COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION 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.

OP-12-0002	Source &	powdered metal parts manufacturing
Owner: GKN Sinter Metals, Inc.	Air	facility, as described herein
	Cleaning	
R.R. 2, Box 47	Device:	
Emporium, PA 15834-9797		
Edward P. Lamont	Location:	Cameron Road Facility
Safety, Health & Compliance Administrator		Shippen Township, Cameron County
	GKN Sinter Metals, Inc. R.R. 2, Box 47 Emporium, PA 15834-9797 Edward P. Lamont	GKN Sinter Metals, Inc. Air Cleaning R.R. 2, Box 47 Device: Emporium, PA 15834-9797 Edward P. Lamont Location:

This permit is subject to the following conditions:

- 1. That the source(s) and any associated air cleaning device(s) are to be:
 - a. operated in such a manner as not to cause air pollution;
 - in compliance with the specifications and conditions of the applicable plan approval(s) issued;
 - 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 attached for additional conditions.

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:

SEP 3 0 1998

Expires: September 30, 2003

David W. Aldenderfer

Environmental Program Manager

cc: Harrisburg

File

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- 3. This operating permit incorporates reasonably available control technology (RACT) determinations as required by Title I provisions of the Clean Air Amendments and 25 Pa. Code Sections 129.91 through 129.95 for the following sources:
 - a) PM-79 hydraulic parts molding unit;
 - b) four heated tanks;
 - c) an impregnation vessel incorporated in a model MD711 Divine Manufacturing Company powdered metals self-lubricating parts oil impregnation system (PK#1), the particulate matter emissions from which are controlled with an Aerocology Air Cleaning Systems M-EP2600DX2 multi-stage electrostatic precipitator;
 - d) 275 gallon sizing dip tank;
 - e) one natural gas-fired 500K Btu per hour Dow/Surface 1980 vintage heat treat furnace (PF#5) and one 350 CFH Surface Combustion, serial #C-6270-1, air draw furnace (PF#55), the air contaminant emissions from which shall be controlled by an 8.3 kW 6000 CFM United Air Specialists model GPC-22-2EIOC 1991 vintage electrostatic precipitator;
 - f) one natural gas-fired 1050K Btu per hour 1984 vintage Lindberg heat treat furnace (PF#28), one 75 kW Lindberg, model #78-SH-304830-IOS parts washer (PF#29), one 95 kW Lindberg, model #13-ECF-304830-12 air draw furnace (PF#30), the air contaminant emissions from which shall be controlled by a 10 kW 6000 CFM United Air Specialists (PSG-Smog-Hog) 1988 vintage electrostatic precipitator;
 - g) one 2.0 MMBtu per hour natural gas-fired boiler No. 1;
 - h) two Safety Kleen parts cleaners (No. 1 and No. 2);
 - i) Electric Discharge Machines;
 - i) two 0.24 MMBtu per hour natural gas-fired boilers (No. 1 and No. 2);
 - k) three underground storage tanks (oil tank 003, oil tank 004 and tank 002).
- 4. The expiration date shown in this permit is for state purposes. For federal enforcement purposes the conditions of this operating permit which pertain to the implementation of RACT regulations shall remain in effect as part of the State Implementation Plan (SIP) until replaced pursuant to 40 CFR 51.1 and approved by the U.S. Environmental Protection Agency (EPA).

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- 5. Pursuant to the RACT provisions of Sections 129.91 through 129.95 of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall restrict the hydraulic oil used in the hydraulic parts molding unit identified in condition 3a) to Nuto H-68 or hydraulic oil determined to be of equivalent or lower volatility by the Department of Environmental Protection. Additionally, the volatile organic compound emissions from the hydraulic parts molding unit shall not exceed 5.9 tons in any 12 consecutive month period.
- Pursuant to the RACT provisions of Sections 129.91 through 129.95 of Chapter 129 of Article III of
 the Rules and Regulations of the Department of Environmental Protection, the sizing dip tank
 identified in condition 3d) herein shall comply with the requirements specified in conditions 10, 11,
 12 and 13 herein.
- 7. Pursuant to the RACT provisions of Sections 129.91 through 129.95 of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall restrict the oil used or processed in the sources identified in conditions 3e) and 3f) herein to Arco 521 or oil determined by the Department of Environmental Protection to be of equivalent or lower volatility. Additionally, the combined volatile organic compound emissions from the sources identified in condition 3e) herein shall not exceed 13.3 tons in any 12 consecutive month period and the combined volatile organic compound emissions from the sources identified in condition 3f) herein shall not exceed 6.7 tons in any 12 consecutive month period.
- 8. The potential to emit volatile organic compounds from each of the following source categories shall never exceed 3 pounds per hour, 15 pounds per day or 2.7 tons per year, as determined by the Department. 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 containing in the respective category.
 - heated tanks identified in condition 3b) herein.
 - oil impregnation vessel identified in condition 3c) herein.
 - natural gas-fired boilers identified in conditions 3g) and 3j) herein.
 - Safety Kleen parts cleaners identified in condition 3h) herein.
 - electric discharge machines identified in condition 3i) herein.
 - storage tanks identified in condition 3k) herein.

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- In accordance with Section 129.95 of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall maintain comprehensive accurate records of the following:
 - a. the identity and amount of all hydraulic fluid used per month in the hydraulic parts molding unit identified in condition 3a) herein.
 - b. the identity and amount of all oil used per month in the oil impregnation vessel identified in condition 3c) herein.
 - c. the identity and amount of all liquids or fluids added per month to the sizing dip tank identified in condition 3d) herein.
 - the identity and amount of all oil used per month in the sources identified in condition 3e) herein.
 - e. the identity and amount of all oil used per month in the sources identified in condition 3f) herein.
 - f. the amount of natural gas used in the boilers identified in condition 3g) and 3j) herein.
 - g. the amount of solvent added per month to the parts cleaners identified in condition 3h) herein as well as the amount of dirty solvent removed from the parts cleaners per month.
 - h. the identity and amount of all oil used per month in the sources identified in condition 3i) herein.
 - i. the identity of the materials stored in the 3 underground storage tanks identified in condition 3k) herein as well as the date and quantity of each addition to the tanks.

All records generated pursuant to this condition shall be retained on site for at least 2 years and shall be made available to the Department upon request except for the records generated pursuant to 9 c. herein which shall be submitted to the Department on a quarterly basis by no later than the last day of the month following the respective quarter (reports due April 30, July 31, October 31 and January 31).

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The following conditions numbered 10 through 13, pertain to the sizing dip tank which previously operated pursuant to Operating Permit 12-399-008B (which is hereby superseded by the issuance of this operating permit):

- 10. Pursuant to the best available technology provisions of Sections 127.1 through 127.12 of Chapter 127 of Article III of the Rules and Regulations of the Department of Environmental Protection, the sizing dip tank shall be equipped with a cover which shall be placed over the tank whenever the tank is not in use. Additionally, the contents of the tank shall not at any time be heated.
- 11. Pursuant to the best available technology provisions of Sections 127.1 through 127.12 of Chapter 127 of Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall not add anything to the sizing dip tank other than Dupont Krytox DF and Chemical Technologies, Inc. Tech Solv 334 unless the Department determines (in advance of use) that an alternate material will result in equivalent or lower emissions. Additionally, the amount of Tech Solv 334 added to the tank shall not exceed 11, 313 gallons in any 12 consecutive month period and the amount of Krytox DF added to the tank shall not exceed 565 gallons in any 12 consecutive month period.
- 12. Pursuant to the best available technology provisions of Sections 127.1 through 127.12 of Chapter 127 of Article III of the Rules and Regulations of the Department of Environmental Protection, all parts dipped in the sizing dip tank shall be allowed to drain within the tank for a period of time which is sufficient to render the parts dry to the touch when removed from the tank.
- 13. Pursuant to the best available technology provisions of Sections 127.1 through 127.12 of Chapter 127 of Article III of the Rules and Regulations of the Department of Environmental Protection, the use of the sizing dip tank shall not result in the emission of more than 36.2 tons of volatile organic compounds and 3.3 tons of 1,1 dichloro-l-fluoroethane in any 12 consecutive month period (as determined by the Department) whether these emissions are emitted from the tank itself, during the subsequent processing of the dipped parts or from a combination of both.

The following condition, number 14, pertains to the oil impregnation vessel which previously operated pursuant to Operating Permit 12-399-009 (which is hereby superseded by the issuance of this operating permit):

14. An appropriate electrostatic precipitator preventative maintenance schedule shall be posted and followed for the Aerocology Air Cleaning Systems M-EP2600DX2 multi-stage electrostatic precipitator. It shall include cleaning of the electrostatic precipitator ionizers, plates and filters.

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- 15. 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, or causes, permits or allows any modifications, malfunction or removal of any air pollution control device required as a condition of this permit, then and in that event, this permit shall be suspended, and the permittee shall not thereafter continue to operate or use said air contamination source(s).
- 16. The aforementioned source(s) may be operated and used only so long as any associated air pollution control devices are operated and maintained in accordance with the specifications set forth in the respective plan approval(s), and the application(s) submitted for said plan approval(s) (as approved by the Department), and in accordance with any conditions set forth herein.
- 17. The operation of the aforementioned source(s) shall not at any time result 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 or specified in any condition contained herein.
- 18. The company shall immediately notify the Department 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, or in excess of the limitations specified in any condition contained herein or which otherwise results in, or may possibly be resulting in, noncompliance with the requirements specified in any condition contained herein.
- 19. If a subject source is taken out of operation for a period of one year or more during the term of this operating permit, the permittee shall not thereafter resume operation of the respective source in a manner which is contrary to the requirements specified in Section 127.11a of Chapter 127 of Article III of the Rules and Regulations of the Department of Environmental Protection.
- 20. Any notification required as a result of any condition herein should be directed to: Bruce V. Vandegrift, Air Quality Specialist, P.O. Box 209, Hawk Run, PA 16840, telephone 814-342-8132 fax 814-342-8216, e-mail vandegrift.bruce@a1.dep.state.dep.us