



Missouri Department of Natural Resources
Missouri Air Conservation Commission
Air Pollution Control Program

PERMIT TO CONSTRUCT

PERMIT BY RULE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct and operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Construction Permit Number: 07 2008 - 004
Project Number: 2008-07-018
Installation ID: 031-0084

Installation Name and Address

Humane Society of Southeast Missouri
2536 Boutin Drive
Cape Girardeau, MO 63701
Cape Girardeau County

Parent Company's Name and Address

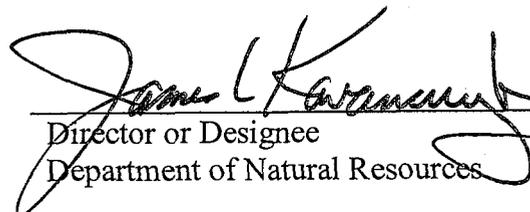
Same

Installation Description:

Animal Cremation Unit (Model C1000P)

JUL 16 2008

Effective Date


Director or Designee
Department of Natural Resources

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 and 10 CSR 10-6.062 if you fail to adhere to the specifications and conditions listed in your permit by rule application and this permit. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department of Natural Resources Regional office responsible for the area within which the equipment is located within 15 days after the actual start up of this air contaminant source.

A copy of this permit and permit notification shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

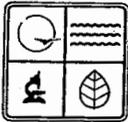
You may appeal this permit or any of the listed special conditions as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Permit Section, Initial Source Review Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102-0176, attention: Initial Review Unit.

031-0084

MISSOURI DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL PROGRAM
P.O. BOX 176, JEFFERSON CITY, MO 65102-0176



**APPLICATION FOR AUTHORITY TO CONSTRUCT
PERMIT BY RULE NOTIFICATION
CREMATORIES AND ANIMAL INCINERATORS**

APCP USE ONLY

CHECK NO. 4529	CHECK RECEIVED (MM/DD/YY) 7-7-08
CHECK AMOUNT \$ 700.00	CHECK DATE (MM/DD/YY) 6-30-08
PROJECT NO. 2008-07-018	PERMIT NO.

SECTION A: GENERAL NOTIFICATION INFORMATION - ALL NOTIFICATIONS MUST BE ACCOMPANIED BY A \$700 FEE.

SECTION A-1: GENERAL INSTALLATION INFORMATION

1. INSTALLATION NAME Humane Society of Southeast mo		2. FIPS	3. PLANT NO.
4. INSTALLATION STREET ADDRESS 2536 Boutin Dr.			
5. INSTALLATION MAILING ADDRESS 2536 Boutin Dr.			
6. CITY Cape Girardeau		STATE MO	ZIP CODE 63701
7. COUNTY NAME Cape	8. 1/4, of 1/4, of SECTION 23 TOWNSHIP 31 N RANGE 13 E		
9. PARENT COMPANY			
10. PARENT COMPANY MAILING ADDRESS			
11. CITY		STATE	ZIP CODE
12. INSTALLATION CONTACT PERSON Cheryle Dillon		13. CONTACT PERSON'S TITLE Shelter Director	
14. CONTACT PERSON'S MAILING ADDRESS 2536 Boutin Dr Cape Girardeau Mo 63701			
15. INSTALLATION CONTACT TELEPHONE NO. (573) 334-5837		16. INSTALLATION CONTACT FAX NO. (573) 334-4039	
17. INSTALLATION CONTACT E-MAIL ADDRESS administrator@semopets.org			
18. PROJECTED DATE TO COMMENCE CONSTRUCTION		19. PROJECT DATE OF OPERATION STARTUP	

SECTION A-2: INSTALLATION DESCRIPTION

20. Cremate animal Carcass

RECEIVED
AIR POLLUTION
CONTROL PGM
2008 JUL -7 PM 12:25

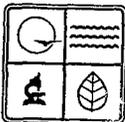
SECTION A-3: CERTIFICATION STATEMENT

I certify that I have personally examined and am familiar with the information in this application and believe that the information submitted is accurate and complete. I am aware that making a false statement or misrepresentation in this application is grounds for denying or revoking this permit.

21. SIGNATURE OF RESPONSIBLE OFFICIAL <i>Cheryle Dillon</i>		22. DATE
23. TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL Cheryle Dillon		24. RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER (573) 579-6915
25. TITLE OF RESPONSIBLE OFFICIAL Shelter Director		

SECTION B: SPECIAL CONDITIONS FOR CREMATORIES AND ANIMAL INCINERATORS (CONTINUED)

SPECIAL CONDITION	EMISSION SOURCE COMPLY?	APPLICABLE EMISSION LIMIT OR STANDARD	METHOD OF COMPLIANCE
10 CSR 10-6.062(3)(B)2.G.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Each incinerator operator shall be trained in the incinerator operating procedures as developed by the American Society of Mechanical Engineers (ASME), by the incinerator manufacturer, or by a trained individual with more than one (1) year experience in the operation of the incinerator that the trainee will be operating. Minimum training shall include basic combustion control parameters of the incinerator and all emergency procedures to be followed should the incinerator malfunction or exceed operating parameters. An operator who meets the training requirements of this condition shall be on duty and immediately accessible during all periods of operation. The manufacturer's operating instructions and guidelines shall be posted at the unit and the unit shall be operated in accordance with these instructions.	Proper work practice and maintenance of proper operator training records. These records shall be maintained for not less than five (5) years, and they shall be immediately available to any Missouri Department of Natural Resources personnel upon request.
10 CSR 10-6.062(3)(B)2.H.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	The incinerator shall have an opacity of less than ten percent (10%) at all times.	Proper work practice such that no opacity violations are noted.
10 CSR 10-6.062(3)(B)2.I.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Heat shall be provided by the combustion of natural gas, liquid petroleum gas, or Number 2 fuel oil with less than three-tenths percent (0.3%) sulfur by weight, or by electric power.	Proper work practice.
10 CSR 10-6.062(3)(B)2.J.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	The operator shall maintain a log of all alarm trips and the resulting action taken. A written certification of the appropriate training received by the operator, with the date of training, that includes a list of the instructor's qualifications or ASME certification school shall be maintained for each operator. The operator shall maintain an accurate record of the monthly amount and type of waste combusted.	Determined through proper alarm and operator training record keeping. These records shall be maintained for not less than five (5) years, and they shall be immediately available to any Missouri Department of Natural Resources personnel upon request.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL PROGRAM
**APPLICATION FOR AUTHORITY TO CONSTRUCT
PERMIT BY RULE NOTIFICATION
CREMATORIES AND ANIMAL INCINERATORS**

INSTRUCTIONS

By submitting your notification, you are accepting all conditions and terms stated in this form. If you find the special conditions listed in Section B unacceptable, you may choose to submit a construction permit application and undergo a case-by-case review.

Please refer to the following line-by-line instructions to complete the notification. The notification, along with the \$700.00 fee, should be mailed to:

Air Pollution Control Program
Permit-By-Rule
P.O. Box 176
Jefferson City, Missouri 65102

You must also retain a copy of the notification at the installation and make it immediately available to any inspector.

Once the fee and notifications have been mailed or hand-delivered, you are free to begin construction of your project under the special conditions that you have accepted.

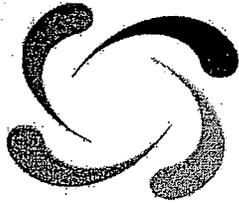
The Air Pollution Control Program will send you a letter acknowledging receipt of your notification with a permit number and a project number for agency tracking purposes.

A copy of this electronic package may be obtained from the Department of Natural Resources Air and Land Protection Division's web site at: <http://www.dnr.mo.gov/aipd/apcp/PermitInfo.htm>.

If you have any questions about the notification form or the permit-by-rule notification procedure, please feel free to contact the Permit Section at (573) 751-4817.

NOTIFICATION FORM INSTRUCTIONS

- 1.) **Installation Name:** Enter the official company name and/or plant designation for the installation that is making the permit-by-rule notification.
- 2.) **FIPS Number:** Enter the official FIPS Number (3 digit code) which corresponds to the county name for the county in which the installation is located. Please refer to <http://www.itl.nist.gov/fipspubs/co-codes/mo.txt> for a listing. The FIPS number in combination with the Plant Number provides the identification/tracking information for the installation in the State/Federal databases.
- 3.) **Plant Number:** Enter the official Plant Number that has been assigned to the installation by the respective State or Local Agencies. If you do not know your plant number, please leave blank.
- 4.) **Installation Street Address:** Enter the street address of the physical location of installation.
- 5.) **Installation Mailing Address:** Enter the mailing address if that address is different from the street address.
- 6.) **City, State and Zip Code:** Enter the City, State and Zip Code of the physical location of the installation.
- 7.) **County:** Enter the county in which the installation is located.
- 8.) **Section, Township, Range:** Enter the appropriate information on the Section, Township and Range in which the installation is located.
- 9.) **Parent Company:** Complete this block if this installation is totally or partially owned by another company.
- 10.) **Parent Company Mailing Address:** Complete this block if this installation is totally or partially owned by another company.
- 11.) **Parent Company City, State and Zip Code:** Complete this block if this installation is totally or partially owned by another company.
- 12.) **Installation Contact Person:** Enter the name of the person who is most familiar with the operations of the installation and who can answer any questions regarding information about the installation.
- 13.) **Contact Person's Title:** Enter the title of the contact person.
- 14.) **Contact Person's Mailing Address:** Enter the mailing address for the Contact Person.
- 15.) **Installation Contact Person's Telephone Number:** Enter the Contact Person's telephone number.
- 16.) **Installation Contact Person's Fax Number:** Enter the Contact Person's fax number.



CRAWFORD

industrial group, LLC

Model C1000P Price Quotation

Proprietary information prepared for
Ms. Cheryle Dillon - Society of Southeast Missouri

One complete model **C1000P** animal cremation package includes:

- Model **C1000P** Random Loaded Crematory
- Electric/Hydraulic Front Loading Door
- Eight Feet of High Temperature, Refractory Lined Exhaust Stack
- Integral Remains Collection Hopper
- Temperature Monitor and Recorder
- Opacity Sensor
- Rolling Primary Chamber Loading Table
- Primary Chamber Viewport
- One Set of Operator Hardware/Tools
- Initial Environmental Permit Application Assistance
- On-Site Equipment Calibration/Start-Up
- On-Site Operator Training

Pricing for the above listed products and services is **\$64,000.00***

* Delivery to Cape Girardeau, MO would be approximately **\$1,300.00**

You may also be interested in our **Cremated Remains Processor**, model **CP200**, to further reduce the remains to a fine, even consistency. The list price for this device is \$2,895.00, however, when purchased with a crematory we offer a \$500.00 discount and no additional shipping charges. Your final cost would be **\$2,395.00**.

Proposal Date: 5/21/08

CRAWFORD MODEL C1000P SPECIFICATIONS



CRAWFORD MODEL C1000P RANDOM LOAD CREMATORY



CRAWFORD

Recognized Approvals:	Underwriters Laboratory (U.L.) Listed (Control # 54E3)
Capacity ratings:	175 lb/hr. for type 4, pathological waste. Recommended maximum initial charge: 600 lbs.
Overall dimensions:	14'-5" L x 5'-1" W* x 8'-7.5" H *(6'-5" W, w/ touch screen panel)
Approx. system weight:	24,500 lbs.
Required fuel (NG/LPG): (light oil fired optional)	Main Line - 2,000,000 BTU/hr @ 11-14" w.c. @ 1.5" header Pilot Line - 200,000 BTU/hr @ 5 psi, max. @ 3/8" regulator
Required electrical supply:	230/460 Volt, Three Phase, 60 Hz, 40/30 Amp @ single point connection (Single Phase available)
Primary chamber volume:	Primary - 65.37 cu. ft.
Hearth Area:	25.70 sq. ft. (91.5" L x 40.5" W)
Secondary chamber volume:	69.29 cu. ft. (provides in excess of one second retention time)
Primary burner capacity:	500,000 BTU/hr. (hi/lo modulated control)
Secondary burner capacity:	1,500,000 BTU/hr. (fully modulated control)
Combustion air fan:	1400 scfm, 7.5 hp, 230/460 Volt, Three Phase, 60 Hz std. (Single phase, optional)
Charging door:	37" W x 30" H - electric-hydraulic powered.
Hydraulic power unit:	1.5 hp, 230/460 Volt, three phase, 4.4 gpm, 500 psi, 3/4 gal. res.
Steel construction:	Heavy channel steel skid base, with angle, square tube, and plate steel structure, with sheet steel used for inner and outer casings.
Refractory & insulation:	
Hearth:	7" to 13" 3000°F abrasion resistant cast refractory
Side walls:	4.5" thick 2700°F dense fire brick 4.5" thick 2600°F insulating fire brick 2.25" 1900°F insulation backing
PCC roof:	6" 2800°F cast refractory with 2" 2400°F insulation cap
SCC floor:	5" 3000°F thick dense insulating cast refractory
Stack:	24" od x 48" L sections (2 sections standard) 10 gauge steel shell with 2" 2400°F high-temperature refractory lining approx. weight - 112 lb/ft.
Draft control:	via "Induce-a-Cool" w/ temperature reduction to 375°F
Controls (PLC based with):	Touch screen operator interface Primary & secondary chamber temperature control Temperature actuated fuel and air control Burner interface, status and reset access** System status and alarm display Opacity alarm system with control intervention ** Discrete, UL, CSA, FM & IRI burner monitoring / control w/ U.V. flame supervision provided for each burner

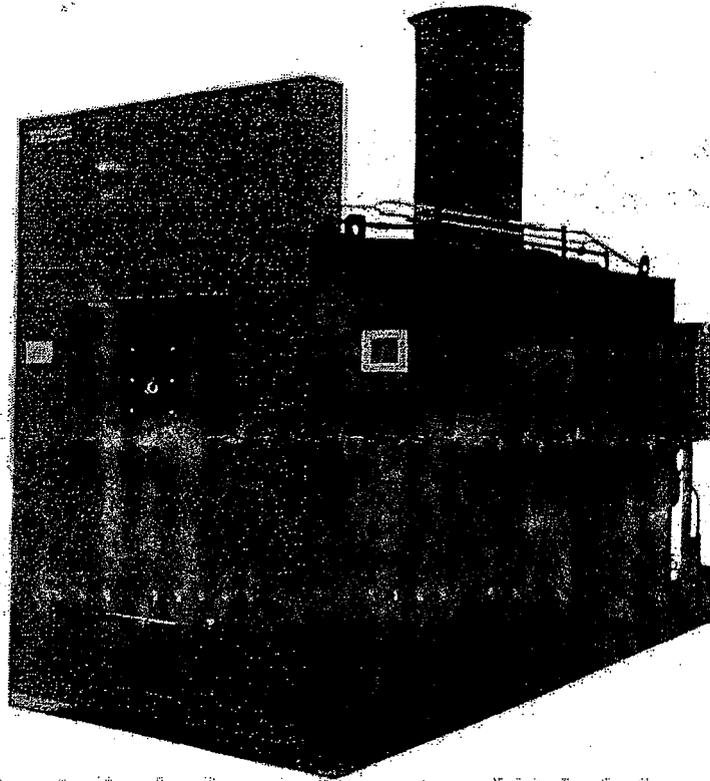


CRAWFORD
Industrial group, LLC

9101 Parkers Landing Orlando, Florida 32824-8093
voice: 407.851.0993 facsimile: 407.851.2406
sales and service: 1.800.228.0884

www.animal-cremation.com
www.crawfordequipment.com

CRAWFORD MODEL C1000P - RANDOM LOAD CREMATORY



The C1000P is a random load animal cremation system which includes many practical features that a high volume business would appreciate. With over 26 square feet of hearth area, the C1000P is perfectly equipped to handle your segregated and communal cremations, yet it is still convenient and economical enough to perform individual animal cremations. This system is capable of accepting an initial load of 600 pounds and will quickly process it at the rate of 175 lbs/hr. The **random load** feature of the C1000P will allow you insert additional carcasses anytime during its burn cycle. This model can be equipped with an optional **hydraulic ram loader & cart tipping system**, which dramatically improves the operational efficiencies, as well as reduces operator exposure and physical exertion. Our **multi-chambered** design with a baffled secondary chamber helps to insure smokeless/odorless operation and compliance with environmental regulations, even at the higher through-put levels. The **hot hearth** feature provides for a quick, clean, and thorough burn-down as well as superior fluid control. The model C1000P is typically used by facilities that expect to perform upwards of 7,500 cremations per year, or have the need to process up to 1,400 pounds in an eight hour day.

- Ⓢ EASY TO USE "PUSH BUTTON" OPERATION
- Ⓢ PERFORMS BOTH PRIVATE AND COMMUNAL CREMATIONS
- Ⓢ UL LISTED FOR SAFE, DEPENDABLE OPERATION
- Ⓢ NO "COOL DOWN" REQUIRED BETWEEN CREMATIONS
- Ⓢ CONVENIENT CREMAINS RETRIEVAL SYSTEM
- Ⓢ EXTREMELY EFFICIENT AND ECONOMICAL OPERATION
- Ⓢ DURABLE CONSTRUCTION, RELIABLE PERFORMANCE, LOW MAINTENANCE



CRAWFORD
industrial group, LLC

9101 Parkers Landing Orlando, Florida 32824-8093
voice: 407.851.0993 facsimile: 407.851.2406
sales and service: 1.800.228.0884

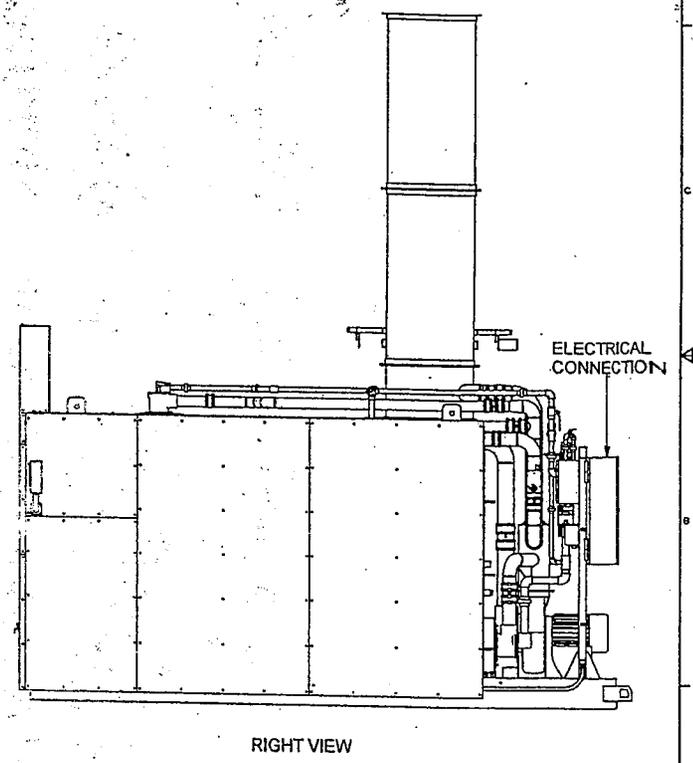
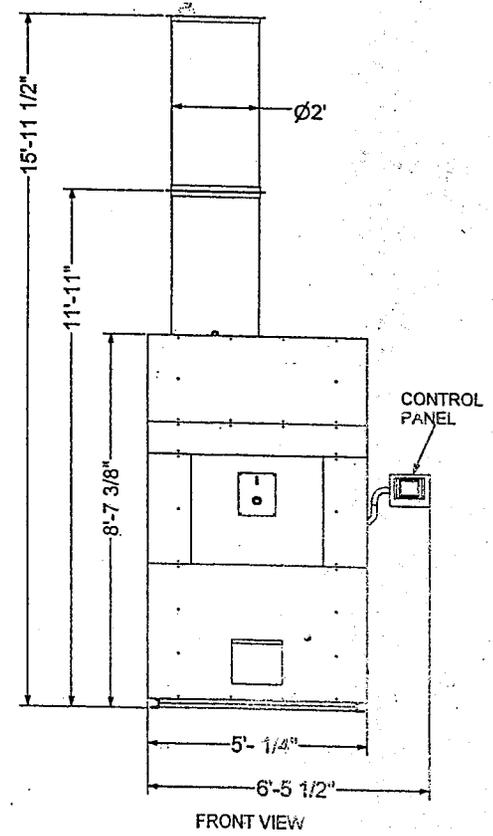
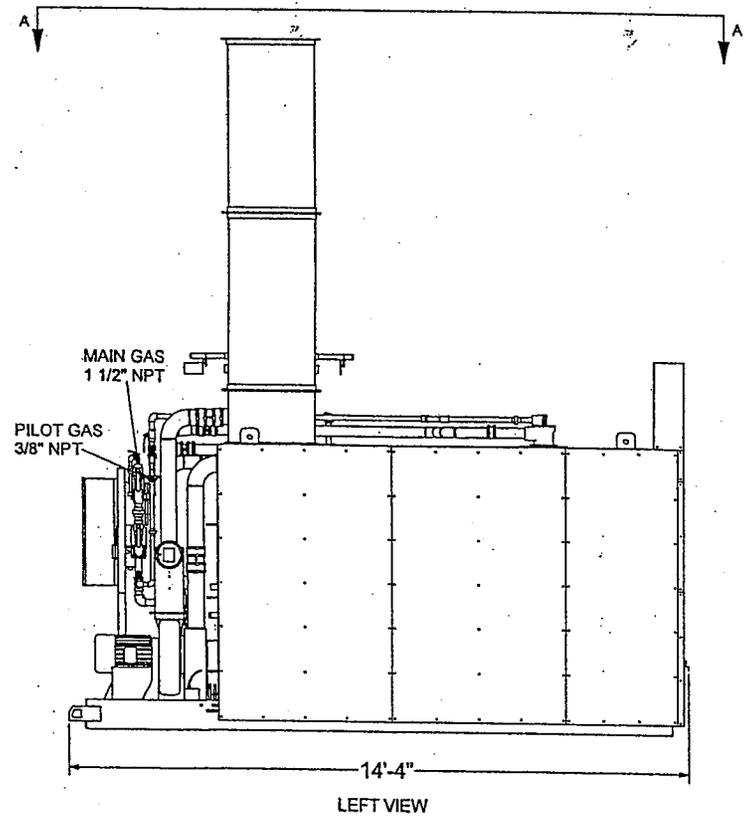
www.animal-cremation.com
www.crawfordequipment.com

CRAWFORD MODEL C1000P - RANDOM LOAD CREMATORY

CRAWFORD

ELECTRICAL:
 SINGLE POINT CONNECTION
 230/480V, 3 PHASE, 60 HZ, 40/30 AMP
 1 PHASE, AND /OR 50 HZ (OPTIONAL)

GAS REQUIREMENTS:
 FUEL SUPPLY MUST BE CAPABLE OF FLOWING
 MAIN 2 MMBTU/ HR @ 11-14" WC @ 1 1/2" HEADER
 PILOT 2 MMBTU/ HR @ 5 PSIG MAX @ 3/8" REGULATOR



NOTE:
 ALL ILLUSTRATIONS COVER THE GENERAL APPEARANCE OF CRAWFORD INDUSTRIAL GROUP, LLC PRODUCTS AT THE TIME OF PUBLICATION AND WE RESERVE THE RIGHT TO MAKE CHANGES IN DESIGN AND CONSTRUCTION AT ANY TIME WITHOUT NOTICE.

DESIGNED	Rev 1	2/2/2004	CRAWFORD INDUSTRIAL GROUP, LLC 9101 PADDERS LANDING, ORELAND, KY 40364 (607) 861-0759		
BY					
DESIGNED	Rev 1		TITLE C1000P		
BY			PROJECT NO. C1000P-GA		
REV	DATE	DESCRIPTION	NAME	SCALE	SHEET 1 OF 2