

DEPARTMENT OF ENVIRONMENTAL PROTECTION
FIELD OPERATIONS - BUREAU OF AIR QUALITY

COMPLIANCE PERMIT

In accordance with provisions of the Air Pollution Control Act, the act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the rules and regulations of the Department of Environmental Protection, the Department hereby issues this permit for the operation of the **Major NOx Emitting Facility AND Major VOC Emitting Facility** described below:

| | | | |
|---------------------|---|-----------------------------|---|
| Permit No. | <u>CP-23-0009</u> | Major Emitting Facility for | <u>VOC & NOx</u> |
| Air Cleaning Device | <u></u> | Related Plan Approvals | <u>23-318-023A, 23-318-036, 23-318-037 and 23-318-038</u> |
| Owner | <u>Boeing Defense & Space Group Helicopters Division</u> | RACT Proposal | <u>As described herein</u> |
| Address | <u>P.O. Box 16858, MS P25-62 Philadelphia, PA 19142-0858</u> | Location | <u>Ridley Township</u> |
| Attention | <u>Mr. James Nash Manager, Environmental Engineering</u> | | <u>Delaware County</u> |

This permit is subject to the following conditions:

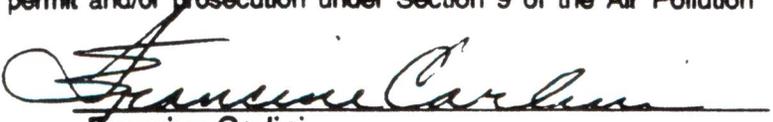
1. That the source(s) and any associated air cleaning devices are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. in compliance with the specifications and conditions of any applicable plan approvals and operating permits; and
 - c. operated and maintained in a manner consistent with good operating and maintenance practices.
2. This permit is valid only for the specific equipment, location and owner described above. This permit is valid for a period of 5 years for all sources listed in this operating permit **except those sources listed in plan approval Nos. 23-318-023A, 23-318-036, 23-318-037 and 23-318-038. Upon completion and demonstration described in plan approvals listed above, the company shall apply for a revised operating permit.**

(SEE ADDITIONAL CONDITIONS ATTACHED)

Violation of this or any other provision of Article III of the Rules and Regulations of the Department of Environmental Protection will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued 09/03/1997

Expires 09/03/2002


Francine Carlini
Regional Manager
Air Quality

cc: Central Office
Administration
SEFO
Re 30 (RN)112-3

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

Reasonably Available Control Technology (RACT)

3. This permit is issued to Boeing Defense & Space Group, Helicopters Division (Boeing) for the operation of Volatile Organic Compound (VOC)/Nitrogen Oxides (NOx) emission sources regulated under 25 Pa. Code §§ 129.91-95. This permit specifies the company's Reasonably Available Control Technology (RACT) requirements for Sources of VOC and NOx.
4. This permit establishes VOC and NOx RACT for the Boeing facility to reduce emissions of VOC and NOx. This permit covers the following sources located in Ridley Township, Delaware County for which the RACT determination has been made:

VOC Emission Sources

Composite Manufacturing
Nital Etch
Paint Gun Cleaning
Solvent Bath Cleaning
Vapor Degreasing
Combustion sources VOCs
Solvent Wiping

NOx Emission Sources

7 boilers
ovens
space heaters
hot water heaters
emergency generators

5. Composite Manufacturing

A. Source Description

Composite processing includes the use of the following VOC bearing materials to manufacture composite parts in Building 3-07:

Prepregs,
Fill and Fairing,
Resin and Hardeners,
Stabilizing and Tacking Resins, and Engineering Foams.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

The VOC emissions occur during Composite Manufacturing processes which includes Component mixing, Lay-up and Curing

~~B. Emission Limitations~~

~~Boeing shall limit the total annual VOC emissions from Composite Manufacturing to a maximum of 8.5 tons/year as a 12 month rolling average calculated monthly. Except for adhesives and sealants, as provided in part C.2 of this condition, this emission limit shall include the total emissions of VOC generated from composite materials described in part A above.~~

C. Operating Requirements

1. The company shall limit the VOC content in composite materials to the following maximums:

| Composite Processing Subcategory | VOC content as applied Lbs VOC/gal (gr VOC/liter) |
|-------------------------------------|--|
| Prepregs | 0.65 (78) |
| Fill and Fairing | 3.50 (420) |
| Resin and Hardeners | 1.00 (120) |
| Core Stabilizing and Tacking Resins | 5.70 (684) |
| Engineering Foams | 2.50 (300) |

2. Adhesives and sealants used in composite processing shall be subject to Aerospace Coating requirements as stated in conditions 18-23 of this Compliance Permit.
3. The source shall be operated and maintained in a manner consistent with good operating and maintenance (O&M) practices. The practices shall include, but not be limited to the following:
 - Good housekeeping procedures for storage, use, and disposal of composite materials and solvents.
 - Employee training detailing good work practices to control solvent usage for minimizing emissions.
 - Periodic inspection of production and cleaning activities.
 - Covered solvent containers when not in use.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

D. Recordkeeping and Reporting Requirements

1. The company shall use its Freezer Inventory Management System (FIMS) to document compliance with ~~part B~~ and C.1 of this condition. The system shall quantify VOC emissions from all sources of Composite Manufacturing, except adhesives and sealants as provided in part C.2 of this condition, by accounting for the amount, in pounds, of the material and solvent used in the process.
2. The company shall record the following information for the sources to demonstrate compliance with ~~part B~~ and C.1 of this condition:
 - Monthly composite material/solvent quantity in gallons and pounds of material as applied
 - Pounds of VOC per pound/gallon of material used
 - Number of production hours per month
- ~~3. The company shall generate an estimated summary of the actual VOC emissions. Emissions shall be calculated monthly.~~
4. Records required under this permit shall be kept for a period of five (5) years and shall be made available to the Department upon request.

6. Nital Etch

A. This source, located in Building 3-57, consists of six process tanks which are used for the inspection of bearing details. The only source of VOC emissions from Nital Etch process is the acid/ethanol solution tank BCC No. 019772.

B. Control Technology

To control VOC emissions from the Nital etch process Boeing has replaced methanol with the lower vapor pressure denatured ethanol. Boeing shall not use methanol or any other solvent with the equal or higher vapor pressure in this process, unless approved by the Department.

~~C. Emission Limitation~~

~~The company shall limit the annual VOC emissions from the source to a maximum of 5.5 tons/year as a 12 month rolling average calculated monthly.~~

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

D. Operating and Recordkeeping Requirements

The source shall be operated and maintained in a manner consistent with good operating and maintenance (O&M) practices. The practices shall include, but not be limited to the following:

- Minimizing agitation or splashing when removing or inspecting parts
- Covering the Nital etch equipment, containing VOCs, when not in use

~~E. Boeing shall use its recordkeeping and material distribution management system to demonstrate compliance with part C of this condition.~~

F. Records required under this permit shall be kept for a period of five (5) years and shall be made available to the Department upon request.

7. Paint Gun Cleaning

A. Source Description

This source consists of spray gun, paint line and pressure pot solvent cleaning operations.

B. Control Technology

The company shall use one or more of the following techniques to control VOC emissions from the source:

1. Enclosed System

- Clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing cleaning solvent through the gun.
- If leaks are found during the monthly inspection, repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

2. Nonatomize Cleaning

Clean spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.

3. Disassembled Spray Gun Cleaning

Disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

4. Atomizing Cleaning

Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.

~~C. Emission Limitations~~

~~The company shall limit the annual VOC emissions from the source to a maximum of 29.0 tons/year as a 12 month rolling average calculated monthly.~~

D. Operating and Recordkeeping Requirements

1. The source shall be operated and maintained in a manner consistent with good operating and maintenance (O&M) practices. The practices shall include, but not be limited to the following:

- Good housekeeping procedures for storage, use, and disposal of solvents.
- Employee training detailing good work practices to control solvent usage for minimizing emissions.
- Periodic inspection of production and cleaning activities.
- Covered solvent containers when not in use.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

- Monthly equipment inspection.

~~2. Boeing shall use its recordkeeping and material distribution management system to demonstrate compliance with part C of this condition.~~

- E. Records required under this permit shall be kept for a period of five (5) years and shall be made available to the Department upon request.

8. Solvent Bath Cleaning

- A. This source consists of not more than 21 batch tanks which have an opening that is smaller than ten square feet. The tanks contain solvent and are used to clean metal parts at the Boeing Helicopters Division facility.

- B. The units shall be equipped, operated, and maintained using the same methods listed in 25 Pa. Code § 129.63 (a) (1) and (2).

~~C. The company shall limit the total VOC emissions from all units to the maximum of 4.5 tons as a 12 month rolling average, calculated monthly.~~

~~D. Boeing shall use its recordkeeping and material distribution management system for emission calculation to demonstrate compliance with part C of this condition.~~

- E. Records required under this permit shall be kept for a period of five (5) years and shall be made available to the Department upon request.

9. Degreasing Operations

- A. Source Description

This source consists of two (2) trichloroethylene (TCE) degreasers which have an area opening, that is smaller than ten square feet. The following open top degreasers are batch-loaded boiling degreasers:

1. Detrex Model VS-800-S vapor degreaser, designated as unit 30653. This vapor degreaser consists of a liquid solvent sump area, steam heated vapor generation area and a sub-zero freeboard chiller that is mounted on top of the degreasing unit. The freeboard ratio of this degreaser is 0.60.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

2. Detrex Ultrasonic Cleaner Model CTR 750A designated as BCC No. 025709. This degreaser is used to clean bearing assemblies by dipping them into the solution for a minimum of 5 minutes.

B. Control Technology

The units shall be equipped, operated, and maintained using the same methods listed in 25 Pa. Code § 129.63 (b) (1), (2) and (3).

C. The company shall operate the degreasers under the following conditions:

1. Detrex Model VS-800-S vapor degreaser shall be operated within the following parameters:
 - Vapor set point temperature range of trichlorethylene solvents is (188-195)°F.
 - Maximum condenser water temperature of 60 °F
 - Refrigerant temperature in a range from 0 °F to -20 °F
2. The cleaning solution in Detrex Ultrasonic Cleaner Model CTR 750A shall be maintained at a maximum of 160 °F.
3. Each degreaser shall be equipped with monitoring devices to indicate compliance with the operating method of 25 Pa. Code § 129.63 (b) and with part C.1 and C.2 of this condition.

~~D. Boeing shall limit the total VOC emissions from both units to the maximum of 20.2 tons per year as a 12 month rolling average calculated monthly.~~

~~E. Boeing shall use its recordkeeping and material distribution management system for emission calculation to demonstrate compliance with part D of this condition.~~

F. Records required under this permit shall be kept for a period of five (5) years and shall be made available to the Department upon request.

10. Combustion Sources

- A. The sources include: four (4) boilers fired with No. 6 fuel oil or natural gas and three (3) boilers fired with No. 6 fuel oil, ovens, space heaters, hot water heaters, and emergency generators. All combustion sources are listed in the NOx RACT part of this permit.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

- ~~B. Boeing shall limit the total annual VOC emissions from combustion units and combustion sources to a maximum of 8.0 tons/year as a 12 month rolling average calculated monthly.~~
- C. The sources shall be operated and maintained in accordance with good air pollution control practices. Manufacturer's specifications for maintenance and operation shall be made available to the Department upon request. Records of repair and maintenance shall be kept in a permanently bound logbook or equivalent method approved by the Department.
- ~~D. The company shall perform all the calculations necessary to demonstrate compliance with part B of this condition and make it available to the Department upon request.~~
- E. Records required under this permit shall be kept for a period of five (5) years and shall be made available to the Department upon request.

11. Solvent Wiping

- A. The VOC emissions from the source are generated during the cleaning solvent distribution, parts cleaning and parts drying processes.
- ~~B. Boeing shall limit the total annual VOC emissions from the source to a maximum of 181.0 tons/year as a 12 month rolling average calculated monthly.~~
- C. The source shall be operated and maintained in a manner consistent with good operating and maintenance (O&M) practices. The practices shall include, but not be limited to the following:
- Good housekeeping procedures for storage, use, and disposal of solvents.
 - Employee training detailing good work practices to control solvent usage for minimizing emissions.
 - Periodic inspection of production and cleaning activities.
 - Covered solvent containers when not in use.
- D. Boeing shall use its collection system for disposal of wipe solvent and spent solvent to minimize emissions.

**COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP**

CONDITIONS (continued):

- E. The company shall centralize the activities and utilize its Hazardous Material Management Program (HMMP) to reduce solvent usage through reduction of inventory, spillage and waste.
- ~~F. Boeing shall use its Hazardous Material Management System (HMMS) to generate an estimated summary of the actual VOC emissions. Emissions shall be calculated monthly.~~
- G. Records required under this permit shall be kept for a period of five (5) years and shall be made available to the Department upon request.

12. De-Minimis VOC Emission Sources

- A. Each of the individual groups of the following de-minimis sources shall be operated with VOC emission rates of no greater than 3 pounds per hour, 15 pounds per day and 2.7 tons per year, whichever is more stringent:

| No. | De-minimis Source |
|-----|--|
| 1. | Aqueous Cleaners |
| 2. | Depainting (paint removal) |
| 3. | Storage Tanks (1,500-gallon diesel Tank 32, 2,000-gallon diesel Tank 38, 2,500-gallon hydraulic oil Tank 48, 30,000-gallon diesel Tank 64) |
| 4. | Foam Packing |
| 5. | Heat Treating (Two 900 °F and 1900 °F furnaces) |
| 6. | Lubrication |
| 7. | Machining |
| 8. | Photo Processing (3 photo labs in Bldg. 3-50, 3-51 and 3, and the metals lab in Bldg. 3-25) |
| 9. | Cadmium Plating |
| 10. | Plexiglas Forming |
| 11. | Quality Control |
| 12. | Quick Freeze (Bldg. 3-60 and 3-07) |
| 13. | Shrink Fit (Shrink bushings to fit into holes) |
| 14. | Waste Storage (2,000-gallon Tank 44 and 1,000-gallon Tank 62) |
| 15. | Wastewater Treatment |
| 16. | Ground Water Remediation-Pump and Treat System |

- B. The sources shall be operated and maintained in accordance with good air pollution control practices.
- C. The company shall keep records to demonstrate compliance with part A of this condition.
- D. Records required under this permit shall be kept for a period of five (5) years and shall be made available to the Department upon request.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

13. Effect on Other Operating Permits

This permit applies to the emissions of VOC and NOx pollutants from the sources listed in this permit only. VOC and NOx emissions from other facility sources and emissions of other pollutants, including criteria pollutants, shall be governed by existing Plan Approvals, Operating Permits, and the applicable requirements of the Rules and Regulations of the Department.

14. Operational Limitations for NOx Sources

A. The hours of operation of the sources listed in Appendix A as Emergency Generators and Fire Pump shall be limited to 500 hrs/yr, each, in a 12 month consecutive period.

B. The hours of operation of the sources listed in Appendix A as:

| | | |
|--------------------|------------------|-----------------|
| Door Heater | Hot Water Heater | Gas Unit Heater |
| Gas Radiant Heater | Infra-red Heater | Air Handler |
| Room Heater | Make-up Air Unit | Heat and Vent |
| Bulk Haz-Mat | Air Conditioner | |

shall not be limited in their hours of operation.

C. The hours of operation of the boiler listed, in Appendix A, as B&W Boiler # 1 shall not be limited.

D. The hours of operation of the boiler listed, in Appendix A, as B&W Boiler # 2 shall be limited to 5854 hrs/yr. The amount of No. 6 fuel combusted in Boiler No. 2 shall be limited to 3,356,000 gallons in a rolling 12 month period

15. NOx RACT Implementation and Source Specific Conditions

A. All the sources listed in Appendix A as:

| | | |
|--------------------|------------------|-----------------|
| Door Heater | Hot Water Heater | Gas Unit Heater |
| Gas Radiant Heater | Infra-red Heater | Air Handler |
| Room Heater | Make-up Air Unit | Heat and Vent |
| Bulk Haz-Mat | Air Conditioner | |

shall conform with the presumptive Reasonably Available Control Technology (RACT) requirements of § 129.93 (c). The presumptive RACT requirements of § 129.93 (c) are that the sources will be maintained and operated in accordance with manufacturer's specifications or according to good operating and maintenance principles.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

B. The sources listed in Appendix A as:

| | |
|---------------------------|---------------------------|
| Cleaver Brooks Boiler | Cleaver Brooks Boiler # 1 |
| Cleaver Brooks Boiler # 2 | Superior Boiler # 1 |
| Superior Boiler # 2 | |

shall conform with the presumptive Reasonably Available Control Technology (RACT) requirements of § 129.93 (b)(2). The presumptive RACT requirements of § 129.93 (b)(2) are that the sources shall receive an annual adjustment or tune-up on the combustion process in accordance with the EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers". This adjustment shall include, at a minimum the following.

- i. Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- ii. Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x, and, to the extent practicable, minimize the emissions of CO.
- iii. Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- iv. Each adjustment conducted under the procedures in part B of this condition shall be recorded in a permanently bound log book.
 - a. The date of the tuning procedure.
 - b. The name of the service company and technicians.
 - c. The final operating rate or load.
 - d. The final CO and NO_x emission rates.
 - e. The final excess oxygen rate.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

- C. The following conditions apply to the B&W No. 1 & 2 Boilers.
- i. The following air contaminant emission limits, on a twenty-four hour basis, are approved for the B&W No. 1 & 2 Boilers. The Department reserves the right to establish and impose more stringent limitations based on test results from stack testing.

When firing No. 6 fuel oil the emissions of oxides of nitrogen (NO_x) shall be limited to 0.4 lb/MMBtu.
 - ii. The initial stack test, to verify compliance with Condition part C. i. of this condition, shall be completed within 180 days of issuance of this permit. An annual stack test shall be performed thereafter to ensure continuing compliance with part C. i. Testing shall be done in accordance with the provisions of 25 Pa. Code Chapter 139 and part C. iii through C. iv. below.
 - iii. At least sixty (60) days prior to the test, Boeing shall inform the Air Quality Regional Manager of the date and time of the test and submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of the sampling ports and other data to ensure the collection of representative samples.
 - iv. Within thirty (30) days after the source test(s), two (2) copies of the complete test report, including all operating conditions, shall be submitted to the Air Quality Regional Manager for approval.
 - v. RACT for the B&W #1 & 2 boilers shall be the annual adjustment or tune-up on the combustion process in accordance with the EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers". This adjustment shall include, at a minimum the following.
 - a. Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
 - b. Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x, and, to the extent practicable, minimize the emissions of CO.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

- c. Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- d. Each adjustment conducted under the procedures in part C. v. of this condition shall be recorded in a permanently bound log book.
 - (1) The date of the tuning procedure.
 - (2) The name of the service company and technicians.
 - (3) The final operating rate or load.
 - (4) The final CO and NO_x emission rates.
 - (5) The final excess oxygen rate.

D. The following conditions only apply to the sources listed in Appendix A as combustion turbines.

- i. The hours of operation of the combustion turbines shall be limited to 200 hours, each, in a 12 month rolling period.
- ii. The combustion turbines shall conform with the presumptive RACT requirements of §129.93(c). The presumptive RACT requirements of §129.93(c) are that the sources will be maintained and operated in accordance with the manufacturer's specifications or according to good operating and maintenance principles.

16. Recordkeeping Requirements

- A. A bound logbook for the combustion units greater than 20 million Btu/hr listed in Appendix A will be kept and sufficient data recorded so that compliance with Conditions (14) and (15) can be determined. Records shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.
- B. The sources listed in Appendix A are:

| | |
|---------------------------|---------------------------|
| Cleaver Brooks Boiler | Cleaver Brooks Boiler # 1 |
| Cleaver Brooks Boiler # 2 | Superior Boiler # 1 |
| Superior Boiler # 2 | |

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

Minimum recordkeeping shall include a certification from the fuel supplier of the nitrogen content of the fuel and identification of the sampling method and sampling protocol.

- C. Whenever sources listed in Appendix A as Emergency Generators operate, the following information shall be recorded in the bound logbook:
- i. date of operation
 - ii. duration or best estimate of the duration of the equipment operation
 - iii. operators name, initials and any additional comments that are needed.
- D. The amount of fuel oil combusted in a rolling 12 month period for Boiler No. 2.

17. **General Requirements**

- A. The expiration date shown on the permit is for State purposes. For Federal enforcement purposes, the permit shall remain in effect as part of the State Implementation Plan until replaced pursuant to 40 CFR 51 and approved by the U.S. Environmental Protection Agency.
- B. Revision to any emission limitations incorporated in this permit will require re-submission as revision to the PA State Implementation Plan. The applicant shall bear the cost of public hearing and notification required for EPA approval as stipulated in 25 Pa. Code §129.91 (h).
- C. The company shall not impose conditions upon or otherwise restrict the Department's access to the aforementioned source and/or any associated air cleaning device(s) and shall allow the Department to have access at any time to said source and associated air cleaning device(s) with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and prior for performing its duties and for the effective enforcement of the Air Pollution Control Act.

18. Compliance Schedules and Requirements for Specified Surface Coating Operations:

Boeing shall meet the surface coating limitations for its coating operations classified as Aerospace Manufacturing and Rework coatings on the below stated schedule. The surface coating operations include, but are not limited to:

- Aerospace coatings;

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

- Surface coatings used for tooling associated with aircraft manufacturing in the same categories as the primer and topcoats in the NESHAP;
 - Adhesives and Sealants used in composite processing
- A. By September 1, 1998, all regulated coating operations shall comply with the appropriate provisions of the National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT), 40 C.F.R. 63, Subpart GG,
- B. Within 6 months of final adoption by the Environmental Protection Agency of the Control Technology Guideline for Aerospace Manufacturing and Rework Operations, Boeing shall only use surface coatings which comply with the final Control Technology Guideline.
- C. Upon final adoption by the Pennsylvania Environmental Quality Board, Boeing shall fully comply with the Department's rules and requirements for Aerospace Manufacturing and Rework Operations.
19. This permit is issued for the purpose of authorizing operation of the sources listed in condition 18 above until the date by which implementation and operation of the Department's requirements for Aerospace Manufacturing and Rework Operations are final.
20. This permit does not authorize the construction or modification of any source. Construction or modification of a source is subject to the Plan Approval requirements of 25 Pa. Code Chapter 127 Subchapter B. Except as provided below, this permit does not modify in any way the terms and conditions of any existing or subsequent plan approval or operating permit issued for the sources that are the subject of this permit.
21. In the event that the permittee is prevented from complying in a timely manner with any interim time limit imposed in this permit solely because of a strike, fire, flood, act of God, or other circumstances entirely beyond the permittee's control and which permittee, by the exercise of all reasonable diligence, is unable to prevent, or mitigate, then the permittee may request an extension of time from the Department.

The permittee shall only be entitled to the benefits of this paragraph if it notifies the Department within five (5) days by telephone and within ten (10) days in writing of the date it becomes aware or reasonably should have become aware of the event impeding performance. The written submission shall include related documentation, as well as a notarized affidavit from a responsible corporate official specifying the reasons for the delay, and the efforts which have been made and are being made by the permittee to minimize the length of the delay. The

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

permittee's failure to comply with the requirements of this paragraph specifically and in a timely fashion shall render this paragraph null and of no effect as to the particular incident involved.

22. If the permittee fails to achieve compliance by the final compliance date described in condition 18 above, this permit shall be terminated for the sources listed in condition 18 above.
23. In the event Boeing fails to comply with any of the compliance dates set forth in conditions 18A and 18B of this Compliance Permit, Boeing shall be in violation of this Compliance Permit and shall pay a stipulated civil penalty in the amount of \$200 per day for each violation. This penalty shall continue for each day that the violation(s) continues beyond the compliance dates set forth in condition 18 above except where an extension of time has been granted to Boeing by the Department under the terms set forth in condition 21 above.

Stipulated civil penalty payments shall be paid monthly on or before the fifteenth day of each succeeding month. The payment shall be made by corporate check or the like made payable to the "Commonwealth of Pennsylvania-Clean Air Fund" and sent to the Air Quality Compliance Specialist, PA DEP, Air Quality Program, Southeast Regional Office, Suite 6010, Lee Park, 555 North Lane, Conshohocken, PA 19428. Stipulated civil penalties shall be due automatically and without notice from the Department.

COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP

CONDITIONS (continued):

APPENDIX A

Identity and Location of Sources

| Source Description | Manufacturer & Model Number | Building | Capacity | Fuel |
|---------------------------|---|----------|----------------|-------------|
| B & W Boiler # 1 | Babcock & Wilcox | 3-52 | 86 MMBtu/hr | No. 6 FO |
| B & W Boiler # 2 | Babcock & Wilcox | 3-52 | 86 MMBtu/hr | No. 6 FO |
| Cleaver Brooks Boiler # 3 | Cleaver Brooks, D-52E | 3-52 | 35.7 MMBtu/hr | No. 6 FO |
| Cleaver Brooks Boiler # 1 | Cleaver Brooks, D60, L904 | 3-05 | 35.7 MMBtu/hr | No. 6 FO/NG |
| Cleaver Brooks Boiler # 2 | Cleaver Brooks, D60, L905 | 3-05 | 42 MMBtu/hr | No. 6 FO/NG |
| Superior Boiler # 1 | Superior, GCR4, RC600B | 3-05 | 24.7 MMBtu/hr | No. 6 FO/NG |
| Superior Boiler # 2 | Superior, GCR4, RC600B | 3-05 | 24.7 MMBtu/hr | No. 6 FO/NG |
| Hot Water Heater | AO Smith, BC300686 | 3-01 | 0.3 MMBtu/hr | NG |
| Emergency Generator | Kohler, 30R72 | 3-01 | 100 kW | NG |
| Emergency Generator | Onan, 45.OEM-15R110467M | 3-01 | 31.25 kW | NG |
| 3 Hot Water Heaters | | 3-02 | | NG |
| Emergency Generator | Onan, 30.0EK-15R31/28796R | 3-02 | 100 kW | NG |
| Boiler | HB Smith, G300-7W | 3-03 | 0.45 MMBtu/hr | NG |
| Hot Water Heater | State Ind., SRX 75NRT-J 56 | 3-03 | 0.055 MMBtu/hr | NG |
| Emergency Generator | Cummins | 3-03 | 200 kW | NG |
| Autoclave # 3 | Thermal Equipment | 3-07 | 7 MMBtu/hr | NG |
| Autoclave # 1 | Thermal Equipment | 3-07 | 7 MMBtu/hr | NG |
| Emergency Generator | Onan, 30.0SK-15R/21605A | 3-12 | 31.5 kW | NG |
| Door Heater | Thermo Shield | 3-12 | 0.75 MMBtu/hr | NG |
| Emergency Generator | Kohler, 85 kW | 3-20 | 100 kW | NG |
| 2 Air Conditioners | Trane, SHFA 300 | 3-25 | 0.7 MMBtu/hr | NG |
| 2 Heat and Vent Units | Dravo Hastings, RJFAE 600-V | 3-25 | 0.6 MMBtu/hr | NG |
| 2 Make-up Air Units | Dravo Hastings, RMUBE-1600V | 3-25 | 1.6 MMBtu/hr | NG |
| 26 Gas Unit Heaters | | 3-25 | | NG |
| 5 Gas Radiant Heaters | Detroit Radiant Products, RE-Verber DR 130-NFS | 3-25 | 0.13 MMBtu/hr | NG |
| 6 Air Handlers | McQuay | 3-25 | | NG |
| Emergency Generator | | 3-25 | 56.3 kW | NG |
| Hot Water Heater | A O Smith, HWT-399-V500 | 3-28 | 0.399 MMBtu/hr | NG |
| Emergency Generator | Magna One, 440FDR8024GG-F250W | 3-28 | 200 kW | NG |
| Emergency Generator | Kohler, 115R72 | 3-30 | 125 kW | NG |
| Emergency Generator | Katolight, N100FRF4 | 3-31 | 93.75 kW | NG |
| Autoclave | Thermal Equipment | 3-31B | 7 MMBtu/hr | NG |
| Emergency Generator | Kohler, 70R2272 | 3-31B | 60 kW | NG |
| 33 Infra-red Heaters | | 3-32 | | NG |
| Emergency Generator | Onan, 705JB-4XR31/1P | 3-32 | 9.4 kW | NG |
| Emergency Generator | Kohler, 45RH772 | 3-35 | 56.25 kW | NG |

**COMPLIANCE PERMIT CONDITIONS
PERMIT NO. CP-23-0009
BOEING DEFENSE & SPACE GROUP**

CONDITIONS (continued):

APPENDIX A

Identity and Location of Sources

| Source Description | Manufacturer & Model Number | Building | Capacity | Fuel |
|---------------------------|--|-----------------|---|-------------|
| 2 Hot Water Heaters | | 3-50 | 0.19999 MMBtu/hr | NG |
| Water Heater | AO Smith, BT100-930 | 3-51 | 0.08 MMBtu/hr | NG |
| Fire Pump | Detroit Diesel, DDFP-L6VT 7362 | 3-52 | 305 hp | Diesel |
| Emergency Generator | Kohler, 25R72 | 3-52 | 12.5 kW | NG |
| Water Heater | PRRV40NORTOF | 3-53 | 0.0355 MMBtu/hr | NG |
| Bulk Haz-Mat | Reznor, RPV PAK3 | 3-54 | 1.2 MMBtu/hr | NG |
| Bulk Haz-Mat | Reznor, F300X | 3-54 | 0.3 MMBtu/hr | NG |
| Bulk Haz-Mat | Reznor, F300X | 3-54 | 0.3 MMBtu/hr | NG |
| 4 Door Heaters | Aerovent 7248R | 3-55 | 0.75 MMBtu/hr | NG |
| 4 Room Heaters | Jackson Church, SDF | 3-55 | 1.875 MMBtu/hr | NG |
| Emergency Generator | Onan, 75KR-4XR31/5207H | 3-56 | 93.75 kW | NG |
| Lead Pot | Sunbeam Tilting Pot | 3-57 | 1.8 MMBtu/hr | NG |
| Kirksit Pot | Sunbeam Tilting Pot | 3-57 | 1.8 MMBtu/hr | NG |
| Salt Bath | Ajax, DGT | 3-57 | 1 MMBtu/hr | NG |
| Drop Bottom Furnace | Despatch | 3-57 | 2 MMBtu/hr | NG |
| Lindberg Oven | Lindberg, 73-H-7212072-10 | 3-57 | 1.5 MMBtu/hr | NG |
| Emergency Generator | Kohler, 85RH772 | 3-57 | 100 kW | NG |
| Emergency Generator | Onan, 75.0ENT-15R/19610A | 3-61 | 93.75 kW | NG |
| Water Heater | AO Smith, HW 300-770 | 3-61A | 0.3 MMBtu/hr | NG |
| Emergency Generator | Kohler, 75R72/75R71 5748F | 3-61A | 93.75 kW | NG |
| 9 Gas Unit Heaters | Trane, CPFBD 1200A | 3-72 | 0.2 MMBtu/hr | NG |
| 12 Gas Unit Heaters | Trane | 3-77 | | NG |
| Air Conditioner | Carrier, 58ED-125-100CA | 3-95 | 0.125 MMBtu/hr | NG |
| 9 Infra-red Heaters | Reznor, IR60RE | 3-95 | 0.2 MMBtu/hr | NG |
| Emergency Generator | Onan, 60EN L33345E | 3-96 | 75 kW | NG |
| Combustion Turbines (4) | US Turbine/Allison, UST 4000/Allison 501-KBSS | | 5280 bhp/ 3743 kW/ 12.76 MMBtu/hr | Jet A Fuel |

Re 30 (RN)112-4

