



City of Cambridge Police Department



TELEPHONE
(617) 868-3400

Office of the Chief of Police

LEO F. DAVENPORT
CHIEF OF POLICE

HEADQUARTERS

ADDRESS ALL COMMUNICATIONS TO
5 WESTERN AVENUE, CAMBRIDGE, MASSACHUSETTS 02139

LIEUTENANT ANTHONY G. PAOLILLO
ADMINISTRATIVE ASSISTANT

CAPTAIN THOMAS F. BURKE JR.
DAY OPERATIONS

CAPTAIN HENRY W. BREEN
NIGHT OPERATIONS

CAPTAIN LAWRENCE J. BRUTTI
FRANCIS A. PISANI ACADEMY

CAPTAIN JAMES F. SUGRUE
CRIME PREVENTION

CAPTAIN JOSEPH P. CUSACK
ADMINISTRATIVE SERVICES

LIEUTENANT HENRY P. GALLAGHER
INSPECTIONAL SERVICES

LIEUTENANT EDWIN C. PETERSEN JR.
CRIMINAL INVESTIGATION DIVISION

DANA A. SKIFF ED. D.
PLANNING AND RESEARCH

October 20, 1978

Mr. James Leo Sullivan
City Manager
City Hall
Cambridge, Massachusetts

Dear Sir:

In regard to the purchase of an animal cremator in reference to Council Order # 5 of September 11, 1978, as a result of extensive research conducted by Captain Joseph Cusack, who is currently in charge of the Animal Control Officers, he has spoken to many persons and it appears at this point in time that said installation, if erected outside rather than inside a building, it would cost somewhere in the vicinity of \$ 9,500.00 as the documentation enclosed would point out together with the fact that if we were to install it in a building, we come up with the questions: Do we erect the building? Is it a building we currently have? or should we go along with the prices furnished to us by the Massachusetts Society for the Prevention of Cruelty to Animals. As set forth, the charges for incinerating animals in their letter should correspond with the figures obtained from the Department of Public Works which include 91 dogs which had to be disposed of since January 1, 1977 up to the current time and 249 cats in that same period of time for a total amount of \$ 1,429.50.

Now, you are well aware, Sir, from the literature enclosed that it might well be that we should follow the steps that we have previously been following in regard to the

continued

Mr. Sullivan

- 2 -

October 20, 1978

disposal of them in the City dump.

There is a question as to whether this facility will be available to us and I also would further draw to your attention that the disposal of animals in the City is accomplished 99 and 9/10 of the time by the Department of Public Works rather than the Animal Control Officers and they, in that period of time set forth from January 1, 1977 to the present time, dispose of no more than 15 dogs and that was at the old city dump.

Or, if, in fact, we do not stay with the city dumping situation as Mr. Fagone believes we may eliminate that entirely, I would suggest that we contract the Massachusetts Society for the Prevention of Cruelty to Animals. In the long range it will be the saving course to follow and we will save tax dollars over the years that pass.

I remain,


Leo F. Davenport
Chief of Police

LFD:smp

Enclosures

P.S. If there are any other communications you so desire, Mr. Manager, in regard to this matter please feel free to call upon me. Thanking you in advance for your interest in this matter.

10/20/78

CITY MANAGER
OFFICE OF THE
OCT 20 9 29 AM '78

RECEIVED

MSPCA
Massachusetts Society for the Prevention
of Cruelty to Animals

350 South Huntington Avenue, Boston, Massachusetts 02130

Telephone: (617) 522-5055

September 20, 1978

Captain Cusack
Cambridge Police Department
5 Western Avenue
Cambridge, Massachusetts 02139

Dear Captain Cusack:

As requested in our telephone conversation on Monday, September 18th, I am pleased to provide you with the following information with regard to the cremation of animal carcasses.

Charges for incinerating animals

Dogs	\$7.50
Litter of pups	7.50
Cats	3.00
Litter of kittens	3.00
Raccoons	4.00
Skunks	3.00 (must be double-wrapped)
Squirrels, chipmunks, etc.	1.00

The animals would have to be brought to Angell Memorial Animal Hospital, 350 So. Huntington Ave., Boston.

The information you requested on the possibility of buying and maintaining your own incinerator is complicated because of the fact that the Massachusetts Department of Public Health establishes rules and regulations which must be met. I feel that if you were to contact a company that sells and services incinerators, you would be able to obtain information that I am not in a position to provide. The company we have used for a number of years is Resource Technology Corp., 471 Hunnewell St., Needham, Mass., and the person to contact is Mr. Frank Hogan, telephone 449-4020.

Sincerely,

William Curran

William Curran
Administrator of Shelter
Services and Development

WC/em

Officers and Directors

Richard L. Brickley, Esq. <i>Chairman of the Board</i>	Robert S. Cummings, Esq. <i>Secretary</i>
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Resource Technology Corporation

471 hunnewell street, needham heights, ma 02194 - telephone (617) 449-4020

September 20, 1978

Captain Cusack
Cambridge Police Department
Cambridge, MA 02139

Dear Captain Cusack:

As requested Resource Technology is pleased to submit the following proposal for your consideration.

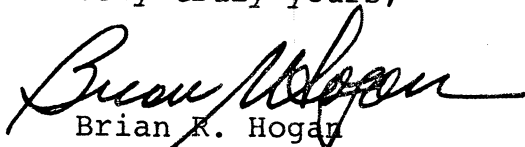
From our conversation we recommend a Vent-O-Matic CAP 25 as the appropriate unit. This equipment is certified to meet all applicable air quality standards and designed for inside or outside installation. Further, as indicated in the enclosed literature, the operator of the equipment simply loads the unit, pushes the start button, and walks away. Shutoff is automatic. If the unit is installed outside a small concrete pad is all that is needed to complete the installation; the unit will fire on #2 fuel oil, gas or propane.

Based on the above, Resource Technology Corporation will furnish to your site one Vent-O-Matic CAP 25 incinerator for the lump sum of \$7,825. Our price includes shipping, obtaining all permits, training of your personnel and warranty. The unit has a one year warranty and is inspected four times during the year by our service personnel.

Not knowing exactly where the unit is to be installed we cannot give you a firm price on installation. Assuming an outside location, we estimate that the installation should cost \$1,000.

Resource Technology specializes in incinerator sales and service and has installed over 100 units throughout New England. Thank you for this opportunity to submit this proposal, and we look forward to being of service to the City of Cambridge.

Very truly yours,


Brian R. Hogan

BRH:ls
Enclosure

TWO STEPS TO COMPLETE COMBUSTION

The traditional design for incineration of pathological wastes calls for a retort (a U-shaped system) with an ignition chamber, mixing chamber, and combustion (or expansion or settling) chamber and often an under-hearth chamber, with many associated air and flame ports, controls, cleanout and charging doors—and using 100% excess air at the primary stage and 40% at the secondary stage! Stringent air quality standards may require the installation of scrubbers with these more traditional designs.

With its controlled combustion system, Vent-O-Matic far exceeds federal guidelines using essentially no excess air (and thus no excess blower capacity, and with minimal stirring up of particulate matter and liquid droplets).

First—the Vent-O-Matic Series CAP utilizes a cylindrical chamber where combustion air from a manifold in the refractory lining, with inlets spaced every few inches and slanted downward to prevent any backflow of liquids, moves gently through the fuel bed, preventing pickup of flyash and dust. The bottom arc of the cylinder serves as the solid hearth; the cylindrical shape helps focus heat to expedite combustion. An oil or gas burner starts the ignition process and maintains it until pathological materials dry out.

The charging door opens the cylinder to its full diameter, but a dam across the bottom retains all liquids until they are fully vaporized. An auxiliary door is available within the main charging door as an option, for loading after combustion has started. An observation port permits viewing the combustion process at all times.

The air flow is controlled to just maintain full combustion: the process is *pyrolytic*—chemical change is largely wrought by high heat to transform liquids and solids into gaseous form for final processing in the secondary chamber.

Second—the combustion products pass to a high-temperature secondary chamber where additional air and heat from an afterburner completes the combustion process. Here again the air is maintained at approximately the exact amount to maintain combustion—no more.

The operator. No smoke, particulate emission a third of EPA requirements, a tiny residue of purified ash at the bottom of the smooth, solid hearth, total sealing against escape of pathogens.

SUPER-SIMPLE CONTROLS

The control panel consists essentially of primary and secondary timers, start buttons and associated lights. An interlock prevents starting the primary combustion until the afterburner is operating, to prevent any escape of smoke or particles or droplets.

The operator pushes the start buttons, observes the lights and walks away. Shutoff is automatic and the flame-out safeguard prevents any dangerous accumulation of fuel if ignition fails.

WHEN AND WHY?

The increasing government and other demands for onsite or other controlled disposal of pathological wastes are bringing about a corresponding demand for Series CAP special-purpose incinerators. General-purpose incinerators, no matter how well designed and constructed, simply will not do the job if—

—for any reason, you must dispose of wastes that are in large part human organisms and other items that have been contaminated, or

—for humane or experimental reasons you are concerned with disposing of animal remains.

THE WORLD LEADER IN SPECIAL PURPOSE INCINERATORS

For forty years Vent-O-Matic has specialized in the design and manufacture of prepackaged and pretested incinerators that exceed the most rigorous requirements for disposal of particular and difficult kinds of wastes—special processing wastes, wet kitchen wastes, waste oils, sewage entrained solids, marine refuse of all kinds, hospital and veterinary wastes—while maintaining exceptional standards of purity of emissions and containment of contaminants during combustion.

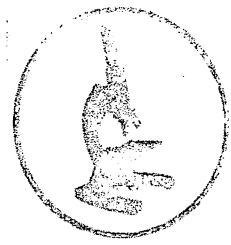
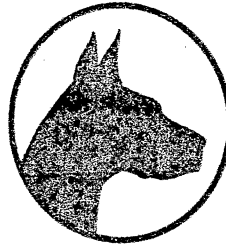
CONSULT US FOR YOUR LOCAL SALES AND ENGINEERING SERVICES

VENT-O-MATIC INCINERATOR CORPORATION

P. O. BOX 157, NORTH QUINCY, MASS. 02171, USA, (617) 328-9360

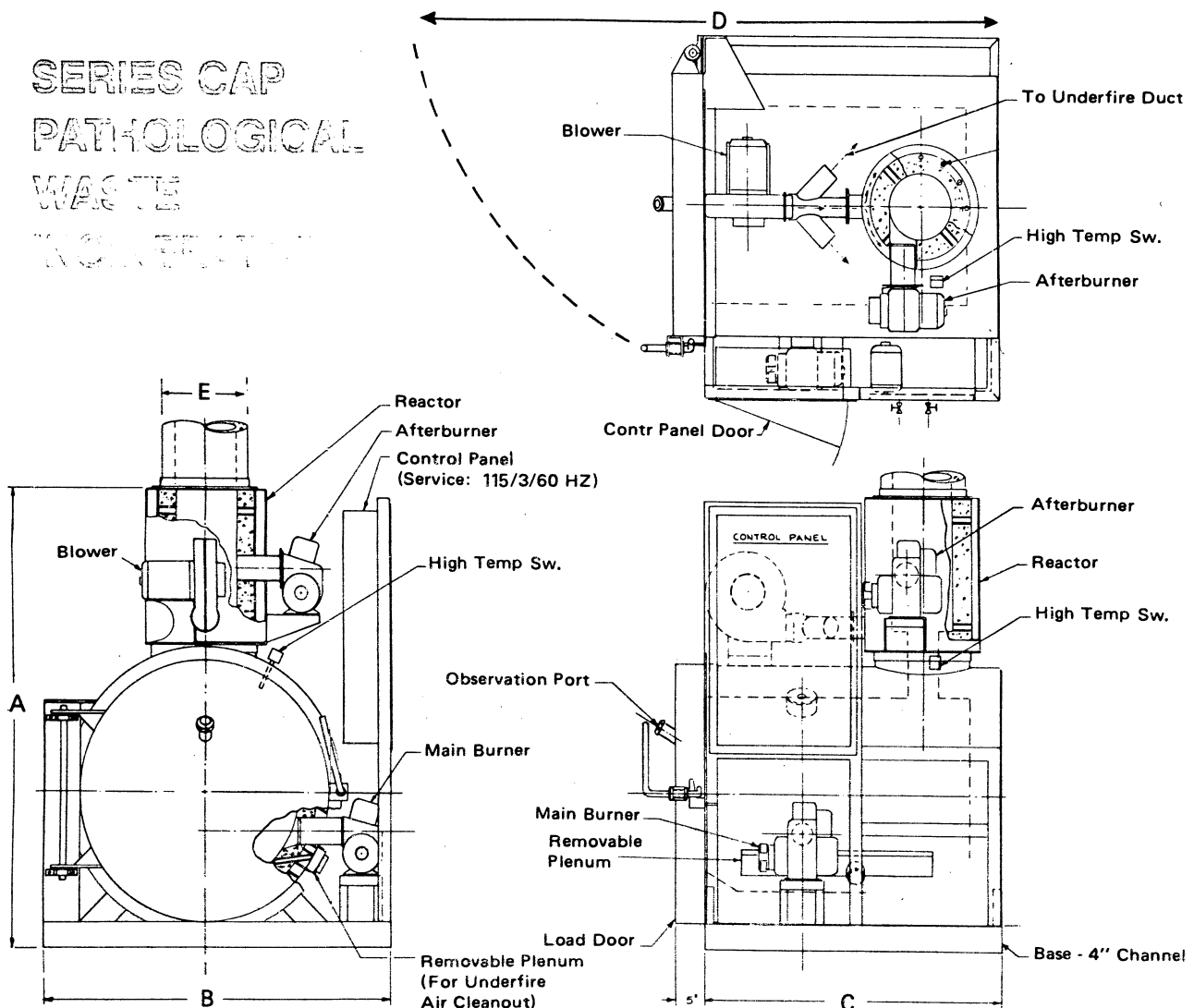
THE SPECIAL PROBLEMS OF PATHOLOGICAL WASTES

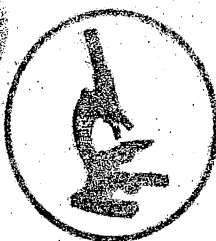
Aside from the obvious problem—totally destroying the wastes without any escape of pathogens—pathological wastes have a structure that requires special engineering in their combustion. Each cell contains much moisture, which must evaporate before the combustible animal tissues will ignite. But the moisture in the deeper tissues will evaporate only after the closely-knit cells in the outer tissues are destroyed, because they are insulated from the heat in the chamber. That is, though the heat of burning dry tissues is great, they are successively insulated inward and their latent heat does not suffice to vaporize the water as fast as it is released—nor to maintain combustion.



In practice we are faced with containing the liquids on a solid hearth until they are vaporized and with maintaining the fire with an auxiliary source of fuel—either oil or gas in the Series CAP—which is injected continuously during the incinerating process in our standard models. As an option, where frequent use is required, thermostatic controls are supplied, to save fuel.

SERIES CAP PATHOLOGICAL WASTE INCINERATOR





WE OFFER —

—any sized model to suit your needs, from the CAP 15, designed to destroy 15 pounds (7 kg) per hour of Type 4 pathological wastes, for small facilities to 500 pounds (225 kg) per hour and more for major centers and central disposal facilities—and to destroy more than twice as much Type 2 waste (half trash, half garbage by weight).

As delivered each Series CAP incinerator is assembled and pretested to meet EPA and other public or private standards you may be faced with. You supply only the foundation for installation plus oil or gas service and 115 VAC electrical power. We furnish 12 feet of insulated stack—more if desired.

The Series CAP is designed for inside or outside installation.

Its compactness and simplicity are achieved by using the most advanced principles of combustion engineering and materials technology to vastly slim down the expense and complexity and increase the efficiency of pathological waste incineration, as compared with the more traditional designs.

SPECIFICATIONS

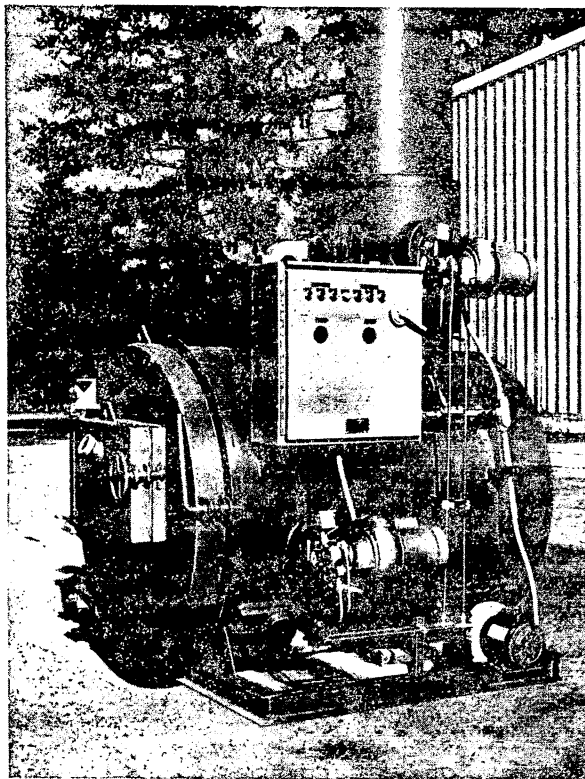
AIR QUALITY STANDARDS	Smoke: 0 on Ringelmann Scale Dust: less than 0.1 gr/scf (228 mg/m ³) at 12% CO ₂
CONSTRUCTION.....	Heavy Duty
UNIT AS DELIVERED.....	Packaged, completely assembled, piped and wired; you provide 115 VAC 60 Hz service (or other voltages and frequencies as specified) and gas or oil supply. Three four foot refractory-cement-lined stack sections are supplied as standard, more as an option.

MODEL	NOMINAL CAPACITY		DIMENSIONS, ft.-in (m)**				REQ'D. STACK HT. ft (m)	STACK OD, in. (m) E	EST. WEIGHT lb. (kg)
	PATHOLOGICAL WASTES (Type 4*)	GENERAL WASTES (Type 2*)	Height A	Width B	Length C	Length, Door Open D			
CAP 15	15 lb/hr 7 kg/hr	40 lb/hr 18 kg/hr	5ft.-2in. (1.57)	3ft.-10in. (1.17)	3ft.-6in. (1.12)	6ft.-5in. (1.98)	12ft. (3.66)	14in. (0.36)	1,100 (490)
CAP 25	25 lb/hr 11 kg/hr	67 lb/hr 30 kg/hr	6ft.-0in. (1.83)	4ft.-10in. (1.48)	4ft.-0in. (1.22)	8ft.-6in. (2.59)	12ft. (3.66)	14in. (0.36)	4,000 (1,816)
CAP 50	50 lb/hr 23 kg/hr	133 lb/hr 60 kg/hr	6ft.-5in. (1.96)	6ft.-0in. (1.83)	5ft.-6in. (1.65)	9ft.-6in. (2.74)	12ft. (3.66)	16in. (0.41)	4,000 (1,816)
100 lb/hr (45 kg/hr) and over for Type 4 wastes (200 lb/hr Type 2); dimensions and data available on request.									

*Type 4: liquid contents to 85%; Type 2: 50/50 garbage and trash by weight.

**Dimensions subject to change.

pathological waste problems **VANI**



in the
**COMPACT
PREPACKAGED
SERIES CAP
INCINERATOR**
engineered for

hospitals ●
biological laboratories ●
veterinary hospitals ●
animal shelters ●

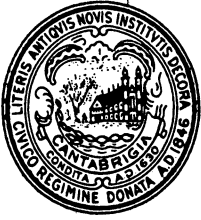
—and for any facilities where good health practices and the increasingly stringent demands of government bodies require the swift clean destruction of human pathological wastes, animal remains and surgical dressings and other contaminated items (including plastics).

The Vent-O-Matic Series CAP are special purpose incinerators dedicated to the most difficult of tasks: the total destruction of organic waste (Type 4) and other contaminated wastes in an escape-proof environment. These wastes contain up to 85% moisture and 5% incom-bustible solids and have a heating value as low as 1000 Btu per lb (556 Cal/Kg). Clearly they cannot support their own combustion and require constant or thermostatically controlled fuel injection.

The Series CAP features streamlined two-stage combustion that seals in contaminants and pollutants until they are rendered harmless—and it is controlled throughout to wring maximum efficiency out of each unit of oil or gas and each watt of power.

- A solid hearth with a refractory dam holds liquids until they are totally vaporized—no need for cast-iron grates. Air inlets slant downward to keep them clean of foreign matter and liquids.
- Primary combustion is achieved by a controlled pyrolytic process that stops the entrainment of most particles and droplets and approaches 100% of theoretical air use. The intense heat of a small secondary chamber, with afterburner, completes combustion.
- With pushbutton startup and automatic shutdown, the Series CAP operates with complete safety, *un-attended through all but the first moments of its cycle.*

The end result: smokeless stack emission that contains less than a third of the particulate matter permitted by federal regulations.



CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
Tel. 876-6800

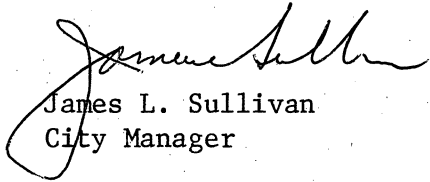
EXECUTIVE DEPARTMENT
JAMES L. SULLIVAN
City Manager

October 23, 1978

To the Honorable, the City Council:

With respect to City Council Order No. 5 of September 11, 1978 regarding the purchase of an animal cremator, enclosed please find copy of a report from Police Chief Leo F. Davenport.

Very truly yours,


James L. Sullivan
City Manager

JLS/mbf
Enc.

Agenda #8

S-445

Response to City Council Order no. 5 of
Sept. 11, 1978 re: purchase of an animal
cremator.

In City Council,
October 23, 1978

10/30/78
Placed on File