#AP-02-001
DEC#NS02-0004

State of Vermont
Agency of Natural Resources
Department of Environmental Conservation

Air Pollution Control Division
Waterbury, Vermont

AIR POLLUTION CONTROL PERMIT TO CONSTRUCT

Date Permit Issued: February 7, 2002

Owner/Operator:	Keystone Vermont, Inc. 100 North Tampa Street, Suite 3100 Tampa, Florida 33602
Source:	Ker-Westerlund & Fleming Funeral Home 57 High Street Brattleboro, Vermont 05301-3797

FINDINGS OF FACT

(A) FACILITY DESCRIPTION

Keystone Vermont, Inc. (hereinafter "Keystone") has proposed to install one cremation retort in the existing Ker-Westerlund & Fleming Funeral Home (hereinafter "Facility") located at 57 High Street in Brattleboro, Vermont. The retort, a Power Pak II Ultra Model IE43-PPII manufactured by Industrial Equipment and Engineering Company, is designed to fire charges at a rate of 100 pounds per hour and uses two burners - a primary burner with a heat input capacity of 700,000 Btu/hr and a secondary burner with a heat input capacity of 1,300,000 Btu/hr. Keystone plans to fire liquified petroleum gas ("LP-gas") exclusively in the retort.

The operations performed at the Facility are classified within the Standard Industrial Classification Code 7261 (Funeral Services and Crematories).

(B) FACILITY CLASSIFICATION

The Facility is classified as a stationary source of air contaminants pursuant to §5-401(1), "Incinerators," of the *Vermont Air Pollution Control Regulations* (hereinafter "*Regulations*"). In addition, §5-101 of the *Regulations* defines a stationary source as any structures, equipment, installations, or operations, or combination thereof, which emit or may emit any air contaminant, which is located on one or more contiguous or adjacent properties and which is owned or operated under common control. Based on this definition, all of the equipment, operations, and structures at the Facility are grouped together as one stationary air contaminant source.

(C) PRIOR APPROVALS

This Facility does not currently operate under an existing Air Pollution Control Permit to Construct ("Permit to Construct").

(D) PROPOSED PROJECT AND PERMIT APPLICABILITY

As noted in Findings of Fact (B) above, this Facility is classified as a source of air contaminants under §5-401 of the *Regulations*. Pursuant to Title 10 *Vermont Statutes Annotated*, (hereinafter *"V.S.A."*) §556, Keystone must apply for and obtain an Air Pollution Control Permit before commencing the construction, installation, operation or modification of the source.

Pursuant to Title 10 *Vermont Statutes Annotated*, (hereinafter *"V.S.A."*) §556a and §§5-1002, 5-1003, and 5-1005 of the *Regulations*, this Facility is not classified as a "Subchapter X Major Source" and is not subject to the requirement to obtain an Air Pollution Control Permit to Operate. In addition, this Facility does not have allowable emissions of any contaminant which would classify the source as a "Title V Subject Source" and is therefore not subject to the federal operating permit requirements of Part 71 of the *Code of Federal Regulations* ("*CFR*").

(E) APPLICATION PROCESSING AND PUBLIC PARTICIPATION

On January 17, 2002, the Agency received an application to construct the proposed cremation retort. The Agency reviewed this application and determined that it was administratively complete on January 17, 2002. Pursuant to *10 V.S.A.* §556 and §5-501 of the *Regulations*, the Agency is not required to provide an opportunity for public comment regarding applications for a Permit to Construct for sources with allowable emissions in the aggregate of less than ten (10) tons per year. In consideration of the factors listed in *10 V.S.A.* §556, an opportunity for public comment was not provided.

(F) NEW SOURCE REVIEW

Any facility with proposed allowable emissions equal to or greater than 50 tons per year for any air contaminant, or five tons per year for lead, is designated as a major stationary source. Major stationary sources are subject to review under §5-502 of the *Regulations*. The allowable emissions from this Facility are estimated to be less than major source levels. Therefore, the proposed Facility is designated as a minor stationary source.

(G) MOST STRINGENT EMISSION RATE DETERMINATION

§5-502 of the *Regulations* requires that *major new sources* and *major modifications* apply control technology adequate to achieve the *Most Stringent Emission Rate* (*"MSER"*) with respect to those air contaminants for which they exceed major emission thresholds or significant increase levels. This Facility is non-major; therefore, the provisions in §5-502 are not applicable to this project.

(H) AMBIENT AIR QUALITY IMPACT EVALUATION

The proposed project will not cause or contribute to violations of state/federal ambient air quality standards, nor will it significantly deteriorate existing air quality.

(I) ALLOWABLE EMISSIONS

Based on the information provided by Keystone, the Agency finds this Facility's allowable Emissions, as defined in §5-101 of the *Regulations*, to be:

Facility Allowable Emissions, tpy *						
PM/PM_{10}	SO_2	NO_x	CO	VOCs	Pb	Total HAPs**
1.95	Neg.	2.72	0.10	0.04	--	<1

* PM/PM_{10} - particulate matter, SO_2 - sulfur dioxide, NO_x - oxides of nitrogen, CO - carbon monoxide, VOCs - volatile organic compounds, Pb - lead, HAPs - hazardous air pollutants.
** All individual HAPs < 10 tpy

(J) APPLICABLE REQUIREMENTS

The operations at this Facility are subject to the following state and federal laws and regulations, the requirements of which are contained in the conditions of this Permit:

(a) State Requirements:

Applicable Requirement from *Vermont Air Pollution Control Regulations*
§5-201 - Open Burning
§5-211(2) - Prohibition of Visible Air Contaminants, Installations Constructed After April 30, 1970
§5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel
§5-231(2) - Prohibition of Particulate Matter; Incinerator Emissions
§5-241 - Prohibition of Nuisance and Odor
§5-403 - Circumvention

(b) Federal Regulations:

None Applicable.

(K) HAZARDOUS MOST STRINGENT EMISSION RATE

Pursuant to §5-261 of the *Regulations,* if the regulated emissions of a hazardous air contaminant from the entire Facility are in excess of the Action Level for the hazardous air contaminant, the Facility shall be subject this section and the hazardous air contaminant shall be subject to the Hazardous Most Stringent Emission Rate ("HMSER"). Hazardous air contaminant emissions from virgin fuel combustion are not subject to §5-261 of the *Regulations*.

The Facility is not expected to have regulated emissions of any hazardous air contaminant in excess of an Action Level. Therefore, the facility is not subject to HMSER under §5-261 of the *Regulations* at this time.

Based upon the Agency's review of Keystone's application and the above findings of fact, the Agency concludes that the proposed construction of the cremation retort at Ker-Westerlund & Fleming Funeral Home in Brattleboro, Vermont, subject to the following Permit conditions, complies with all applicable state and federal air pollution control laws and regulations. Therefore, pursuant to 10 *V.S.A.*, §556, the Agency hereby issues a Permit approving the construction of the cremation retort, as described in the above findings of fact, subject to the following:

PERMIT CONDITIONS

- Construction and Equipment Specifications -

(1) Keystone shall construct and operate its 2.0 million Btu/hr cremation retort according to the plans and specifications submitted in conjunction with its application to the Agency on January 17, 2002 and in accordance with the conditions set forth herein. [10 *V.S.A.* §556(c)]

(2) Keystone shall ensure that the last combustion chamber or zone of the cremation retort is preheated to a temperature of at least 1,600°F prior to introduction of the charge and shall maintain said temperature throughout the remainder of the crematory operation cycle. All elements of the crematory units shall be maintained in good working order at all times. The crematory units shall be operated and maintained in accordance with the manufacturer's operation and maintenance recommendations. [10 V.S.A. §556(c) and §5-231(2)(c) of the *Regulations*]

(3) Keystone shall vent the exhaust gases from the cremation retort vertically through a stack which extends a minimum of 4 feet above the roofline of the building housing the retort. The stack height shall be increased should it be determined by the Agency that proper or adequate dispersion is not maintained at the constructed elevation. The stack shall not be equipped with any device that may obstruct the upward discharge of the exhaust gases such as a fixed raincap. [10 *V.S.A.* §556(c)]

(4) Keystone shall only introduce and charge human and animal remains, limited amounts of associated surgical wastes, including but not limited to, disposable sharps, gloves, gowns, dressings, and combustible waste containers as approved in writing by the Agency. Associated surgical wastes shall be limited to that generated by Keystone. [10 V.S.A. §556(c)]

(5) Under no circumstances shall Keystone fire any plastics containing poly vinyl chlorides (PVCs), caskets made predominantly of fiberglass and/or plastic, household wastes, trash or other solid wastes in the unit. Failure to comply with this condition shall be grounds for revocation of this Permit.
[10 V.S.A. §556(c)]

(6) All operators of the crematory unit shall receive training on the proper operation of the unit from the manufacturer, vendor or another qualified source. Keystone shall display near the units, certification of that training and a certified operator shall be on-site and available during all periods of operation.
[§5-402(1) of the *Regulations*]

(7) Keystone shall only fire LP-gas in the cremation retort burners.
[10 V.S.A. §556(c)]

- EMISSION LIMITATIONS -

(8) Emissions of visible air contaminants from any installation at the facility shall not exceed twenty (20) percent opacity for a period or periods aggregating to six minutes or more in any hour, and at no time shall they exceed sixty (60) percent opacity. If any emission testing is conducted to demonstrate compliance with this limit, the owner of operator shall use proposed Reference Method F-1 published in the *Federal Register* on August 29, 1986 or an equivalent method approved in writing by the Agency. [§5-211(2) of *Regulations*]

(9) Only fuel with a maximum sulfur content not to exceed 2.0 percent by weight may be fired in the cremation retort. [§5-221(1)(a) of the *Regulations*]

(10) Particulate Matter: Emissions from the cremation retort shall not exceed 0.06 grains per dry standard cubic foot, corrected to 7 percent oxygen. All sampling runs conducted as part of emission tests intended to demonstrate compliance with the emission limits specified above shall begin when waste material is first introduced into the crematory unit.
[§5-231(2)(c) of the *Regulations*]

Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with Title 40 Code of Federal Regulations Part 60, Appendix A, Reference Method 5 or an equivalent method approved in writing by the Agency. [§5-404 of the *Regulations*]

- Compliance Testing -

(11) Within 90 days after installing the cremation retort, Keystone shall perform emission testing to demonstrate compliance with the emission limitations specified in conditions (8) and (10) of this Permit. Keystone shall furnish the Agency with a written report of the results within 30 days after completing the emission test. The emission testing must be performed during a cremation cycle that includes a wooden casket unless Keystone agrees to a permit restriction prohibiting the burning of wooden caskets in both units. In lieu of performing on-site emission testing, Keystone may furnish the Agency with a written report of the results of an emission test performed on another unit of the same make and model as proposed. This emission test must also have been performed during a cremation cycle that included a wooden casket and the test must have been observed by a state or local air pollution control agency.
[§§5-402(1) and 5-404(1) of the *Regulations*]

At least thirty days prior to performing the emission testing required above, Keystone shall submit to the Agency a pre-test report prepared in accordance with the Agency's "Source Emission Testing Guidelines". [5-402(1) of the *Regulations*]

- Nuisance and Odor -

(12) Keystone shall not discharge, cause, suffer, allow, or permit from any source whatsoever such quantities of air contaminants or other material which will cause injury, detriment, nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which causes or has a natural tendency to cause injury or damage to business or property. [§5-241 of the *Regulations*]

(13) Keystone shall not discharge, cause, suffer, allow, or permit any emissions of objectionable odors beyond the property line of the premises. [§5-241 of the *Regulations*]

- Monitoring, Recordkeeping and Reporting -

(14) Keystone shall have the cremation retort inspected and maintained at least annually by the manufacturer or a qualified service representative. Keystone shall develop and implement an operation and maintenance plan for the retort prior to initial start-up of the system. Keystone shall revise this plan at the Agency's request or on its own motion to reflect equipment or operational changes. Said operation and maintenance plan shall be present at the facility at all times and shall be made available to representatives of the Agency upon request.

The operation and maintenance plan shall include, but not be limited to, a description of proper operating procedures, provisions for performing and maintaining records of daily and routine maintenance inspections, findings of those inspections, and descriptions of any corrective actions taken.
[10 V.S.A. §556(c)]

(15) Keystone shall notify the Agency in writing of the initial start-up date for the cremation retort within fifteen (15) days after said date. [§5-402(1) of the Regulations]

(16) If requested by the Agency, Keystone shall notify the Agency at least one (1) day in advance of all scheduled cremations. [§5-402(1) of the *Regulations*]

(17) Keystone shall maintain an operator's log book to record the following information: operators' name, date, number of charges per day, start and stop time of each charge, approximate weight of each charge including casket if present, casket description if present (wood, cardboard, crematory friendly casket designed for crematory use, approximate weight) and initial temperature of last combustion zone before charging. A separate section of the log book will also be maintained containing record of material safety data sheets (MSDSs) on any plastics fired within the crematories. Said log book shall be present at the facility at all times and shall be made available to representatives of the Agency upon request. [§5-402(1) of the *Regulations*]

(18) Keystone shall notify the Agency in writing within ten (10) days of any violation, of which it is aware, of any requirements of this Permit. This notification shall include, at a minimum, the cause for the deviation and corrective action or preventative maintenance taken to correct the deviation.
[§5-1015(a)(12) of the *Regulations*]

(19) Keystone shall notify the Agency in writing of any proposed physical or operational change at the facility which may increase the emission rate of any air contaminant to the ambient air. Such changes shall include, but are not limited to, the installation of an additional cremation retort. If the Agency finds that a permit amendment is required, a new application and the appropriate application fee shall be submitted. The permit amendment shall be obtained before commencing any such change. [§5-501 of the *Regulations*]

(20) All records, reports, and notifications required to be submitted to the Agency by this Permit shall be submitted to:

Field Services Section
Air Pollution Control Division
D.E.C., Agency of Natural Resources
103 South Main Street, Bldg. 3 South
Waterbury, Vermont 05671-0402.

(21) All records shall be retained for a minimum period of five (5) years from the date of record and shall be made available to the Agency upon request. [§5-402(1) of the *Regulations*]

- Standard Conditions -

(22) Approval to construct or modify under this Permit shall become invalid if construction or modification is not commenced within 18 months after issuance of this Permit, if construction or modification is discontinued for 18 months or more, or if construction or modification is not substantially completed within a reasonable time. The Agency may extend any one of these periods upon a satisfactory showing that an extension is justified. The term "commence" as applied to the proposed construction or modification of a source means that the owner or operator either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction or modification of the source, to be completed within a reasonable time; or

(b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a continuous program of actual on-site construction or modification of the source to be completed within a reasonable time.

(23) These Permit conditions may be modified, suspended, terminated, or revoked for cause and reissued upon the filing of a written request with the Secretary of the Agency (hereinafter "Secretary") or upon the Secretary's own motion. Any modification shall be granted only with the written approval of the Secretary. If the Secretary finds that modification is appropriate, only the conditions subject to modification shall be re-opened. The filing of a request for modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any terms or conditions of this Permit. The Secretary may provide opportunity for public comment on any proposed modification of these conditions. If public comments are solicited, the Secretary shall follow the procedures set forth in 10 *V.S.A.*, §556 and §556a, as amended. [10 *V.S.A.* §556]

(24) Cause for reopening, modification, termination and revocation of this Permit includes, but is not limited to:

(a) Inclusion of additional applicable requirements pursuant to state or federal law;
(b) A determination that the permit contains a material mistake or that inaccurate information was used to establish emissions standards or other terms or conditions of the operating permit;
(c) A determination that the operating permit must be modified or revoked to ensure compliance with applicable requirements;
(d) A determination that the subject source has failed to comply with a permit condition;
(e) For Title V subject sources, a determination by the U.S. EPA that cause exists to terminate, modify, revoke, or reissue an operating permit;
(f) Those causes which are stated as grounds for refusal to issue, renew or modify an operating permit under §5-1008(a) of the *Regulations*; or
(g) If more than three (3) years remain in the permit term and the source becomes subject to a new applicable requirement. [§5-1008(e)(4) of the *Regulations*]

(25) This Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights. [10 *V.S.A.* §556a(d)]

(26) By acceptance of this Permit, Keystone agrees to allow representatives of the State of Vermont access to the properties covered by the Permit, at reasonable times, to ascertain compliance with Vermont environmental and health statutes and regulations and with this Permit. Keystone also agrees to give the Agency access to review and copy any records required to be maintained by this Permit, and to sample or monitor at reasonable times to ascertain compliance with this Permit.
[10 *V.S.A.* §556a(d)]

(27) All data, plans, specifications, analyses and other information submitted or caused to be submitted to the Agency as part of the application for this Permit or an amendment to this Permit shall be complete and truthful. Any such submission which is false or misleading shall be sufficient grounds for denial or revocation of this Permit, and may result in a fine and/or imprisonment under the authority of Vermont statutes. [§5-1008(f) of the *Regulations*]

(28) These Permit conditions shall be binding upon and enforceable against the current owner and operator and all subsequent owners and operators of the source. [10 *V.S.A.* §556a(d)]

(29) The provisions of this Permit are severable. If any provision of this Permit, or its application to any person or circumstances is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the invalidity shall not apply to any other portion of this Permit which can be given effect without the invalid provision or application thereof. [10 *V.S.A.* §556a(d)]

(30) It shall not be a defense for Keystone in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this Permit. [10 *V.S.A.* §556a(d)]

The Agency's issuance of this Air Pollution Control Permit to Construct relies upon the data, judgement, and other information supplied by Keystone. The Agency makes no assurances that the air contaminant source approved herein will meet performance objectives or vendor guarantees supplied to Keystone. It is the sole responsibility of Keystone to operate the source according to the conditions herein and with all applicable state and federal standards and regulations.

Dated this 7th day of February, 2002, in the town of Waterbury, county of Washington, state of Vermont.

Agency of Natural Resources

Chris Recchia, Commissioner
Department of Environmental Conservation

By: Richard A. Valentinetti
Richard A. Valentinetti, Director
Air Pollution Control Division

RP/rp
A2: Ker-Westerlund & Fleming Funeral Home - Brattleboro, VT