**SYNTHETIC MINOR APPLICATION EVALUATION REPORT**
**Lockheed Martin Space Systems Company**
**APPLICATION 12514, PLANT 55**

## BACKGROUND:

The Lockheed Martin Space Systems Company (Lockheed Martin) of the Lockheed Martin Corporation has chosen to apply for a revision to its Synthetic Minor Operating Permit (SMOP) to comply with the Title V permitting requirements of the Federal Clean Air Act. The Title V permitting requirements were implemented as a result of the 1990 revisions to the Federal Clean Air Act. The initial SMOP was issued on January 19, 1996 under Permit Application #13823.

Lockheed Martin is a large aerospace corporation that is involved in the design and construction of missiles, satellites and space launch vehicles. Lockheed Martin has been at its Sunnyvale facility since 1954. The parent company of Lockheed Martin was formed in March 1995 with the merger of Lockheed Corporation and Martin Marietta Corporation. Subsequently, the facility name was changed from Lockheed Missiles and Space Company to Lockheed Martin Space Systems Company.

The majority of Lockheed Martin's emissions of organic compounds arise from cleaning, processing and coating operations associated with the cleaning, assembly, and testing of aerospace components. Lockheed Martin has combustion sources that emit NOx, CO, POC, SOx and particulate emissions.

It was determined in 1996 that Lockheed Martin had the potential to emit greater than 100 tons per year of criteria pollutants and 25 tons per year of HAPS, if all sources were to operate at maximum capacity. Lockheed Martin applied for the SMOP to obtain federally enforceable permit conditions limiting its NOx emissions to less than 62 tons per year, POC emissions to less than 50 tons per year, HAP emissions to less than 23 tons per year for any combination of HAPS and less than 9 tons per year for any individual HAP. With this application, Lockheed Martin is requesting that the allowable POC emissions be less than 35 tons per year and the District is making the NOx emission limit of 62 tons per year a condition limit rather than limiting the amount of combustion of natural gas and solid fuel. A gasoline dispensing facility and emergency standby engines will be added to the synthetic minor operating permit.

## SOURCES COVERED BY THIS APPLICATION:

The permitted sources and significant exempt sources covered by this application are listed in the synthetic minor permit condition at the end of this evaluation and are not repeated here since the list is a few pages long.

**EMISSION LIMITS STRATEGY:**

To obtain a synthetic minor permit, a facility must have federally enforceable limits that keep the potential to emit below 95 tons per year of any regulated pollutant, below 9 tons per year of any single HAP, and below 23 tons per year of any combination of HAPs.

Lockheed Martin previously agreed to accept permit conditions limiting POC emissions to less than 50 tons per year and NOx emissions to less than 62 tons per year. Additionally, total HAPs were conditioned to less than 23 tons per year and emissions of TCA and methylene chloride and other individual HAPs were conditioned to less than 9 tons per year. With this application, TCA and methylene chloride will not be specifically included since it is redundant and the use of each of these HAPs has been substantially reduced. The only emission limit changes with this application are to lower the POC emission limit to 35 tons per year and to provide a specific annual emission limit for NOx of 62 tons per year.

Lockheed Martin has three categories of sources. The first category consists of solvent evaporating processes such as coating and solvent cleaning operations. The second category of sources is a gasoline dispensing facility that is used to fuel mobile sources and results in emissions of POC. The third category of sources involves the combustion of fuel in stationary sources, which results in combustion pollutants.

Lockheed Martin will continue to monitor and record the amount of material distributed to the solvent evaporating sources from the centralized warehouse by using a computerized inventory system that keeps track of the total emissions from these sources based on a conservative emission factor of 100% solvent loss from the products. The amount of solvent lost to evaporation corresponds to the amount of POC and HAP emissions from this source category.

Records of the quantity of POC and HAP containing materials distributed through the central warehouse system, and records of materials purchased directly for special projects will be kept on an event basis and summarized monthly. The quantities of materials used, and the chemical composition information from the associated Material Safety Data Sheets (MSDS) and/or technical data sheets shall be used to calculate emissions of POC and HAP. The potential emission may be reduced by subtracting the POC and HAP content of any specific waste material collected for off-site recycling or disposal (as recorded in hazardous waste manifests). Materials collected for offsite recycling do not contribute to POC or HAP emissions at the facility and therefore may be subtracted from the materials distributed at the facility to yield a "net POC and HAP emission" from the facility.

Any material collected for recycle which cannot be specifically identified, such as mixtures of solvents, will not be used to reduce POC and HAP emissions from operations listed in the solvent and coating usage category. This method of record keeping will result in a conservative estimate of the amount of POC and HAP emissions from the facility.

The second category of sources is a gasoline dispensing facility that is used to fuel motor vehicles and results in emissions of gasoline vapors. The combustion emissions from motor vehicles are not included in any synthetic minor permit condition limit. For this category, we have assumed that emissions of gasoline vapors occurring during loading, breathing, refueling and spillage are 1.52 pounds of gasoline (as POC) per 1,000 gallons dispensed and 7.50 pounds of benzene, a HAP, per million gallons

dispensed (official California Air Pollution Control Officer's Association (CAPCOA) factors for aboveground gasoline storage tanks). The amount of gasoline dispensed is equivalent to the amount delivered to the facility, therefore Lockheed Martin will track the amount of gasoline received. These POC and HAP emissions from the gasoline dispensing facility must be included with the other two categories to determine compliance with the facility-wide POC ad HAP emission limits.

Lockheed Martin has hired contractors for facility maintenance activities including the painting of stationary structures and their appurtenances. Because these emissions are not substantial, are exempt from District permits, and the POC limit for Lockheed Martin is substantially below the synthetic minor maximum limit of 95 tons per year, Lockheed Martin will not be required to track emissions from these activities.

The third category of sources, combustion sources, will be limited to emitting 62 tons per year of NOx. The POC emission from combustion sources must be included with the other two categories to determine compliance with the facility-wide POC emission limit of 35 tons in any consecutive 12-month period.

NOx and POC emissions from combustion sources shall be calculated as follows:

Emissions shall be calculated using one or more of the following methods:
(1) continuous emission monitor systems (CEMs),
(2) source test data,
(3) for boilers, portable analyzer test data. The portable analyzer must be operated and maintained as required by Appendix A "Portable Analyzer Protocol and Specifications" in the District's Regulation 9, Rule 7 "Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters"
(4) (a) manufacturer's emissions data, or emission factors from AP-42, or the California Air Resources Board (CARB) [including CARB's Off-road Certification Database, CARB's "Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines, October 2000 (The Risk Reduction Plan)", the amendment and clarification to the Guidance, March 2002, and CARB's "California's Emissions Inventory For Off-Road Large Compression-Ignited (CI) Engines (> 25HP), January 2000" (The OFFROAD Model)],
plus
(b) fuel supplied or actual fuel usage, run time and/or energy produced.
If emissions information is not available for a propane-fired engine, the Permit Holder may assume emissions are the same as for a natural gas fired engine.

The Permit Holder may use the NOx and POC emission factors for "commercial boilers" in Table 1.5-1 of AP-42 for propane boilers and for all other propane or LPG fired sources at the facility except internal combustion engines. The Permit Holder may use the NOx and POC emission factors for "small boilers" in Tables 1.4-1 and 1.4-2, respectively, of AP-42 for natural gas fired boilers and for all other natural gas fired sources at the facility except internal combustion engines. If an engine drives a generator and the generator output is measured, the Permit Holder may assume that it takes 1.34 horsepower-hours to produce 1 kW-hr of electricity. Emissions shall be estimated using accepted methodology that is appropriate to the emitting sources.

A couple of examples are provided to better illustrate a conservative approach to calculating emissions:

If fuel usage and engine load are not measured but run time is recorded, the Permit Holder shall assume an engine operated at full load its entire run time.

If the Permit Holder continues to retain a master natural gas meter for its facility, the Permit Holder may assume that natural gas fired engines operate at full load the entire run time and determine small boiler fuel usage by subtracting the calculated engine fuel usage from the master metered quantity since the mass emissions of NOx and POC per unit of input energy from engines are higher than the mass emissions of NOx and POC per unit of input energy from boilers.

Restated, Lockheed Martin, at its option, may calculate combustion emissions at the source level, group similar sources together, or calculate emissions using a combination of the above.

The initial synthetic minor permit included a combustion source with a firing limit of 1,000 tons of solid fuel per year. The source was permanently removed from service several years ago. Decreases in combustion emissions are also the result of Lockheed Martin upgrading many small boilers in order to reduce NOx emissions.

Calculation of the emissions of CO, PM-10 and SOx are not required since it was demonstrated in 1996 that limiting NOx to 62 tons per year limits these other pollutants to less than 62 tons per year each.

Records of fuel usage shall be maintained on a monthly basis. Natural gas usage for the entire facility shall be based on the utility meter used for billing purposes. Natural gas for the entire facility is supplied through a main gas meter, which simplifies facility-wide monthly natural gas readings.

## EMISSION CALCULATIONS

The emissions calculation approaches for NOx and POC from combustion sources, POC and HAP from solvent evaporation sources, and POC and HAP from the gasoline dispensing facility are described above.

## STATEMENT OF COMPLIANCE:

This facility is in compliance with the necessary requirements in Regulation 2, Rule 6 to retain a synthetic minor operating permit. Lockheed Martin has voluntarily accepted federally enforceable permit conditions including emission limits that will keep Lockheed Martin's potential to emit under 62 tons per year of any regulated air pollutant except that POC shall be less than 35 tons per year, 9 tons per year of any hazardous air pollutant, and 23 tons per year of any combination of hazardous air pollutants.

**CONDITIONS:**
Lockheed Martin is currently subject to Synthetic Minor Operating Permit Condition Number 13374 (Appendix A). Condition 13374 will be archived and Lockheed Martin will now be subject to Synthetic Minor Permit Condition Number 24784. In addition to the changes discussed in the evaluation, monthly emission limits for HAP, POC, and NOx were deleted because they are unnecessary and not required by any regulation.

**Condition 24784:**
(Application 12514: Revision of Synthetic Minor Operating Permit. Decrease facility-wide POC limit from 50 to 35 tpy. Limit facility-wide NOx emissions to 62 tpy versus limiting the amount of fuel fired. Include GDF and emergency standby engines in the Synthetic Minor Operating Permit.)

Conditions presented in this revised Synthetic Operating Permit shall become effective 60 days from the facility's receipt of the finalized version of this permit.

Lockheed Martin Space Systems Co., Plant #55, has a synthetic minor operating permit. This operating permit covers all sources existing at this facility on the date of issuance. The sources are listed below.

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| 10 | Vehicle Gasoline Dispensing | |
| 206 | Wipe Cleaning Operation | |
| 211 | Brush-Applied Coating Operation | |
| 212 | Diesel Engine, Cummins model 6CT8.3/G, emergency standby abated by A-212 Catalyzed diesel particulate filter | |
| 322 | Wipe Cleaning Operation | |
| 323 | Wipe Cleaning Operation Bldg 103/E-3 | |
| 324 | Wipe Cleaning Operation Bldg 103/J-12 | |
| 325 | Wipe Cleaning Operation Bldg 103/K-6 | |
| 328 | Wipe Cleaning Operation Bldg 103/C-12 | |
| 335 | Wipe Cleaning Operation | |
| 336 | Wipe cleaning Operation | |
| 338 | Solvent Wipe Cleaning | |
| 406 | Wipe Cleaning Operation Bldg 150/C-8 | |
| 407 | Mobile Freon Storage Tank/Hydrostatic Test (Bldg 104) | [exempt] |
| 408 | B/104 Thin Film Lab with Associated Curing Oven | |
| 510 | Solvent Cold Cleaner | |
| 701 | Diesel Engine, Komatsu model 06110T, emergency standby | |
| 1001 | Wipe Cleaning Operation Bldg 076/E-7 | |
| 1300 | Semiconductor Fab, Bldg. 113 abated by A-1304 Acid Fume Scrubber | |
| 1310 | Bead blast operation (bldg 113) abated by Cyclone and Baghouse | [exempt] |
| 3001 | Wipe Cleaning Operation - Bldg. 130 | |
| 3902 | Sandblast Operation | |
| 4107 | Diesel Engine | |
| 4108 | Diesel Engine | |
| 4301 | Diesel Engine, John Deere model 4239DF001, emergency standby | |
| 4601 | Diesel Engine, Cummins model VTA28G2, emergency standby | |
| 4901 | STEAM BOILER | [exempt] |
| 5024 | Wipe Cleaning Operation - Bldg 182 | |
| 5026 | Standby Generator abated by A-5026 Diesel Particulate Filter | |
| 5028 | Diesel Engine, John Deere model 6059TF001, emergency standby | |
| 5029 | Emergency Standby Diesel Engine | |
| 5030 | Emergency Engine Generator | |
| 5104 | FUME HOOD | |

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| 5125 | Wipe Cleaning Operation Bldg 151/A2-7 | |
| 5126 | Solvent Wipe Cleaning-Bldg 151/B-6 | |
| 5127 | Solvent Wipe Cleaning-Bldg 141/C-5 | |
| 5128 | Wipe Cleaning Operation Bldg 151/C-13 | |
| 5129 | Wipe Cleaning Operation Bldg 151A/X-8 | |
| 5130 | Solvent Wipe Cleaning-Bldg 151/G-11 | |
| 5131 | Wipe Cleaning Operation Bldg 151/K-2 | |
| 5139 | Paint Spray Booth | |
| 5144 | Peelcoat Cleaning/Coating Operation | |
| 5147 | Spray booth | |
| 5149 | Paint Spray Booth B/151 | |
| 5150 | Paint Spray Booth B/151 | |
| 5153 | Cold Cleaner | |
| 5162 | Glove Box Sandblast Unit abated by A-5162 Baghouse | |
| 5189 | Wipe Cleaning Operation | |
| 5190 | Cold Cleaner | |
| 5191 | Cold Cleaner | |
| 5192 | Cold Cleaner | |
| 5197 | Solvent Wipe Cleaning | |
| 5199 | Diesel Engine, Cummins model NT855G, emergency standby | |
| 5200 | Wave Solder | |
| 5201 | WATER BOILER | [exempt] |
| 5202 | WATER BOILER | [exempt] |
| 5203 | WATER BOILER | [exempt] |
| 5204 | WATER BOILER | [exempt] |
| 5205 | PAINT SPRAY BOOTH | [exempt] |
| 5207 | Wipe Cleaning Operation Bldg 152/E-14 | |
| 5208 | Wipe Cleaning Operation Bldg 152/E-20 | |
| 5209 | Wipe Cleaning Operation Bldg 152 | |
| 5210 | Spray Booth with Associated Drying Ovens | |
| 5211 | Touchup Coating | |
| 5212 | SOLVENT WIPE CLEANING | |
| 5216 | Diesel Engine, Cummins model NT855G, emergency standby | |
| 5301 | WATER BOILER | [exempt] |
| 5302 | WATER BOILER | [exempt] |
| 5307 | Wipe Cleaning Operation Bldg 153/C-8 | |
| 5308 | Wipe Cleaning Operation Bldg 153/D-2 & E-3 | |
| 5315 | Conformal coating of circuit boards with associated drying | |
| 5319 | Ventilation Hood (Bldg. 153) | |
| 5322 | Coating Operation | |
| 5323 | Paint Booth (M175542) B/153, J6 | |
| 5326 | Primer Spray Booth Portable Filtration Table abated by A-5326 Carbon Filters | |
| 5327 | Wipe Cleaning Operation | |
| 5329 | Wipe Cleaning | |
| 5330 | Touchup Coating Operation | |
| 5332 | Wipe Cleaning Operation | |
| 5333 | Wipe Cleaning | |
| 5334 | Wave Solder | |
| 5336 | Firetube Boiler | |
| 5337 | Diesel Engine, John Deere model 6076AF010, emergency standby | |
| 5338 | Diesel Engine, John Deere model 6076AF010, emergency standby | |
| 5339 | Natural Gas Fired Boiler, 400 BHP, 16.33 MMBtu/hr | |
| 5401 | WATER BOILER | [exempt] |
| 5402 | WATER BOILER | [exempt] |
| 5404 | Emergency Standby Diesel Generator Set | |
| 5501 | WATERFALL PAINT BOOTH | |

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| 5502 | WOOD CUTTING MACHINES AND FLOOR SWEEP<br>Abated by A-5501 Dust Collector | [exempt] |
| 5503 | Wipe Cleaning Operation Bldg 155 | |
| 5602 | Touch-up/Repair Operation, Col. G-9 | |
| 5603 | Wipe Cleaning Operation | |
| 5604 | Wipe Cleaning | |
| 5608 | Emergency Standby Generator Engine | |
| 5609 | Emergency Standby Generator Engine | |
| 5610 | Diesel Engine, Cummins model NTA855G3, emergency standby | |
| 5611 | Emergency Standby Generator Engine | |
| 5615 | Emergency Standby Generator | |
| 5618 | Diesel Engine | |
| 5620 | Emergency Standby Diesel Generator Set | |
| 5622 | Emergency Standby Diesel Generator Set | |
| 5623 | Emergency Generator Set | |
| 5624 | Emergency Generator Set | |
| 5625 | Emergency Standby Diesel Generator Set | |
| 5626 | Natural Gas Fired Boiler for Bldg 156 Liquid Nitrogen Vaporizer | |
| 5628 | Natural Gas Fired Boiler, 60 MMBtu/hr | |
| 5629 | Natural Gas Fired Boiler, 60 MMBtu/hr | |
| 5701 | Diesel Engine, Detroit Diesel model 12V92T, emergency standby | |
| 5702 | Emergency Standby Diesel Engine | |
| 5703 | Natural Gas Fired Boiler | |
| 5704 | Cleaver-Brooks 350 HP Boiler | |
| 5705 | Cleaver-Brooks 350 HP Boiler | |
| 5802 | Wipe Cleaning Operation | |
| 5803 | Diesel Engine, Cummins model NT855G, emergency standby | |
| 5804 | Diesel Engine, Caterpillar model 3412, emergency standby | |
| 5805 | Diesel Engine, Caterpillar model 3412, emergency standby | |
| 5806 | Emergency Engine Generator | |
| 5807 | Emergency Engine Generator | |
| 5808 | Emergency Engine Generator | |
| 5904 | WATER BOILER | [exempt] |
| 5905 | Wipe Cleaning Operation Bldg 153A | |
| 5906 | Wipe Cleaning Operation Bldg 159/DX-1 | |
| 5907 | Wipe Cleaning Operation | |
| 5908 | Wipe Cleaning Operation | |
| 5911 | Heating System | |
| 5912 | Spray Booth | |
| 5913 | Manual Surface Coating | |
| 5914 | Wipe Cleaning Operation | |
| 5915 | Fiberglass Layup | |
| 5916 | Resin Mixing/Kitting Hood | |
| 5917 | Trim Area abated by A-5917 Dust Control System | [exempt] |
| 5918 | Oven | [exempt] |
| 5919 | Boiler, Gas Fired | |
| 5920 | Diesel Engine, Caterpillar model 3508 STD, emergency standby | |
| 5921 | Diesel Engine, Cummins model KTA-50-G1, emergency standby | |
| 7023 | Wipe Cleaning Operation Bldg 170/A-7 | |
| 7025 | Wipe Cleaning Operation Bldg 170/B-4 | |
| 7026 | Wipe Cleaning Operation Bldg 170/D-8 | |
| 7027 | Wipe Cleaning Operation Bldg 170/F-7 & F-8 | |
| 7035 | Adhesive Application Area, Col. C-8 | |
| 7036 | Batch Silicone Mixer | [exempt] |
| 7037 | Batch Silicone Mixer | [exempt] |
| 7101 | WATER BOILER | [exempt] |

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| 7102 | WATER BOILER | [exempt] |
| 7103 | WATER BOILER | [exempt] |
| 7109 | Diesel Engine, Caterpillar model 3406, emergency standby | |
| 7112 | Diesel Engine, Caterpillar model 3508 STD, emergency standby | |
| 7162 | Process Tanks 37 and 43 abated by A-7162 Washer 7 | [exempt] |
| 7163 | Process Tanks 27 and 29 abated by A-7163 Washer 6 | [exempt] |
| 7164 | Process Tanks 8 and 10 abated by A-7164 Washer 3 | [exempt] |
| 7165 | Process Tank 52 abated by A-7165 Washer 1 | [exempt] |
| 7166 | Process Tanks, 39, 48 and 41 abated by A-7166 Scrubber 4 | [exempt] |
| 7167 | Process Tank 31 abated by A-7167 Scrubber 3 | [exempt] |
| 7168 | Process Tanks 4 and 6 abated by A-7168 Scrubber 1 | [exempt] |
| 7189 | Wipe Cleaning Operation | |
| 7192 | Boiler 400 Hp | |
| 7193 | Boiler 400 Hp | |
| 7194 | Boiler 400 Hp | |
| 7196 | Paint Booth with Electric Oven #2 | |
| 7197 | Paint Booth | |
| 7198 | Paint Booth | |
| 7199 | Paint Booth with Electric Oven #1 | |
| 7201 | Diesel Engine, John Deere model 6076TF001, emergency standby | |
| 7427 | Printing Press | |
| 7428 | Printing Press | |
| 7432 | Emergency Standby Diesel Engine | |
| 7601 | Diesel Engine, Komatsu model 06110TA, emergency standby | |
| 7603 | Emergency Engine Generator | |
| 8101 | WATER BOILER | [exempt] |
| 8102 | WATER BOILER | [exempt] |
| 8104 | Wipe Cleaning Operation Bldg 181/B-6 | |
| 8107 | Paint Area with Curing Oven | |
| 8108 | Wipe Cleaning Operation | |
| 8112 | Wipe Cleaning Operation | |
| 8204 | Spray Booth for Adhesive Coating Prep,(Acetone Wipe Cleaning) | |
| 8216 | Paint Booth with Dryer | |
| 8218 | Paint Booth with Dryer | |
| 8220 | WATER BOILER | [exempt] |
| 8221 | WATER BOILER | [exempt] |
| 8222 | WATER BOILER | [exempt] |
| 8223 | PAINT SPRAY BOOTH | |
| 8225 | STEAM BOILER | [exempt] |
| 8226 | WATER BOILER | [exempt] |
| 8227 | MACHINE SHOP abated by A-8215 Dust Collector | [exempt] |
| 8234 | Paint Booth | [exempt] |
| 8237 | Wipe Cleaning Operation Bldg 182/F-16 | |
| 8238 | Wipe Cleaning Operation Bldg 182/F-23 | |
| 8239 | Wipe Cleaning Operation Bldg 182/H-12 | |
| 8240 | Wipe Cleaning Operation Bldg 182/H-15 | |
| 8241 | Wipe Cleaning Operation Bldg 182/H-27 | |
| 8242 | Wipe Cleaning Operation Bldg 182/J-23 | |
| 8255 | Cold Cleaner | |
| 8261 | Bead Blast Operation abated by A-8261 Dust Collector for Blast Cabinet | [exempt] |
| 8262 | Silicone Adhesive Application with Curing Oven | |
| 8264 | Paint Spray Booth, Col. F-29 | |
| 8265 | Wipe Cleaning Operation | |
| 8266 | Batch Silicone Mixer | [exempt] |
| 8267 | Batch Silicone Mixer | [exempt] |
| 8268 | Paint Touch-Up Operation | |

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| 8278 | Sealant Application | |
| 8279 | Composite Fabrication, Curing and Cleaning | |
| 8280 | Emergency Standby Engine | |
| 8302 | Wipe Cleaning Operation | |
| 8601 | Diesel Engine, Allis Chalmers Model 670T, emergency standby | |
| 8701 | Emergency Standby Generator Engine | |
| 8801 | Coating Operation | |
| 9001 | WATER BOILER | [exempt] |
| 9002 | WATER BOILER | [exempt] |
| 9502 | Spray Booth | |
| 9504 | Wipe Cleaning - Bldg 195B/Rm 144 | |
| 9505 | Emergency Standby Generator Engine | |
| 9506 | Emergency Standby Generator Engine | |
| 9507 | Emergency Diesel Generator Set | |
| 15100 | Solvent Cleaning | |
| 30004 | Wipe Cleaning | |
| 30012 | Enclosed Coating Line | |
| 30016 | Adhesive and Primer Application | |
| 30017 | Paint Spray Booth - Coating | |
| 30024 | Coating and Adhesive Booth | |
| 30026 | Paint Booth 2B/159 | |
| 30028 | Solvent Cleaning Operation B/151 | |
| 32100 | Fugitive Sources | [exempt] |
| 32101 | Fugitive Sources | [exempt] |

Permit conditions that are part of this operating permit but do not contribute to establishing the synthetic minor limits are attached. Lockheed Martin Space Systems Co. must comply with all conditions. The following conditions do not negate the applicability of any District, state, or federal requirements.

**Synthetic Minor Conditions:**

1) The owner/operator shall not emit more than 9 tons per any consecutive twelve-month period of any single hazardous air pollutant (HAP) from all sources combined.
(basis: Regulation 2-6-423.2)

2) The owner/operator shall not emit more than 23 tons per any consecutive twelve-month period of any combination of HAPs from all sources combined.
(basis: Regulation 2-6-423.2)

3) The owner/operator shall not emit more than 35 tons per any consecutive twelve-month period of Precursor Organic Compounds from all sources combined on a facility-wide basis.
(basis: Regulation 2-6-423.2)

4) The owner/operator shall not emit more than 62 tons per any consecutive twelve-month period of Oxides of Nitrogen as NO2 from all sources combined on a facility-wide basis.
(basis: Regulation 2-6-423.2)

Conditions 5-9

Demonstration of Compliance for NOx and POC for Combustion Sources:

5) The owner/operator shall calculate NOx and POC emissions from combustion sources as follows:

Emissions shall be calculated using one or more of the following methods:
(1) continuous emission monitor systems (CEMs),
(2) source test data,
(3) for boilers, portable analyzer test data. The portable analyzer must be operated and maintained as required by Appendix A “Portable Analyzer Protocol and Specifications” in the District’s Regulation 9, Rule 7 “Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters”
(4) (a) manufacturer’s emissions data, or emission factors from AP-42, or the California Air Resources Board (CARB) [including CARB’s Off-road Certification Database, CARB’s "Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines, October 2000 (The Risk Reduction Plan)", the amendment and clarification to the Guidance, March 2002, and CARB's "California's Emissions Inventory For Off-Road Large Compression-Ignited (CI) Engines (> 25HP), January 2000" (The OFFROAD Model)],
plus
(b) fuel supplied or actual fuel usage, run time and/or energy produced.
If emissions information is not available for a propane-fired engine, the Permit Holder may assume emissions are the same as for a natural gas fired engine.

The Permit Holder may use the NOx and POC emission factors for “commercial boilers” in Table 1.5-1 of AP-42 for propane boilers and for all other propane or LPG fired sources at the facility except internal combustion engines.

The Permit Holder may use the NOx and POC emission factors for “small boilers” in Tables 1.4-1 and 1.4-2, respectively, of AP-42 for natural gas fired boilers and for all other natural gas fired sources at the facility except internal combustion engines.

If an engine drives a generator and the generator output is measured, the Permit Holder may assume that it takes 1.34 horsepower-hours to produce 1 kW-hr of electricity. Emissions shall be estimated using accepted methodology that is appropriate to the emitting sources.
(basis: Regulation 2-6-423.2)

6) The owner/operator shall use the facility-wide gas meter to measure throughput of natural gas used by boilers and natural gas fired equipment.
(basis: Regulation 2-6-423.2)

7) The owner/operator shall install either a fuel meter or hour meter on all diesel fuel combustion sources that are subject to air permits.
(basis: Regulation 2-6-423.2)

8) The owner/operator shall maintain monthly logs and rolling 12-month total logs of the usage of diesel fuel, propane, natural gas and other liquid fuel when the fuel usage is used in an emission calculation.
(basis: Regulation 2-6-423.2)

9) The owner/operator shall calculate NOx and POC from all combustion sources combined on a rolling 12-month basis.
(basis: Regulation 2-6-423.2)

Condition 10
Demonstration of Compliance for POC and HAP for Solvent Evaporating Sources:

10) The owner/operator shall maintain District approved coating and solvent usage logs that list the mass emissions of Precursor Organic Compounds (POC) and HAPs from all solvent evaporating sources. The emissions of POC compounds shall be grouped in one of two categories: coating operations and solvent usage operations. Any material which cannot be categorized as a coating operation shall be categorized as a solvent usage operation.

a. Records of the quantity of POC and HAP containing materials distributed through the central warehouse system shall be summarized on a monthly basis.
b. Materials containing POCs and HAPs purchased directly for special projects shall be recorded on an event basis and summarized monthly.
c. The quantities of materials used and the chemical composition information from the associated Material Safety Data Sheets (MSDS) shall be used to calculate emissions of POCs and HAPs.
d. The emission factor for POCs and HAPs shall be one (1) pound of POC per pound of POC content and one (1) pound of HAP per pound of HAP content, respectively.
e. The quantities of materials collected for recycle, multiplied by the corresponding POC and HAP content of the material, shall be subtracted from the amount of material distributed to calculate the net consumption of POC and HAP containing materials.
f. The year-to-date totals shall be derived each month by summing the totals for the previous twelve month period.
(basis: Regulation 2-6-423.2)

Condition 11
Demonstration of Compliance for POC and HAP from Fuel Dispensing Source

11) The owner/operator shall do all of the following for the Fuel Dispensing Source listed above:

a. Maintain records of Material Safety Data Sheets (MSDS) or other product information identifying the POC content and individual HAP contents for each of the fuel or fuel mixtures, as appropriate, dispensed at the sources.
b. Keep a log of the quantity of the amount of each type of fuel dispensed (or received) at the source, summarized on a monthly basis.
c. Calculate monthly emissions of POC (as gasoline) and combined HAP (as benzene) from each source, assuming that emissions of gasoline vapors occurring during the loading, breathing, refueling and spillage are 1.52 pounds of gasoline per 1,000 gallons dispensed (or received) and 7.50 pounds of benzene per million gallons dispensed (or received).

d. Calculate POC and combined HAP (as benzene) emissions on a rolling 12-month basis for the source.

(basis: Regulation 2-6-423.2)

Conditions 12-
Monthly and Annual Emissions and Non-Compliance Reporting

12) The owner/operator shall calculate and maintain records on a monthly basis of the quantities of NOx, POC and HAP emitted into the atmosphere as required for sources identified in the SMOP. Within 30 days of the end of each month, the NOx, POC and HAP emissions must be totaled for the last consecutive 12-month period to ensure compliance with parts 1 - 4. The owner/operator shall keep all the information required to calculate NOx, POC and HAP emissions for at least five years, and shall make those records available for review during normal business hours by the District's representatives.
(basis: Regulation 2-6-423.2)

13) The Owner/Operator shall prepare an annual emissions report. The report shall contain the following items for the year ending June 30:

a. Monthly report on each HAP and total combined HAP emissions for the rolling 12-month period.
b. Monthly report on total POC emissions for the rolling 12-month period.
c. Monthly report on NOx emissions for the rolling 12-month period.

This report shall be submitted to the Director of Compliance and Enforcement by August 31 of each year.
(basis: Regulation 2-6-423.2)

Signed by Pemela Leong — November 1, 2010

**Pamela Leong** — **Date**
**Senior Air Quality Engineer**

## Appendix A
## Archived Synthetic Minor Operating Permit Condition

COND# 13374 ----------

SYNTHETIC MINOR OPERATING PERMIT

LOCKHEED MISSILES & SPACE CO. P/A #13823 P#55

Permitted Sources

| Type | Permited Source# | Permit Status | Description |
|---|---|---|---|
| S | 2 | PO | |
| S | 206 | PO | Wipe Cleaning Operation |
| S | 322 | PO | Wipe Cleaning Operation |
| S | 323 | PO | Wipe Cleaning Opeation Bldg 103/E-3 |
| S | 324 | PO | Wipe Cleaning Operation Bldg 103/J-12 |
| S | 325 | PO | Wipe Cleaning Operation Bldg 103/K-6 |
| S | 328 | PO | Wipe Cleaning Operation Bldg 103/C-12 |
| S | 333 | PO | Blast Cabinet |
| S | 335 | PO | Wipe Cleaning Operation |
| S | 336 | PO | Wipe cleaning Operation |
| S | 337 | PO | WIPE CLEANING |
| S | 338 | PO | Solvent Wipe Cleaning |
| S | 339 | PO | Empire Pressure Cabinet |
| S | 340 | PO | Sand Blaster |
| S | 406 | PO | Wipe Cleaning Operation Bldg 150/C-8 |
| S | 408 | PO | B/104 Thin Film Lab |
| S | 409 | PO | B/104, Thin Film Lab Dryer |
| S | 410 | PO | Wipe Cleaning Operation |
| S | 1,001 | PO | Wipe Cleaning Operation Bldg 076/E-7 |
| S | 1,300 | PO | Semiconductor Fab, Bldg. 113 |
| S | 1,306 | PO | Vapor Degreaser |
| S | 1,308 | PO | Vapor Degreaser |
| S | 1,310 | PO | Bead blast operation (bldg 113) |
| S | 1,311 | PO | Drying Oven |
| S | 1,312 | PO | Wave Solder |
| S | 1,801 | PO | Cold Cleaner Bldg. 118 |
| S | 1,802 | PO | GAS CYLINDER CLEANER |
| S | 3,001 | PO | Wipe Cleaning Operation - Bldg. 130 |
| S | 3,901 | PO | Spray Paint Operation |
| S | 3,902 | PO | Sandblast Operation |
| S | 4,101 | PO | Paint Booth |
| S | 4,102 | PO | Paint Booth |
| S | 4,103 | PO | Paint Booth |
| S | 4,401 | PO | Elastomer Emulsion Mixer 4401 |
| S | 4,402 | PO | Elastomer Emulsion Mixer |
| S | 5,016 | PO | Silkscreen operation |
| S | 5,017 | PO | Drying oven (Silkscreen operation) |
| S | 5,024 | PO | Wipe Cleaning Operation |

| | | | |
|---|---|---|---|
| S | 5,104 | PO | FUME HOOD |
| S | 5,122 | PO | Vapor Degreaser Bldg 151/G-11 |
| S | 5,123 | PO | Vapor Degreaser Bldg 151/K-2 |
| S | 5,124 | PO | Vapor Degreaser Bldg 151/K-9 |
| S | 5,125 | PO | Wipe Cleaning Operation Bldg 151/A2-7 |
| S | 5,126 | PO | Solvent Wipe Cleanine-Bldg 151/B-6 |
| S | 5,127 | PO | Solvent Wipe Cleaning-Bldg 141/C-5 |
| S | 5,128 | PO | Wipe Cleaning Operation Bldg 151/C-13 |
| S | 5,129 | PO | Wipe Cleaning Operation Bldg 151A/X-8 |
| S | 5,130 | PO | Solvent Wipe Cleaning-Bldg 151/G-11 |
| S | 5,131 | PO | Wipe Cleaning Operation Bldg 151/K-2 |
| S | 5,139 | PO | Paint Spray Booth |
| S | 5,140 | PO | Curing Oven |
| S | 5,141 | PO | Vapor Degreaser With Chiller |
| S | 5,144 | PO | Peelcoat Cleaning/Coating Operation |
| S | 5,147 | PO | Spray booth |
| S | 5,148 | PO | Curing oven |
| S | 5,149 | PO | Paint Spray Booth B/151 |
| S | 5,150 | PO | Paint Spray Booth B/151 |
| S | 5,153 | PO | Cold Cleaner |
| S | 5,155 | PO | Cold Cleaner |
| S | 5,156 | PO | Cold Cleaner |
| S | 5,157 | PO | Cold Cleaner |
| S | 5,158 | PO | Cold Cleaner |
| S | 5,160 | PO | Drying Oven |
| S | 5,161 | PO | Drying Oven |
| S | 5,162 | PO | Glove Box Sandblast Unit |
| S | 5,164 | PO | Curing Oven |
| S | 5,177 | PO | Vapor Degreaser |
| S | 5,185 | PO | Oven |
| S | 5,186 | PO | Oven |
| S | 5,189 | PO | Wipe Cleaning Operation |
| S | 5,190 | PO | Cold Cleaner |
| S | 5,191 | PO | Cold Cleaner |
| S | 5,192 | PO | Cold Cleaner |
| S | 5,193 | PO | Modification to peelocat Cleaning/Coating Operatio |
| S | 5,197 | PO | Solvent Wipe Cleaning |
| S | 5,198 | PO | Curing Oven, Column H-11 |
| S | 5,200 | PO | ave Soilder |
| S | 5,207 | PO | Wipe Cleaning Operation Bldg 152/E-14 |
| S | 5,208 | PO | Wipe Cleaning Operation Bldg 152/E-20 |
| S | 5,209 | PO | Wipe Cleaning Operation Bldg 152 |
| S | 5,210 | PO | Spray Booth |
| S | 5,211 | PO | Touchup Coating |
| S | 5,212 | PO | SOLVENT WIPE CLEANING |
| S | 5,213 | PO | Oven, 110" x 142" x 20' |
| S | 5,214 | PO | Oven |
| S | 5,215 | PO | Oven (Electric) |
| S | 5,307 | PO | Wipe Cleaning Operation Bldg 153/C-8 |
| S | 5,308 | PO | Wipe Cleaning Operation Bldg 153/D-2 & E-3 |
| S | 5,310 | PO | Vapor Degreaser Bldg 153/K-7 |
| S | 5,311 | PO | Vapor Degreaser Bldg 153/J-7 |

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|---|---|---|---|
| S | 5,312 | PO | Vapor Degreaser Bldg 153/K-7 |
| S | 5,313 | PO | Vapor Degreaser Bldg 153/K-8 |
| S | 5,315 | PO | Conformal coating of circuit boards |
| S | 5,316 | PO | Oven dry polyurethane coating |
| S | 5,318 | PO | Drying Oven (Bldg 153) |
| S | 5,319 | PO | Ventilation Hood (Bldg. 153) |
| S | 5,322 | PO | Coating Operation |
| S | 5,323 | PO | Paint Booth (M175542) B/153, J6 |
| S | 5,326 | PO | Primer Spray Booth Portable Filtration Table |
| S | 5,327 | PO | Wipe Cleaning Operation |
| S | 5,328 | PO | Bonding and Painting Cables, Col. 2C-12 |
| S | 5,329 | PO | Wipe Cleaning |
| S | 5,330 | PO | Touchup Coating Operation |
| S | 5,332 | PO | Wipe Cleaning Operation |
| S | 5,333 | PO | Wipe Cleaning |
| S | 5,334 | PO | Wave Solder |
| S | 5,501 | PO | WATERFALL PAINT BOOTH |
| S | 5,503 | PO | Wipe Cleaning Operation Bldg 155 |
| S | 5,602 | PO | Touch-up/Repair Operation, Col. G-9 |
| S | 5,603 | PO | Wipe Cleaning Operation |
| S | 5,604 | PO | Wipe Cleaning |
| S | 5,626 | PO | Natural Gas Fired Boiler: Donlee for a Liquid Nitrogen Vaporizer at Building 156 |
| S | 5,802 | PO | Wipe Cleaning Operation |
| S | 5,902 | PO | SPRAY BOOTH |
| S | 5,905 | PO | Wipe Cleaning Operation Bldg 159/B-6 |
| S | 5,906 | PO | Wipe Cleaning Operation Bldg 159/DX-1 |
| S | 5,907 | PO | Wipe Cleaning Operation |
| S | 5,908 | PO | Wipe Cleaning Operation |
| S | 5,911 | PO | Heating System |
| S | 5,912 | PO | Spray Booth |
| S | 5,913 | PO | Manual Surface Coating |
| S | 5,914 | PO | Wipe Cleaning Operation |
| S | 5,915 | PO | Fiberglass Layup |
| S | 5,916 | PO | Resin Mixing/Kitting Hood |
| S | 7,002 | PO | Adhesive Application Area |
| S | 7,005 | PO | SPRAY BOOTH |
| S | 7,006 | PO | NUMERICAL CONTROL MACHINE |
| S | 7,007 | PO | NUMERICAL CONTROL MACHINE |
| S | 7,008 | PO | NUMERICAL CONTROL MACHINE |
| S | 7,009 | PO | NUMERICAL CONTROL MACHINE |
| S | 7,014 | PO | SPRAY BOOTH |
| S | 7,021 | PO | SILICONE MIXER CLEANING BOOTH |
| S | 7,022 | PO | Vapor Degreaser |
| S | 7,023 | PO | Wipe Cleaning Operation Bldg 170/A-7 |
| S | 7,024 | PO | Wipe Cleaning Operation Bldg 170/A-8 |
| S | 7,025 | PO | Wipe Cleaning Operation Bldg 170/B-4 |
| S | 7,026 | PO | Wipe Cleaning Operation Bldg 170/D-8 |
| S | 7,027 | PO | Wipe Cleaning Operation Bldg 170/F-7 & F-8 |
| S | 7,028 | PO | Curing Oven, LMSC #M094887 |
| S | 7,029 | PO | Cruing Oven, LMSC #N152869 |

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|---|---|---|---|
| S | 7,030 | PO | Silicone Cure Oven, LMSC #M049862(Electric) |
| S | 7,031 | PO | RTV Material Cure Oven, LMSC #049365 (Electric) |
| S | 7,032 | PO | Drying Oven, LMSC #049363 |
| S | 7,033 | PO | Drying Oven, LMSC #M97991 |
| S | 7,035 | PO | Adhesive Application Area, Col. C-8 |
| S | 7,038 | PO | Vertical Mill |
| S | 7,104 | PO | Energy Recovery Incinerator/Boiler |
| S | 7,106 | PO | 20 million Btu/Hr Boiler see section II of project |
| S | 7,107 | PO | Gas Fired Boilers |
| S | 7,108 | PO | Gas Fired Boilers |
| S | 7,170 | PO | Vapor Degreaser |
| S | 7,172 | PO | Cold Cleaner |
| S | 7,189 | PO | Wipe Cleaning Operation |
| S | 7,192 | PO | Boiler 400 Hp |
| S | 7,193 | PO | Boiler 400 Hp |
| S | 7,194 | PO | Boiler 400 Hp |
| S | 7,196 | PO | Paint Booth with Electric Oven #2 |
| S | 7,197 | PO | Paint Booth |
| S | 7,198 | PO | Paint Booth |
| S | 7,199 | PO | Paint Booth with Electric Oven #1 |
| S | 7,412 | PO | ETHANOL STORAGE TANK |
| S | 7,699 | PO | Vapor Degreaser W/ Built In Chiller |
| S | 8,104 | PO | Wipe Cleaning Operation Bldg 181/B-6 |
| S | 8,105 | PO | Wipe Cleaning Operation Bldg 182/H-14 |
| S | 8,107 | PO | Paint Booth |
| S | 8,108 | PO | Wipe Cleaning Operation |
| S | 8,112 | PO | Wipe Cleaning Operation |
| S | 8,201 | PO | CONFORMAL COATING SPRAY BOOTH |
| S | 8,204 | PO | Spray Booth for Adhesive Coating Prep,(Acetone Wip |
| S | 8,216 | PO | Paint Booth |
| S | 8,218 | PO | Paint Booth |
| S | 8,223 | PO | PAINT SPRAY BOOTH |
| S | 8,236 | PO | Vapor Degreaser Bldg 182/H-21 |
| S | 8,237 | PO | Wipe Cleaning Operation Bldg 182/F-16 |
| S | 8,238 | PO | Wipe Cleaning Operation Bldg 182/F-23 |
| S | 8,239 | PO | Wipe Cleaning Operation Bldg 182/H-12 |
| S | 8,240 | PO | Wipe Cleaning Operation Bldg 182/H-15 |
| S | 8,241 | PO | Wipe Cleaning Operation Bldg 182/H-27 |
| S | 8,242 | PO | Wipe Cleaning Operation Bldg 182/J-23 |
| S | 8,249 | PO | Vapor Degreaser |
| S | 8,255 | PO | Cold Cleaner |
| S | 8,257 | PO | Blast Cabinet |
| S | 8,258 | PO | Paint Drying Oven |
| S | 8,259 | PO | Paint Drying Oven |
| S | 8,261 | PO | Bead Blast Operation |
| S | 8,262 | PO | Silicone Curing Oven |
| S | 8,263 | PO | Silicone Curing Oven |
| S | 8,264 | PO | Paint Spray Booth, Col. F-29 |
| S | 8,265 | PO | Wipe Cleaning Operation |
| S | 8,268 | PO | Paint Touch-Up Operation |

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|---|---|---|---|
| S | 8,271 | PO | Curing Oven |
| S | 8,275 | PO | CURING OVEN, ELECTRIC |
| S | 8,276 | PO | CURING OVEN, ELECTRIC |
| S | 8,277 | PO | Curing Oven (Electric) |
| S | 8,278 | PO | Sealant Application |
| S | 8,302 | PO | Wipe Cleaning Operation |
| S | 8,801 | PO | Coating Operation |
| S | 9,502 | PO | Spray Booth |
| S | 9,504 | PO | Wipe Cleaning Operation Bldg 195B/RM144 |
| S | 9,518 | PO | Freon TF Storage Tank B/195B |
| S | 30,004 | PO | Wipe Cleaning |
| S | 30,007 | PO | Curing Oven Electric |
| S | 30,012 | PO | Enclosed Coating Line |
| S | 30,016 | PO | Adhesive and Primer Application |
| S | 30,017 | PO | Paint Spray Booth - Coating |
| S | 30,018 | PO | Oven (electric) |
| S | 30,024 | PO | Coating and Adhesive Booth |

Exempted Sources

| Type | Permited Source# | Permit Status | Description |
|---|---|---|---|
| S | 202 | CE | WATER BOILER |
| S | 203 | CE | WATER BOILER |
| S | 204 | CE | WATER BOILER |
| S | 306 | CE | WATER BOILER |
| S | 307 | CE | WATER BOILER |
| S | 309 | CE | WATER BOILER |
| S | 311 | CE | STEAM BOILER |
| S | 319 | CE | WEIGH OUT HOOD |
| S | 401 | CE | STEAM BOILER |
| S | 402 | CE | WATER BOILER |
| S | 403 | CE | WATER BOILER |
| S | 404 | CE | WATER BOILER |
| S | 405 | CE | WATER BOILER |
| S | 407 | CE | Mobile Freon Storage Tank/Hydrostatic Test (Bldg |
| S | 3,903 | CE | Cold Cleaner |
| S | 4,901 | CE | STEAM BOILER |
| S | 5,201 | CE | WATER BOILER |
| S | 5,202 | CE | WATER BOILER |
| S | 5,203 | CE | WATER BOILER |
| S | 5,204 | CE | WATER BOILER |
| S | 5,205 | CE | PAINT SPRAY BOOTH |
| S | 5,301 | CE | WATER BOILER |
| S | 5,302 | CE | WATER BOILER |
| S | 5,305 | CE | SPRAY BOOTH |
| S | 5,401 | CE | WATER BOILER |
| S | 5,402 | CE | WATER BOILER |
| S | 5,502 | CE | WOOD CUTTING MACHINES AND FLOOR SWEEP |
| S | 5,904 | CE | WATER BOILER |
| S | 5,917 | CE | Trim Area |

| | | | |
|---|---|---|---|
| S | 5,918 | CE | Oven |
| S | 7,003 | CE | WATER BOILER |
| S | 7,004 | CE | WATER BOILER |
| S | 7,013 | CE | SPRAY BOOTH FOR HAND TOOL CLEANING |
| S | 7,016 | CE | WATER BOILER |
| S | 7,019 | CE | CHEMICAL PROCESS TANKS |
| S | 7,020 | CE | Anodizing Tank |
| S | 7,036 | CE | Batch Silicone Mixer |
| S | 7,037 | CE | Batch Silicone Mixer |
| S | 7,101 | CE | WATER BOILER |
| S | 7,102 | CE | WATER BOILER |
| S | 7,103 | CE | WATER BOILER |
| S | 7,162 | CE | Process Tanks 37 and 43 |
| S | 7,163 | CE | Process Tanks 27 and 29 |
| S | 7,164 | CE | Process Tanks 8 and 10 |
| S | 7,165 | CE | Process Tank 52 |
| S | 7,166 | CE | Process Tanks, 39, 48 and 41 |
| S | 7,167 | CE | Process Tank 31 |
| S | 7,168 | CE | Proces Tanks 4 and 6 |
| S | 7,191 | CE | Cold Cleaner(Precision Cleaning Room, Bldg 071) |
| S | 7,195 | CE | Cold Cleaner (Prep-for-paint room) |
| S | 8,101 | CE | WATER BOILER |
| S | 8,102 | CE | WATER BOILER |
| S | 8,220 | CE | WATER BOILER |
| S | 8,221 | CE | WATER BOILER |
| S | 8,222 | CE | WATER BOILER |
| S | 8,225 | CE | STEAM BOILER |
| S | 8,226 | CE | WATER BOILER |
| S | 8,227 | CE | MACHINE SHOP |
| S | 8,234 | CE | Paint Booth |
| S | 8,266 | CE | Batch Silicone Mixer |
| S | 8,267 | CE | Batch Silicone Mixer |
| S | 9,001 | CE | WATER BOILER |
| S | 9,002 | CE | WATER BOILER |
| S | 32,100 | CE | Fugitive Sources |
| S | 32,101 | CE | Fugitive Sources |

Abatement Devices

| Type | Abate. Device# | Permit Status | Description |
|---|---|---|---|
| A | 1,305 | NI | Gas Incinerator/Afterburner |
| A | 1,311 | NI | Afterburner |

CONDITIONS:

Lockheed Missiles and Space Co., Plant #55, has a synthetic minor operating permit. This operating permit covers all sources (list attached) existing at this facility as of permit issuance.

Permit conditions that are part of this operating permit

but do not contribute to establishing the synthetic minor limits are attached. Lockheed Missiles and Space Co. must comply with all conditions. The following conditions do not negate the applicability of any District, state, or federal requirements.

Synthetic Minor Conditions:

1) Annual emissions of any single hazardous air pollutant (HAP), including TCA and methylene chloride, from all sources combined shall be no greater than 9 tons per any consecutive twelve month period. Annual emissions of any combination of HAPs from all sources combined shall be less than 23 tons per year.

2) Emissions of any single HAP, including TCA and methylene chloride, from all sources combined shall be less than 3 tons per calendar month. Emissions of any combination of HAPs from all sources combined shall be less than 5 tons per calendar month.

3) Emissions of Precursor Organic Compounds from sources (see Appendix A) combined shall not exceed 100,000 pounds (50 tons) per any consecutive twelve month period.

4) Emissions of Precursor Organic Compounds from sources (see Appendix A) combined shall not exceed 20,000 pounds (10 tons) per calendar month.

5) Net TCA usage from vapor degreaser operations shall not exceed 1,500 gallons in any consecutive twelve month period.

6) Net TCA usage from vapor degreaser operations shall not exceed 375 gallons per calendar month.

7) Total natural gas usage at the facility shall not exceed 800 million cubic feet in any consecutive twelve month period.

8) Total natural gas usage at the facility shall not exceed 200 million cubic feet in any calendar month.

9) Total solid fuel burned at the facility shall not exceed 1,000 tons in any consecutive twelve month period. Solid fuel shall be limited to paper and other related materials from classified office areas.

10) Total solid fuel burned at the facility shall not

exceed 250 tons in any calendar month.

11) District approved coating and solvent usage logs shall be maintained that list the mass emissions of Precursor Organic Compounds (POC) and HAPs from all non-combustion sources. The emissions of POC compounds shall be grouped in one of two categories: coating operations and solvent usage operations. Any material which cannot be categorized as a coating operation shall be categorized as a solvent usage operation.

a. records of the quantity of POC and HAP containing materials distributed through the central warehouse system shall be summarized on a monthly basis.

b. materials containing POCs and HAPs purchased directly for special projects shall be recorded on an event basis and summarized monthly.

c. the quantities of materials used and the chemical composition information from the associated Material Safety Data Sheets (MSDS) shall be used to calculate emissions of POCs and HAPs.

d. the emission factor for POCs and HAPs shall be one (1) pound of POC per pound of POC content and one (1) pound of HAP per pound of HAP content, respectively.

e. the quantities of materials collected for recycle, multiplied by the corresponding POC and HAP content of the material, shall be subtracted from the amount of material distributed to calculate the net consumption of POC and HAP containing materials.

f. the year to date totals shall be derived each month by summing the totals for the previous twelve months period. The summaries shall be completed within ten business days after the end of each month. Logs of the information required to generate the necessary reports shall be retained for at least five years and be available for review during normal business hours by the District's representatives.

12) District approved natural gas usage logs shall be maintained that indicate the amount of natural gas consumed by the plant.

a. natural gas usage shall be measured by the main gas meter for the plant.

b. records of natural gas usage shall be summarized on a monthly basis.

c. the year to date totals shall be derived each month by summing the totals for the previous twelve month period. The summaries shall be completed within ten business days after the end of each month. Logs of the information required to generate the necessary reports shall be retained for at least five years and be available for review during normal business hours by the District's representatives.

13) District approved solid fuel usage logs shall be maintained that indicate the amount of solid fuel consumed at S-7104.

a. the amount of solid fuel burned shall be recorded on a daily basis. This amount shall be summarized on a monthly basis.

b. the year to date totals shall be derived each month by summing the totals for the previous twelve month period. The summaries shall be completed within ten business days after the end of each month. These logs shall be retained for at least five years and be available for review.