for the past twelve months;
 - The calculations of monthly VOC, each HAP, and



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- total HAP emissions from Part 3(a), Indicating the VOC and HAP contents of each coating and solvent, for the past twelve months, totaled to show the rolling 12-month sums for each month;
- c. The calculation of the monthly VOC and/or HAP emission reductions from Part 3(b), indicating the VOC and/or HAP content of each offsite shipment, for the past twelve months, totaled to show the rolling 12-month sums for each month;
 - d. If any emission reductions were based upon offsite disposal of mixed solvent waste, not including virgin material, a copy of the lab analysis indicating the VOC and/or HAP content of each shipment;
 - e. Calculations of the net facility-wide VOC, each HAP, and total HAP emissions from non-combustion sources (the quantities in Part 25(b) minus the corresponding quantities in Part 25(c) each month for the past twelve months, totaled to show the rolling 12-month sums for each month;
 - f. The amount of natural gas consumed each month at each source or group of sources identified in Part 89 for the past 12 months, totaled to show the rolling 12-month sums;
 - g. The monthly natural gas usage for the remainder of the facility, defined as the entire facility exclusive of the sources listed in Part 8, for the past 12 months, totaled to show the rolling 12-month sums;
 - h. A copy of the source test results performed during the previous 12-month period to measure the NO_x emissions from S5;
 - i. Monthly diesel deliveries to S132, S153, S157, and S159 for the past 12-months, totaled to show the rolling 12-month sums for non-emergency activities and for all activities.

(Basis: Regulations 1-402; 1-420; 1-441; 1-544; and 2-6-423.2.3)

- *26. To ensure compliance with Part 72, the owner/operator shall calculate and report the annual emissions of VOC and NO_x for each year ending January 31st. For solvents and coatings, the calculations required in Part 3 for POC from solvents and coatings for the year ending January 31st shall be used. The calculations shall be based on the following emission factors for the combustion sources:

Sources S5, S56, S128

5.5 lb POC/MMscf (based on AP-42)

35.7 lb NO_x/MMscf (based on BAAQMD Regulation 9, Rule 7)

Sources S138, S139



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5.5 lb POC/MMscf natural gas (based on AP-42)

41.40 lb NOX/MMscf natural gas (based on 25 ppmv @ 3% O₂)

Remaining Natural Gas Combustion Sources

5.5 lb POC/MMscf (based on AP-42)

100 lb NOx/MMscf (based on AP-42)

Source S132

0.05 lb POC/gal diesel fuel (based on AP-42 factor of 0.36 lb/MM BTU and 137,000 BTU/gal)

0.60 lb NOX/gal diesel fuel (based on AP-42 factor of 4.41 lb NOX/MM BTU and 137,000 BTU/gal)

Source S153

0.06 lb POC/hr (based on 0.12 g/hp-hr and 240 hp)

2.22 lb NOX/hr (based on 4.2 g/hp-hr and 240 hp)

Source S157

0.05 lb POC/hr (based on 0.15 g/hp-hr and 140 hp)

1.30 lb NOX/hr (based on 4.2 g/hp-hr and 140 hp)

Source S159

0.32 lb POC/hr (based on 0.231 g/hp-hr, 58% control, and 1482 hp)

14.34 lb NOx/hr (based on 4.394 g/hp-hr and 1482 hp)

This report shall be prepared for the consecutive 12-month period ending on January 31 and shall be submitted by April 1, two calendar months after from the annual permit renewal date. (Basis: Regulations 1-420, 1-441, 2-6-423.2.3)

OTHER PERMIT CONDITIONS

SOLVENT AND COATING OPERATIONS

- *27. The total combined precursor organic (POC) emissions from the six paint spray booths, S8 through S13, shall not exceed 140 lbs/day. (Basis: Cumulative Increase)
- *28. The total combined POC emissions from the six paint spray booths, S8 through S13, shall not exceed 12.8 tons/year. (Basis: Cumulative Increase)
- *29. The total coating usage at S41 shall not exceed 250 gallons per year. The organic emissions from usage of coating shall not exceed 1,400 pounds per year. (Basis: Cumulative Increase)
- *30. The total clean-up solvent usage at S41 shall not exceed 500 gallons per year. The organic emissions from usage of clean-up solvent shall not exceed 3,500 pounds per year. (Basis: Cumulative Increase)
- *31. The owner/operator shall ensure that S41, spray booth, is abated by the dry filter system when S41 is in



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- operation. (Basis: Regulation 1-207; Cumulative Increase)
- *32. S63 shall only be used to apply rust preventative coatings. (Basis: Regulation 1-207)
 - *33. The total annual usage of rust preventative coatings at S63 shall not exceed 660 gallons. (Basis: Cumulative Increase)
 - *34. The total annual usage of cleanup solvent at S63 shall not exceed 20 gallons. (Basis: Cumulative Increase)
 - *35. The spray booth filters at S63 shall be kept in good working condition. (Basis: Regulation 1-207)
 - *36. Total combined net solvent evaporation shall not exceed 3375 gallons of non-precursor organic compounds and 5270 gallons of POCs in any single year at the following sources: S106, S107, S108, S109, S111, S112, S113, S114, S115, S116, S118, and S135. (Basis: Cumulative Increase)
 - *37. S155 and S156 urethane elastomer casting machines may be used to combine prepolymers with a curative to form elastomer objects, and methylene chloride or other NPOC compounds may be used to flush the machines provided that the following limits are not exceeded:
 - a. S155 may not be modified in a way that increases solvent usage or emissions.
 - b. S156 is limited to 3 gallons (gross) of flushing solvent on any single day; 249 gallons (gross) of flushing solvent in any consecutive 12-month period.(Basis: Cumulative Increase; BACT S156 only)
 - *38. The owner/operator of S155 and S156 shall maintain the following records of flushing solvent usage. These records shall be kept in a District-approved log for at least 5 years and shall be made available to the District upon request.
 - a. S155: monthly gross usage
 - b. S156: daily gross usage, monthly gross usage(Basis: Regulation 8-4-501; Cumulative Increase, BACT S156 only]
 - *39. The owner/operator shall maintain the following records in a District-approved log:
 - a. For S8 through S13: daily usage of all coatings and cleanup solvent at each source;
 - b. For S41: weekly usage of all coatings and cleanup solvents;



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- c. For S63: monthly records of coating and cleanup solvent usage;
- d. Monthly records of type and net amount of all solvents used at each of the following sources: S106, S107, S108, S109, S111, S112, S113, S114, S115, 116, S118, and S135;
- e. For S125 through S127: the date and quantity of solvent added to any of these sources, the quantity of solvent recovered for disposal or recycling, and, on a quarterly basis, a summary of net solvent usage at each source;
- f. Net solvent usage shall be calculated by subtracting the quantity of solvent removed from a source from the quantity added to the source.

Records shall be kept onsite for a period of two years from the date of last entry and shall be made available to District staff upon request. (Basis: Regulations 2-5, 1-420, 1-441; Cumulative Increase)

*40. Cold cleaners S140, S143, S145, S147, S149 and S151 are subject to the requirements of Regulation 8, Rule 16, including the general operating and design requirements of 8-16-303.1, 303.2 and 303.3, and the recordkeeping requirements of 8-16-501, as well as the minimum freeboard ratio requirement (0.75) of 8-16-303.4.1. Water rinse tanks S142, S144, S146, S148 and S150 are subject to these same requirements when they contain 1% or more VOC by weight (Regulation 8-16-114), and are exempt from these requirements when they contain less than 1% VOC by weight. (Basis: Regulation 8, Rule 16)

*41. Water rinse tanks S142, S144, S146, S148 and S150 shall not exceed a VOC concentration (by weight) of 10%. (Basis: Cumulative Increase)

*42. Net usage of solvent at each source may not exceed the following limits in any consecutive 12-month period:

S-140	12 gallons
S-141	500 gallons
S-143	500 gallons
S-145	500 gallons
S-147	500 gallons
S-149	500 gallons
S-151	500 gallons

(Basis: Cumulative Increase)

*43. Monthly records of the solvent throughput at cold cleaners S140, S143, S145, S147, S149 and S151 shall be kept in a District-approved log for at least 5 years and shall be made available to the District upon request. (Basis: Regulations 1-420, 1-441, 8-16-501;



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Cumulative Increase)

- *44. The combined net solvent usage of Bromothane R and Bromothane E at S158 shall may not exceed 110 gallons in any consecutive 12-month period. (Basis: Cumulative Increase; Regulation 2, Rule 5)
- *45. To demonstrate compliance with Part 44, the owner/operator shall record the total volume of Bromothane R and Bromothane E added to Vapor Degreaser S158 on a monthly basis, and shall also total the past consecutive 12-month periods. The total volume added shall be considered to be the net solvent usage. The owner/operator shall keep the records in a District-approved log for at least 5 years and shall make the log available to the District upon request. (Basis: Regulations 2-5, 1-420, 1-441; Cumulative Increase)

COMBUSTION OPERATIONS

- *46. Emissions of oxides of nitrogen (NOx) from Steam Generator S56 averaged over any one hour period shall not exceed 12 ppm at 3% oxygen, on a dry basis, whenever the steam flow rate exceeds 225,000 pounds per hour. Upon the effective date for Regulation 9-7-307.6 as specified in Regulation 9-7-308, NOx emissions from Source S56 shall not exceed 5 ppmv, dry at 3% O₂, except during startup and shutdown periods as defined in Regulations 9-7-219-220 and complying with Regulation 9-7-115. (Basis: Cumulative Increase; BACT, and Regulations 9-7-115, 9-7-307.6, and 9-7-308)
- *47. The mass emissions of NOx from S56, calculated as NO₂, shall not exceed 140 pounds during any consecutive 24-hour period. (Basis: Cumulative Increase; BACT)
- *48. The mass emissions of NOx from S56, calculated as NO₂, shall not exceed 24 tons during any consecutive 12-month period. (Basis: Cumulative Increase; BACT)
- *49. The maximum heat input to S56 shall not exceed 410 MM BTU/hr. (Basis: Cumulative Increase; BACT)
- *50. The boiler, S56, shall not operate at the maximum heat input for more than 23 hours in any 24-hour period. (Basis: Cumulative Increase; BACT)
- *51. S56 shall be equipped with District-approved continuous emission monitors and recorders for oxygen (O₂), carbon monoxide (CO), and oxides of nitrogen (NOx). (Basis: 40 CFR 60 Subpart Db; Regulations 1-520, 1-521)



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- *52. Records of natural gas usage and strip charts from the O₂, CO, and NO_x monitors on S56 shall be maintained for a period of two years and shall be made available to the District personnel upon request. (Basis: Regulation 1-522; District MOP Volume V)
- *53. Calibration of all continuous emission monitoring instruments shall be performed on a daily basis whenever the boiler, S56, is operating. (Basis: District MOP Volume V)
- *54. Operation of the S132 In-Use Stationary Prime Engine shall be limited to idling at a nominal 40% load during engine tests to ensure that tests may be safely terminated in the event of a power outage, and operation during power outages to terminate tests. (Basis: Regulation 2, Rule 1)
- *55. Visible emissions at S132 shall not exceed Ringelmann 0.5, nor result in fallout on adjacent properties in sufficient quantities as to cause a public nuisance per Regulation 1-301. (Basis: Regulations 1-301; 6-1-305)

PARTICULATE OPERATIONS

- *56. The total amount of abrasive sand used at S31 shall not exceed 657 tons in any consecutive 12-month period. Other blast media shall be used only with the prior approval of the District. (Basis: Cumulative Increase)
- *57. The throughput of abrasive blast media at S57 shall not exceed 4,380 tons in any consecutive 12-month period. (Basis: Cumulative Increase)
- *58. The throughput of Aerolyte plastic media material at S59 shall not exceed 100 tons in any consecutive 12-month period. (Basis: Cumulative Increase)
- *59. The throughput of abrasive blast material at S61 shall not exceed 480 tons in any consecutive 12-month period. (Basis: Cumulative Increase)
- *60. The total number of launch tube closures processed annually at S62 for each operation shall not exceed the following closures:
 - Repair 50 closures per year
 - Refurbishment 100 closures per year
 - Disassembly 200 closures per yearLaunch tube closures containing asbestos shall not be processed at this facility. (Basis: Cumulative Increase)



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- *61. The annual release of total particulate emissions at S62 shall not exceed 106 pounds. (Basis: Cumulative Increase)
- *62. The daily release of total particulate emissions at S62 shall not exceed 1.5 pounds. (Basis: Cumulative Increase)
- *63. Emissions from S62 shall be abated by the water wash system at all times the booth is in operation. (Basis: Regulation 1-207)
- *64. The following records shall be maintained:
 - a. for S31, S57, S59 and S61: monthly blast media usage in the form of purchase records
 - b. for S62: the total daily throughput of closures, recorded in a District-approved logThese records and this log shall be kept onsite for at least five years and shall be made available to the District upon request. (Basis: Regulations 1-420, 1-441; Cumulative Increase)

S-9 COATING OPERATION

- *65. The emissions from the S-9 Paint Spray Booth shall be routed under negative pressure to the A-135 Carbon Adsorption System at all times in which S-9 is in operation. (Basis: Regulations 8-19-302, 8-19-313; Cumulative Increase)
- *66. The abatement efficiency of the A-135 Carbon Adsorption System shall be no less than 85% on a mass basis. (Basis: Regulations 8-19-302, 8-19-313; Cumulative Increase)

S158 VAPOR DEGREASER

- *67. The VOC emissions from the S158 Vapor Degreaser shall be routed under negative pressure to the A-158 Carbon Adsorption System at all times which S158 is in operation. (Basis: Regulation 8-16-301; Cumulative Increase)
- *68. The VOC abatement efficiency of the A158 Carbon Adsorption System shall be no less than 90% on a mass basis. (Basis: Regulation 8-16-301; Cumulative Increase)
- *69. At least once per week, the owner/operator shall take measurements of the inlet VOC concentration and outlet VOC concentration of the carbon vessel S158 with a photo-ionization detector (OVA-PID) or other method



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approved in writing by the APCO. The owner/operator shall change out the spent carbon with fresh carbon upon detection at the outlet of A158 of greater than 10% of the inlet. (Basis: Regulations 1-207, 1-420, 1-441, 2-1-403; Cumulative Increase)

- *70. The owner/operator shall record the monitoring readings specified in Part 69 in a District-approved log as they are taken. The monitoring results shall be used to:
- Calculate the time of predicted breakthrough of VOC emissions.
 - Establish the frequency of carbon change-out necessary to insure compliance with Part 69. (Basis: Regulations 1-207, 1-420, 1-441, 2-1-403; Cumulative Increase)
- *71. The owner/operator may propose for District review, based upon actual measurements at the site during operation of S158 and A158 that the monitoring frequency be reduced based upon the demonstrated breakthrough rate of the carbon canister. The owner/operator must receive written approval from the District prior to initiating any changes in the monitoring frequency. (Basis: Regulations 1-207, 1-420, 2-1-403)

FACILITY-WIDE CONDITIONS

- *72. Notwithstanding any other limits in this permit condition, facility-wide POC and NOx emissions shall be less than 35 ton/yr each in any consecutive 12-month period. This limit is imposed because POC and NOx offsets were provided by the District in accordance with Regulation 2-2-302 for emission increases in Application 19631, 14969, and 20163. (Basis: Regulation 2-2-302)
73. Monthly records of facility-wide POC and NOx emissions shall be kept in a District-approved log for at least 5 years and shall be made available to the District upon request. (Basis: Regulations 1-411, 1-420, 2-2-302; and 2-6-423.2)

CONDITIONS FOR S160 DRY FILTER SPRAY BOOTH

- *74. The owner/operator of S160 Dry Filter Spray Booth shall not exceed the use of 200 gallons of coating in any consecutive 12-month period. (Basis: Regulations 8-19-302, 8-19-313; Cumulative Increase)
- *75. The owner/operator of S160 Dry Filter Spray Booth shall not exceed the use of 50 gallons of clean up solvents



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in any consecutive 12-month period. (Basis: Regulations 8-19-302, 8-19-313, 8-43-301, 8-43-302; Cumulative Increase)

- *76. The owner/operator shall use the following coatings, thinners, and clean up solvents at S160 Dry Filter Spray Booth.

Coatings	Amercoat 235 Off-White Epoxy Amercoat 3279 Heat Resistant Coating Amercoat 395FD White Epoxy Amercoat 90HS Pearl Gray Epoxy Daubert Chemical (F&L) Tectyl 891 Class II (P-1)
Rust Preventative	Esgard PL-2 Rust Preventative Esgard PL5 Rust Preventative Niles Chemical Paint MIL-E-24635 Gray Enamel Topcoat (N5120) Daubert Chemical (F&L) P-2 Tectyl 50 2C Class II Corrosion Inhibitor Niles Chemical Paint TTP645B Zinc Molybdate Primer Yellow (N-6949)
Thinners and Clean Up Solvents	Acetone Amercoat 65 Methyl Ethyl Ketone Mineral Spirits Oxsol 1 00 (PCBTF)

(Basis: Regulations 8-19-302, 8-19-313, 8-43-301, 8-43-302; Cumulative Increase)

- *77. The owner/operator of S160 may use coatings and clean up solvents other than the materials specified in Part 76 and/or usages in excess of those specified in Parts 74 and 75, provided that the owner/operator can demonstrate that the following are satisfied.
- The VOC contents of coatings do not exceed 340 grams/liter.
 - The VOC contents of any "Specialty Coating" of Regulation 8-43-302 do not exceed 420 grams/liter.
 - Total POC emissions from S160 do not exceed 1026 lb/yr in any consecutive 12-month period.
 - Total NPOC emissions from S160 do not exceed 690 lb/yr in any consecutive 12-month period.
 - The use of these materials does not increase toxic emissions above any risk screening trigger level
- (Basis: Regulations 2-5, 8-19-302, 8-19-313, 8-43-301, 8-43-302; Cumulative Increase)

- *78. To determine compliance with the above conditions, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but



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not necessarily limited to, the following information:

- a. Maintain a current list of coatings in use, which provides all of the data necessary to evaluate compliance, including the following information, as applicable:
 - (i) Coating, catalyst or reducer used;
 - (ii) Mix ratio of components used;
 - (iii) VOC content of coating as applied;
 - (iv) Military specification of the component or area coated;
 - (v) VOC content of surface preparation and cleanup solvents, as applied.
- b. Maintain monthly records that provide the following information on a daily basis, as applicable:
 - (i) Coating and mix ratio of components in the coating used as applied;
 - (ii) Quantity of each coating applied;
 - (iii) Type and amount of solvent used for cleanup and surface preparation.

The owner/operator shall record all records in a District-approved log. The owner/operator shall retain all records on-site for five years, from the date of entry, and make them available for inspection by District staff upon request. These record-keeping requirements shall not replace the record-keeping requirements contained in any applicable District Regulations. (Basis: Regulations 1-420, 1-441, 2-5, 8-19-501, 8-43-501; Cumulative Increase)

CONDITIONS FOR S161 DRY FILTER SPRAY BOOTH

- *79. The owner/operator of S161 Dry Filter Spray Booth shall not exceed 880 lb of POC and 242 lb of NPOC of coatings and clean up solvents in any consecutive 12-month period. (Basis: Regulations 8-19-302, 8-19-313, 8-43-301, 8-43-302; Cumulative Increase)
- *80. The owner/operator of S161 may use any coating and clean up solvent provided that the owner/operator can demonstrate that the following are satisfied.
 - a. The VOC contents of coatings do not exceed 340 grams/liter.
 - b. The VOC contents of any "Specialty Coating" of Regulation 8-43-302 do not exceed 420 grams/liter.
 - c. Total POC emissions from S161 do not exceed 880 lb/yr in any consecutive 12-month period.
 - d. Total NPOC emissions from S161 do not exceed 242 lb/yr in any consecutive 12-month period.
 - e. The use of these materials does not increase toxic emissions above any risk screening trigger level.(Basis: Regulations 2-5, 8-19-302, 8-19-313, 8-43-301,



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8-43-302; Cumulative Increase)

- *81. To determine compliance with the above conditions, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:
- a. Maintain a current list of coatings in use, which provides all of the data necessary to evaluate compliance, including the following information, as applicable:
 - (i) Coating, catalyst or reducer used.
 - (ii) Mix ratio of components used
 - (iii) VOC content of coating as applied
 - (iv) Military specification of the component or area coated
 - (v) VOC content of surface preparation and cleanup solvents, as applied.
 - b. Maintain monthly records that provide the following information on a daily basis, as applicable:
 - (i) Coating and mix ratio of components in the coating used as applied
 - (ii) Quantity of each coating applied
 - (iii) Type and amount of solvent used for cleanup and surface preparation

The owner/operator shall record all records in a District-approved log. The owner/operator shall retain all records on-site for five years, from the date of entry, and make them available for inspection by District staff upon request. These record-keeping requirements shall not replace the record-keeping requirements contained in any applicable District Regulations. (Basis: Regulations 1-420, 1-441, 2-5, 8-19-501, 8-43-501; Cumulative Increase)

End of Conditions