217/782-2113

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

## PERMITTEE

Ingersoll Products Company

Attn: Jim Jamrus 1000 West 120th Street Chicago, Illinois 60643

Application No.: 72121095 I.D. No.: 031600ASM

Applicant's Designation: FESOP-011 Date Received: August 15, 2001

<u>Subject</u>: Agricultural Disk Manufacturing

Location: 1000 West 120th Street, Chicago, 60643

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a coil heater; Forming Department 38 including furnace #4A; Heat Treat Department 37 including heating line #1 (furnace #1A, furnace #1B, oil quench #1, and draw furnace #1), heating line #2 (furnace #2A, furnace #2B, oil quench #2, and draw furnace #2), heating line #3 (furnace #3A, furnace #3B, oil quench #3, and draw furnace #3), Fulton boiler #1, and Fulton boiler #2; Thermal Set Department 39 including 5 Sunbeam furnaces; Finishing Department 16 including rust preventative spray booth with filter; Painting Department 15 including water-based coating dip tank with filters and drying oven; and Machine Shop Department 73 including paint burnoff oven and heat treat furnace; and several infrared heaters, portable gas heaters, and gas furnace burners 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 air emissions from the source to less than major source thresholds (25 tons/year for volatile organic materials, 25 tons/year for hazardous air pollutants and 10 tons/year for any individual hazardous air pollutant). As a result, the source is excluded from requirements 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 permit(s) for this location.
- 2a. Natural gas shall be the only fuel fired in all combustion equipment including the following:

Coil Heater Furnace #1A Furnace #4A Draw Furnace #3 Furnace #1B
Furnace #3A
Furnace #3B
Furnace #2A
Furnace #2B
Draw Furnace #2
Five Sunbeam Furnaces

Fulton Boiler #1
Fulton Boiler #2
Draw Furnace #1
Heat Treat Furnace
Paint Burnoff Oven
Paint Drying Oven
Infrared Heaters
Portable Gas Heaters
Gas Furnace Burners

b. Combined natural gas usage for the emission units listed above shall not exceed the following limits:

<u>Material</u>	mmscf/Month	mmscf/Year
Natural Gas	62	620

c. Combined emissions of nitrogen oxides  $(NO_x)$ , carbon monoxide (CO), particulate matter (PM), volatile organic material (VOM), and sulfur dioxide  $(SO_2)$  from all fuel combustion equipment at the source as listed above shall not exceed the following:

	Emissions		
<u>Pollutant</u>	(Ton/Mo)	(Ton/Yr)	
$NO_x$	3.1	31.0	
CO	2.6	26.0	
PM	0.24	2.4	
VOM	0.17	1.7	

These emissions are based on standard AP-42 emission factors for natural gas combustion. Compliance shall be determined from a running total of the previous 12 months data.

3a. Operation and emissions from the rust preventative spray booth and the water-based coating dip tank shall not exceed the following limits:

	VOM Usage ar	nd Emissions
Material	(Tons/Year)	(Tons/Year)
Rust Preventative and Water-Based Coatings (Combined)	2.8	21.5

- b. Pursuant to 35 Ill. Adm. Code 218.204(j)(2)(A) each coating applied in the air dried extreme performance rust preventative and water-based coating spray booths shall not exceed 3.5 lb VOM/gal (minus water and exempt compounds).
- 4. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source to exceed 200 ppm corrected to 50% excess air in accordance with 35 Ill. Adm. Code 216.121.

- 5a. Emissions of carbon monoxide (CO), from the burn-off oven, shall not exceed 500 ppm corrected to 50% excess air, pursuant to 35 Ill. Adm. Code 216.141.
- b. No person shall cause or allow the emission of particulate matter into the atmosphere from the burn-off oven to exceed 0.1 grains per standard cubic foot of effluent gases corrected to 12% carbon dioxide (Ill. Adm. Code 212.181(d)).
- 6a. VOM emissions from the 3 quench oil tanks shall not exceed 0.2 tons/month and 1.6 tons/year.
- b. This permit is issued based on emissions of VOM from each quench oil tanks not exceeding 8 lb/hour pursuant to 35 Ill. Adm. Code 218.301.
- 7a. The Permittee shall operate the rust preventative spray booth with filters only when its control equipment is operating under design specifications.
- b. Material insulated with polyvinyl chloride or asbestos, or scrap containing the fuming metals tin, zinc, or lead shall not be charged to the paint burn-off oven.
- c. The afterburner shall be heated to an operating temperature of 1400°F before charging and this temperature shall be maintained during operation.
- d. The paint burn-off oven shall be equipped with an afterburner temperature indicator.
- 8. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 9a. The Permittee shall maintain records of the following information:
  - i. Natural gas usage (mmscf/month and mmscf/year).
  - ii. VOM emissions as calculated by AP-42 emission factors based on the actual natural gas usage (lb/month and lb/yr).
- b. i. Quench oil purchased and shipped off-site (lb/month and tons/year).
  - ii. VOM emissions calculated by subtracting amount shipped off-site from amount purchased (lb/month and tons/year).

- c. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in Condition 3a and b.
  - i. name and identification number of each coating;
  - ii. coating usage (gal/month and gal/yr);
  - iii. VOM and HAP content (wt. % VOC, lb VOM/gal, wt. % HAP, and lb HAP/gal; and
  - iv. VOM and HAP emissions as calculated by assuming 100% VOM content emitted (lb/month and ton/yr).
- d. 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 and 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 request for records during the course of a source inspection.
- 10. 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.
- 11. 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

 $\underline{\text{and}}$  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 12. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: natural gas usage (mmscf/month and year); quench oil purchased and shipped offsite; amounts of coatings used and VOM and HAP contents of each; VOM and HAP emission calculations. If there have been no exceedances during the prior calendar year the Annual Emissions Report shall include a statement to that effect.

It should be noted that all shotblasting, grinding and the 3 hot water washers are exempt from state permitting requirements pursuant to 35 Ill. Adm. Code 201.146 (aa) and (oo), respectively.

If you have any questions on this permit, please call Randy Solomon at 217/782-2113.

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

DES:RBS:jar

cc: IEPA, FOS Region 1
IEPA, Compliance Unit
Lotus Notes

## Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission of the agricultural disk manufacturing facility 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. The resulting maximum emissions are below the levels of 25 tons per year of volatile organic materials, 25 tons per year of total HAPs and 10 tons per year of each single HAP 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 material is handled, and control measures are more effective than required in this permit.

1. Combined emissions of nitrogen oxides  $(NO_x)$ , carbon monoxide (CO), particulate matter (PM), volatile organic material (VOM), and sulfur dioxide  $(SO_2)$  from all fuel combustion equipment at the source as listed above shall not exceed the following:

	Emissions		
Pollutant	(Ton/Mo)	(Ton/Yr)	
$NO_x$	3.1	31.0	
CO	2.6	26.0	
PM	0.24	2.4	
VOM	0.17	1.7	

These emissions are based on standard AP-42 emission factors for natural gas combustion.

2. Emissions from the rust preventative spray booth and the water-based coating dip tank shall not exceed the following limits:

VOM Usage an	d Emissions
<pre>Material</pre>	(Tons/Year)
Rust Preventative and Water-Based Coatings 2.8 (Combined)	21.5

- 3. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 4. VOM emissions from the 3 quench oil tanks shall not exceed 0.2 tons/month and 1.6 tons/year.

DES:RBS:jar