

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FIELD OPERATIONS - BUREAU OF AIR QUALITY

OPERATING 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 air contamination source(s) described below:

Permit No.	OP-46-0032	Source(s)	Facility NOx and VOC
Owner	SPS Technologies	Air	
Address	Highland Avenue	Cleaning	
	Jenkintown, PA 19046	Device	
Attention	Mr. Stephen Pierce	Location	Abington Township
	Plant Environmental Engineer		Montgomery County


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 all applicable plan approvals issued;
 - 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 named above.

(SEE ADDITIONAL CONDITIONS ATTACHED)

Failure to comply with the conditions placed on this permit is a violation of Section 127.444. 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 10/30/1997


Francine Carlini
Regional Manager
Air Quality

~~Expires~~ ~~10/30/2002~~

cc: Division of Permits, RCSOB
Administration
SEFO
Re (KAL)72.39

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SPS TECHNOLOGIES, INC.

CONDITIONS (continued):

3. This Operating Permit incorporates Reasonably Available Control Technology (RACT) determinations as required by Title I provisions of the Clean Air Act Amendments and 25 PA Code Section 129.91 through 129.95 for:
 - one natural gas fired 48 MMBtu/hr heat input Keeler (DS-10-11) boiler
 - one natural gas fired 21 MMBtu/hr heat input Clayton (EOG-500) boiler
 - two No. 5 oil fired 16.5 MMBtu/hr heat input IBW boilers (removed on October 1996)
 - one natural gas fired 4 MMBtu/hr heat input Aztec oven
 - one natural gas fired 1 MMBtu/hr heat input Ispen hardening furnace
 - two natural gas fired 1 MMBtu/hr heat input surface combustion atmospheric generators
 - one 8 MMBtu/hr heat input air handling unit (for space heating)
 - thirteen miscellaneous combustion units rated less than 20 MMBtu/hr heat input, each
 - machining cutting operations which includes approximately 150 machines
 - seventy-one kerosene buckets for parts cleaning operations
 - penetrant inspection area
 - four heat treat ovens
 - trichloroethylene vapor degreaser
 - eight aboveground storage tanks
 - three surface coating operations
4. The expiration date shown on this RACT Operating Permit is for State purposes. For Federal Enforcement purposes the RACT portion of this RACT Operating Permit shall remain in effect as part of the State Implementation Plan (SIP) until replaced pursuant to 40 CFR 51 and approved by the US Environmental Protection Agency (EPA).
5. The potential to emit volatile organic compounds from each of the following sources or source categories shall never exceed 3 pounds per hour, 15 pounds per day or 2.7 tons per year. Should any of these limitations ever be exceeded for any of the source categories listed below, a detailed RACT analysis which meets the criteria specified in Section 129.92 of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection must be submitted to the Department for each source contained in the respective source category.
 - **seventy-one kerosene buckets**
 - **penetrant inspection area**
 - **four heat treat ovens**
6. Pursuant to the RACT provision of Section 129.93(b)(2)(3)(4) and (5) of Article III of the Rules and Regulations of the Department of Environmental Protection, SPS shall comply with the annual tune-up with respect to the combustion process on Keeler DS-10-11 boiler and Clayton EOG-500 identified in condition 3 herein. The annual tune-up of the combustion process shall consist of but not be limited to the following:

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CONDITIONS (continued):

- 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, or by good engineering practice.
 - B. Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NOx and to the extent practicable to minimize emissions of CO.
 - 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. The following records will be maintained: certification from the fuel supplier of the type of fuel, and a certification for each shipment that the fuel oil complies with ASTM D396-78 "Standard Specifications for Fuel Oils".
 - E. The annual tune-up shall be made in accordance with the EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas Fired Boilers", September 1983 (EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.
- 7. Trichloroethylene (TCE) vapor degreaser shall comply with the provisions established in 25 PA Code § 129.63. The vapor degreaser was removed in July 1995. This condition is solely for the determination of RACT for the source.
 - 8. Eight aboveground storage tanks shall comply with the provisions established in 25 PA Code § 129.57.
 - 9. Three metal surface coating operations shall comply with the provisions established in 25 PA Code § 129.52.
 - 10. The sources described in Condition 3 shall be maintained and operated in accordance with manufacturer specifications and/or good air pollution control practices.
 - 11. If at any time the permittee causes, permits or allows any modification (as that term is defined in Chapter 121 of Title 25, the Rules and Regulations of the Department of Environmental Protection) of the aforementioned air contamination source(s), the operation and use of which is authorized by this permit, this permit shall be suspended, and the permittee shall not thereafter continue to operate or use said air contamination source(s).

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CONDITIONS (continued):

12. Recordkeeping Requirements

- A. The company shall keep the records of each adjustment conducted under the procedures in condition 6 in a permanently bound log book. The records shall consist of but not be limited to the following:
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 NOx emission rates
 5. the final excess oxygen rate
- B. The records shall be retained for at least 5 years and shall be made available to the Department upon request.
- C. The company shall maintain comprehensive, accurate records of any additional data in accordance with 25 PA Code Section 129.95.

13. The company, within one hour of discovery, shall notify the Department, at 610-832-6241, of any malfunction of the source(s) or associated air cleaning device(s) which results in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection. A written report shall be submitted to the Department within two working days following the incident describing the malfunctions and corrective actions taken.
14. If at any time the Department has cause to believe that air contaminant emissions from the aforementioned source(s) may be in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

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CONDITIONS (continued):

15. This Operating Permit is valid for a limited period of time and may be renewed before its expiration. Requests for an Operating Permit renewal must be in writing and must be accompanied by the appropriate permit application processing and annual permit administration fees as specified in Section 127.703 of the Rules and Regulations of the Department of Environmental Protection. These fees shall be paid in the form of a check payable to the "Commonwealth of Pennsylvania - Clean Air Fund". The request should be made using the appropriate application form and must be received by the Department along with a completed Air Pollution Control Act Compliance Review form no later than 30 days prior to expiration.

An annual operating permit administration fee is also due pursuant to 25 PA Code § 127.703 no later than 30 days prior to expiration. The administration fee is to be submitted with an Annual Operating Permit Administration Fee Transmittal form.

All necessary forms can be obtained from the Department upon request.

16. Any notification requirements as a result of any condition herein should be directed to:

Regional Air Program Manager
Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428
Telephone: 610-832-6241

17. This operating permit supersedes all previously issued plan approvals and/or plan approval extensions bearing the numbers 46-323-013 and 46-323-014.
- A. The following conditions apply only to the 5 metal finishing and electroplating operations with acid exhausts.
- i. This operating permit No. OP-46-0032 is also issued to SPS Technologies, Inc. for the operation of the following sources:
- Black oxide/Phosphate plating line with acid exhaust
 - Passivate/Stripping line with acid exhaust
 - Chromate plating line with acid exhaust
 - Small lot plater with acid exhaust

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CONDITIONS (continued):

- A. These five plating lines are located in their Jenkintown facility in Abington Township, Montgomery County.
- ii. The following emissions are permitted for the above sources:
- | | |
|---|------------|
| * Hydrochloric Acid (HCl) | 263 lb/yr |
| Nitric Acid (HNO ₃) | 526 lb/yr |
| * Hydrofluoric Acid | 1.3 lb/yr |
| Phosphoric Acid (H ₂ SO ₄) | 0.26 lb/yr |
| * Chromic Acid | 0.7 lb/yr |
| * Nickel (Ni) | 0.2 lb/yr |
| Boric Acid | 0.9 lb/yr |
- * Denotes Hazardous Air Pollutants (HAP)
- No Sulfuric Acid shall be detected at the stack outlet.
- iii. The scrubber for these plating processes shall be a packed scrubber type manufactured by Met-Pro Corporation, Model No. F103-64, or an equivalent approved by the Department. The scrubbing liquor shall be a Sodium Hydroxide solution with a minimum pH of 9.
- iv. The hoods over the plating tanks shall have sufficient suction to draw all fugitive mists in to the scrubber.
- v. The scrubber shall be on whenever the Metal Finishing and Electroplating Lines with acidic tanks are in operation.
- vi. The pressure drop across the scrubber shall be within the range of 1 to 4 inches of water.
- vii. The Company shall maintain the scrubber according to the Company's Prevention Maintenance Schedule.
- viii. The Company shall keep a record of all inspections and repairs made to the scrubber system.
- B. The following conditions apply only to the 5 metal finishing and electroplating operations with non-acid exhausts.
- i. This Operating Permit is issued to SPS Technologies, Inc. for the operation of the following sources:

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SPS TECHNOLOGIES, INC.

CONDITIONS (continued):

- Black oxide/Phosphate plating line with non acid exhaust
- Passivate/Stripping line with non acid exhaust
- Chromate plating line with non acid exhaust
- Small lot plater with non acid exhaust
- Chemical milling with non acid exhaust

These five plating lines are located in their Jenkintown facility in Abington Township, Montgomery County.

- ii. The following emissions are permitted for these sources:

sodium hydroxide	280.3 lb/yr
potassium permanganate	26.3 lb/yr *
sodium cyanide	26.3 lb/yr *
Albatex BDR	18 lb/yr
Potassium cyanide	9 lb/yr *
silver	.3 lb/yr
sodium dichromate	13.1 lb/yr *
sodium nitrate	44 lb/yr
sodium nitrite	44 lb/yr

* Denotes Hazardous Air Pollutant (HAP)

- iii. The fan exhauster shall have sufficient suction to draw air from the hoods located over the plating tanks without interference of outside drafts. The fan shall be operational whenever the nonacid platings are occurring.
- iv. If at any time it is determined that the operation of the aforementioned source(s) is causing the emission of particulate matter in excess of the limitations specified in Section 123.13 or fugitive air contaminants in excess of the limitations specified in Section 123.1, both Sections of Chapter 123 of Article III of the Rules and Regulations of the Department of Environmental Protection, or is causing the emission of either of these or any other type of air contaminant in excess of the limitations specified in, or established pursuant to, any other applicable rule or regulation contained in Article III, the company shall take immediate steps, including the installation of additional air cleaning device(s), if necessary, to reduce the emissions to within the applicable limitations.

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CONDITIONS (continued):

18. The following conditions apply to the company's Cleaver-Brooks boiler rated at 34 million Btus per hour.
 - a. This boiler shall emit nitrogen oxide (NOx) emissions that are less than 30 ppmdv at 3% O₂ or 0.035 lb/MMBTU when firing natural gas.
 - b. This boiler shall be limited to natural gas as the primary fuel and Nos. 2, 4 and 5 fuel oil as a backup fuel.
 - c. The increase in NOx emissions from this boiler shall be less than 25 tons/yr.
 - d. The sulfur content of No. 2 fuel oil burned in this boiler shall be limited to 0.2% S and the sulfur content of Nos. 4 and 5 fuel oil shall be limited to 0.5% S.
 - e. This boiler shall limit the burning of No. 4 and 5 fuel oils to the following:
 - A. 973,820 gallons/yr when burned in combination with natural gas
 - B. 853,760 gallons/yr when burned in combination with No. 2 fuel oil
 - f. This boiler is subject to the emission limitations of the New Source Performance Standard, 40 CFR, Subpart Dc. The following limits shall be maintained for this boiler.
 - A. Opacity limitations of § 60.43(c) (discharge gases shall not exceed 20% opacity at any 6 minute average per 1 hour), or the limitations of 25 PA Code § 123.41 whichever is more stringent.
 - B. Sulfur content shall not exceed 0.5% by weight in accordance with 25 PA Code § 123.22(e)(2) or 40 CRD 60.42C(d) whichever is more stringent.
 - g. The company shall record the amount of fuel usage on a daily basis.

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CONDITIONS (continued):

- h. This source is subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR § 60.4 requires submissions of copies of all requests, reports, applications, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air, Toxics and Radiation Division
U.S. EPA, Region III
841 Chestnut Street
Philadelphia, PA 19107

Re 30 (KAL)269-7

