

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
NSPS SOURCE -- RENEWAL

PERMITTEE

Kropp Forge Division
Park-Ohio Forged & Machined Products
Attn: Ron Wilson
5301 West Roosevelt Road
Cicero, Illinois 60804

Application No.: 74090033

I.D. No.: 031051ABJ

Applicant's Designation: IEPAAP981

Date Received: May 5, 2004

Subject: Forging Plant

Date Issued:

Expiration Date:

Location: 5301 West Roosevelt Road, Cicero

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of two gas-fired boilers, forty-two process furnaces, several small combustion emission units, one chemical milling acid tank with separator, and one quench tank pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for nitrogen oxides (NO_x)). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. The Nebraska boiler is subject to a New Source Performance Standard (NSPS) for Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subpart A and Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. At all times, the Permittee shall, to the extent practicable, maintain and operate the boilers, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- c. The Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.48c.

- 3a. Natural gas shall be the only fuel fired in the boilers.
- b. Natural gas consumption in the Nebraska and Zurn Boilers and emissions shall not exceed the following limits:

Natural Gas Consumption			
<u>(mmscf/Month)</u>		<u>(mmscf/Year)</u>	
50		400	
<u>Pollutant</u>	<u>Emission Factor</u> <u>(Lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
NO _x	200	5.00	40.00
CO	84	2.10	16.80
PM	7.6	0.19	1.52
VOM	5.5	0.14	1.10
SO ₂	0.6	0.015	0.12

These limits are based on the actual emissions determined from maximum natural gas consumption and the emission factor. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

- c. The heat input firing rate of the Nebraska Boiler shall not exceed 95 mmBtu/hour. This is based on the burner of the boiler being modified to restrict the fuel input to less than 95 mmBtu/hour. Modifying the firing rates above this level will require a construction permit.
- 4. Emissions and operations of the 42 process furnaces and miscellaneous combustion equipment (< 10 mmBtu/hour) shall not exceed the following limits:

Natural Gas Consumption			
<u>(mmscf/Month)</u>		<u>(mmscf/Year)</u>	
65.0		650	
<u>Pollutant</u>	<u>Emission Factor</u> <u>(Lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
NO _x	100	3.25	32.50
CO	84	2.73	27.30
PM	7.6	0.247	2.47
VOM	5.5	0.179	1.79
SO ₂	0.6	0.020	0.20

This table defines the potential emissions of the equipment and is based on the actual emissions determined from maximum natural gas consumption and standard emission factors. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

5. The Permittee shall maintain monthly records of the natural gas consumption (mmscf/month, mmscf/year):
 - a. For the Nebraska and Zurn Boilers.
 - b. For the process furnaces and miscellaneous combustion equipment.
 - c. Emission records.
6. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
7. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
8. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P. O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

Please note that this permit is revised to allow operation of the Nebraska boiler up to 95 mmBtu/hr as demonstrated through testing and Construction Permit 02060029.

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If you have any questions on this permit, please contact John Blazis at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JPB:psj

cc: Illinois EPA, Region 1
Illinois EPA, Compliance Section
USEPA-Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the forging plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is a usage of 10.5 million therms of natural gas in the boilers and furnaces per year. The resulting maximum emissions are below the levels (i.e., 100 tons per year of NO_x) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less fuel is used and control measures are more effective than required in this permit.

1. Emissions from the 2 boilers:

<u>Pollutant</u>	<u>Emissions (Tons/Year)</u>
NO _x	40.00
CO	16.80
PM	1.52
VOM	1.10
SO ₂	0.12

2. Emissions and operations of the 42 process furnaces and miscellaneous combustion equipment:

<u>Pollutant</u>	<u>Emissions (Tons/Year)</u>
NO _x	32.50
CO	27.30
PM	2.47
VOM	1.79
SO ₂	0.20

3. The furnace burnoff of grease and oil from the bar stock

VOM Emissions: 3.5 tons/year
PM₁₀ Emissions: 3.5 tons/year

4. Quench tank:

VOM emissions: 0.44 tons/year.