High Meadow Pet Crematory LLC

158 High Meadow Pass Fairmont, WV 26554 304-677-1858

Jim Ward - Member/Operator

Application For Permit

45CSR13

For

High Meadow Pet Crematory LLC

For questions about the equipment or technical data in this application contact

Sonny Hall

Bestech Environmental Resources

138 Industrial Park Dr.

Woodstock, AL 35188

Office: (205) 428-0210

Cell: (205)790-2012

Fax: (205) 428-0211

For all other questions pertaining to this application contact

James D. Ward III 158 High Meadow Pass

Fairmont, WV 26554

Home: (304) 366-4222

Cell: (304) 677-1858

Fax: (304) 366-4222

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WEST VIRGINIA DEPARTMENT OF **ENVIRONMENTAL PROTECTION**

DIVISION OF AIR QUALITY

601 57th Street, SE Charleston, WV 25304

APPLICATION FOR NSR PERMIT AND

(304) 926-0475 www.dep.wv.gov/dag	(OPTIONAL)					
PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF KNOWN CONSTRUCTION X MODIFICATION RELOCATION CLASS I ADMINISTRATIVE UPDATE AFTER-THE-FACT	PLEASE CHECK TYPE OF 45CSR30 (TITLE V) REVISION (IF ANY) ADMINISTRATIVE AMENDMENT MINOR MODIFICATION SIGNIFICANT MODIFICATION IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS ATTACHMENT S TO THIS APPLICATION					
	sion Guidance" in order to determine your Title V Revision options y to operate with the changes requested in this Permit Application.					
Section	ı I. General					
Name of applicant (as registered with the WV Secretary of High Meadow Pet Crematory LLC / DBA High Meadow Far	4C 4420FE2					
Name of facility (if different from above):	4. The applicant is the:					
High Meadow Pet Crematory LLC	☐ OWNER ☐ OPERATOR X BOTH					
5A. Applicant's mailing address: 158 High Meadow Pass	5B. Facility's present physical address: 158 High Meadow Pass					
Fairmont, WV 26554	Fairmont, WV 26554					
change amendments or other Business Registration Certif	//Organization/Limited Partnership (one page) including any name icate as Attachment A. ority of L.L.C./Registration (one page) including any name change					
7. If applicant is a subsidiary corporation, please provide the na	ame of parent corporation:					
 8. Does the applicant own, lease, have an option to buy or other. If YES, please explain: own If NO, you are not eligible for a permit for this source. 	erwise have control of the <i>proposed site</i> ? X YES					
 Type of plant or facility (stationary source) to be construct administratively updated or temporarily permitted (e.g. crusher, etc.): Pet Crematory/Incinerator 						
11A. DAQ Plant ID No. (for existing facilities only): 061 – 00145 11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R13-2640A						
All of the required forms and additional information can be found	under the Permitting Section of DAQ's website, or requested by phone.					

F						
12A.						
 For Modifications, Administrative Updates or Temporary permits at an existing facility, please provide directions to the present location of the facility from the nearest state road; 						
 For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment B. 						
Drive North on I-79, Take Exit 146, Turn left onto the Go Rd., Go 1.6 miles and turn left onto Halleck Rd., Go onto High Meadow Pass, turn right into the second	Go .3 miles and turn right onto Brooomsa					
12.B. New site address (if applicable):	12C. Nearest city or town:	12D. County:				
158 High Meadow Pass	Morgantown	Monongalia				
Fairmont, WV 26554						
12.E. UTM Northing (KM): 4374744.8	12F. UTM Easting (KM): 583895	12G. UTM Zone: 17				
13. Briefly describe the proposed change(s) at the facili Installation of a second Therm-Tec Model S27T Animal						
14A. Provide the date of anticipated installation or change: 05/01/2015 — If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: / / 14B. Date of anticipated Start-Up if a permit is granted: 05/03/2015						
14C. Provide a Schedule of the planned Installation of/ Change to and Start-Up of each of the units proposed in this permit application as Attachment C (if more than one unit is involved).						
15. Provide maximum projected Operating Schedule of activity/activities outlined in this application: Hours Per Day 10 Days Per Week 7 Weeks Per Year 52						
16. Is demolition or physical renovation at an existing fa	acility involved? YES X NO					
17. Risk Management Plans. If this facility is subject to	o 112(r) of the 1990 CAAA, or will become	ne subject due to proposed				
changes (for applicability help see www.epa.gov/cep	changes (for applicability help see www.epa.gov/ceppo), submit your Risk Management Plan (RMP) to U. S. EPA Region III.					
18. Regulatory Discussion. List all Federal and State air pollution control regulations that you believe are applicable to the						
proposed process (if known). A list of possible applic	proposed process (if known). A list of possible applicable requirements is also included in Attachment S of this application					
(Title V Permit Revision Information). Discuss applica	ability and proposed demonstration(s) of	compliance (if known). Provide this				
information as Attachment D.						
Section II. Additional attachments and supporting documents.						
19. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and						
45CSR13).						
20. Include a Table of Contents as the first page of you	20. Include a Table of Contents as the first page of your application package.					
21. Provide a Plot Plan, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as Attachment E (Refer to Plot Plan Guidance).						
 Indicate the location of the nearest occupied structure (e.g. church, school, business, residence). 						
 Provide a Detailed Process Flow Diagram(s) show device as Attachment F. 	wing each proposed or modified emission	ns unit, emission point and control				
23. Provide a Process Description as Attachment G.						
 Also describe and quantify to the extent possible 	all changes made to the facility since the	e last permit review (if applicable)				

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide Material Safety Data Sheets (MSDS) for all materials process	ssed, used or produced as Attachment H.							
 For chemical processes, provide a MSDS for each compound emitted 	o the air.							
25. Fill out the Emission Units Table and provide it as Attachment I.								
26. Fill out the Emission Points Data Summary Sheet (Table 1 and Table 2) and provide it as Attachment J.								
27. Fill out the Fugitive Emissions Data Summary Sheet and provide it	as Attachment K.							
28. Check all applicable Emissions Unit Data Sheets listed below:								
☐ Bulk Liquid Transfer Operations ☐ Haul Road Emissions								
☐ Chemical Processes ☐ Hot Mix Asphalt Plant	Solid Materials Sizing, Handling and Storage							
Concrete Batch Plant X Incinerator	Facilities							
☐ Grey Iron and Steel Foundry ☐ Indirect Heat Exchanger	☐ Storage Tanks							
General Emission Unit, specify								
Fill out and provide the Emissions Unit Data Sheet(s) as Attachment L.								
29. Check all applicable Air Pollution Control Device Sheets listed below	W:							
☐ Absorption Systems ☐ Baghouse	☐ Flare							
Adsorption Systems Condenser	Mechanical Collector							
Afterburner	tor Wet Collecting System							
Other Collectors, specify								
Fill out and provide the Air Pollution Control Device Sheet(s) as Attach	ment M.							
 Provide all Supporting Emissions Calculations as Attachment N, of Items 28 through 31. 	or attach the calculations directly to the forms listed in							
 Monitoring, Recordkeeping, Reporting and Testing Plans. Attach testing plans in order to demonstrate compliance with the proposed e application. Provide this information as Attachment O. 								
Please be aware that all permits must be practically enforceable whet measures. Additionally, the DAQ may not be able to accept all measure are proposed by the applicant, DAQ will develop such plans and inclu	ires proposed by the applicant. If none of these plans							
32. Public Notice. At the time that the application is submitted, place a	Class I Legal Advertisement in a newspaper of general							
circulation in the area where the source is or will be located (See 45C	SR§13-8.3 through 45CSR§13-8.5 and Example Legal							
Advertisement for details). Please submit the Affidavit of Publication	on as Attachment P immediately upon receipt.							
33. Business Confidentiality Claims. Does this application include confidence	idential information (per 45CSR31)?							
☐ YES X NO								
If YES, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "Precautionary Notice – Claims of Confidentiality" guidance found in the General Instructions as Attachment Q.								
Section III. Certification of	of Information							
34. Authority/Delegation of Authority. Only required when someone of Check applicable Authority Form below:	her than the responsible official signs the application.							
☐ Authority of Corporation or Other Business Entity ☐	Authority of Partnership							
☐ Authority of Governmental Agency	Authority of Limited Partnership							
Submit completed and signed Authority Form as Attachment R.								
All of the required forms and additional information can be found under the F	Permitting Section of DAQ's website, or requested by phone.							

35A. Certification of Information. To certify 2.28) or Authorized Representative shall check	this permit application, a Responsible the appropriate box and sign below.	e Official (per 45CSR§13-2.22 and 45CSR§30-						
Certification of Truth, Accuracy, and Completeness								
reasonable inquiry I further agree to assume re stationary source described herein in accordar Environmental Protection, Division of Air Quali and regulations of the West Virginia Division o	pended hereto, is true, accurate, and desponsibility for the construction, moduce with this application and any amenty permit issued in accordance with the fair Quality and W.Va. Code § 22-5-Official or Authorized Representative,	complete based on information and belief after lification and/or relocation and operation of the ndments thereto, as well as the Department of						
that, based on information and belief formed a compliance with all applicable requirements. SIGNATURE	fter reasonable inquiry, all air contami	not achieved, I, the undersigned hereby certify inant sources identified in this application are in 1/26/15 DATE: //AC/15 (Please use blue ink) 35C. Title: Member/Operator						
35D. E-mail: highmeadowpetcrematory@yahoo.com	36E. Phone: 304-677-1858	36F. FAX: 304-366-4222						
36A. Printed name of contact person (if differe	nt from above):	36B. Title:						
36C. E-mail:	36D. Phone:	36E. FAX:						
PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION: X Attachment A: Business Certificate X Attachment B: Map(s) X Attachment C: Installation and Start Up Schedule Attachment D: Regulatory Discussion X Attachment B: Plot Plan X Attachment M: Air Pollution Control Device Sheet(s) X Attachment M: Supporting Emissions Calculations X Attachment C: Monitoring/Recordkeeping/Reporting/Testing Plans X Attachment F: Detailed Process Flow Diagram(s) X Attachment C: Process Description X Attachment C: Business Confidential Claims X Attachment I: Emission Units Table X Attachment S: Title V Permit Revision Information X Attachment J: Emission Points Data Summary Sheet Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.								
FOR AGENCY USE ONLY – IF THIS IS A TITLE V Forward 1 copy of the application to the Title For Title V Administrative Amendments: NSR permit writer should notify Title v For Title V Minor Modifications: Title V permit writer should send appr NSR permit writer should notify Title v For Title V Significant Modifications processes NSR permit writer should notify a Title Public notice should reference both 4 EPA has 45 day review period of a drawn of the required forms and additional information.	V Permitting Group and: V permit writer of draft permit, Topriate notification to EPA and affected V permit writer of draft permit. Ed in parallel with NSR Permit revision: E V permit writer of draft permit, SCSR13 and Title V permits, oft permit.	d states within 5 days of receipt,						
mii vi uie required ivillis aliu additivilai ilifoffiat	ion can be round under the Permitting .	because of DAG 5 website, or requested by prione.						



I, Natalie E. Tennant, Secretary of State of the State of West Virginia, hereby certify that

HIGH MEADOW PET CREMATORY LLC

has filed a "Certificate of Registration of Trade Name" in my office according to the provisions of Chapter 47 of the West Virginia Code and was found to conform to law.

Therefore, I hereby issue this

CERTIFICATE OF REGISTRATION OF TRADE NAME

authorizing it to transact business in West Virginia under the assumed name of

HIGH MEADOW FARM



Given under my hand and the Great Seal of the State of West Virginia on this day of April 25, 2014

Secretary of State

WEST VIRGINIA STATE TAX DEPARTMENT BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
HIGH MEADOW PET CREMATORY LLC
DBA HIGH MEADOW FARM
158 HIGH MEADOW PASS
FAIRMONT, WV 26554-8700

BUSINESS REGISTRATION ACCOUNT NUMBER:

2301-7048

This certificate is issued on:

06/4/2014

This certificate is issued by the West Virginia State Tax Commissioner in accordance with Chapter 11, Article 12, of the West Virginia Code

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

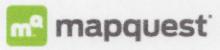
This certificate is not transferrable and must be displayed at the location for which issued

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them. CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

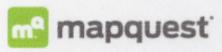
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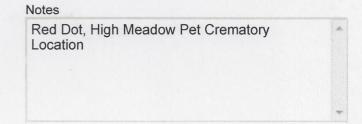
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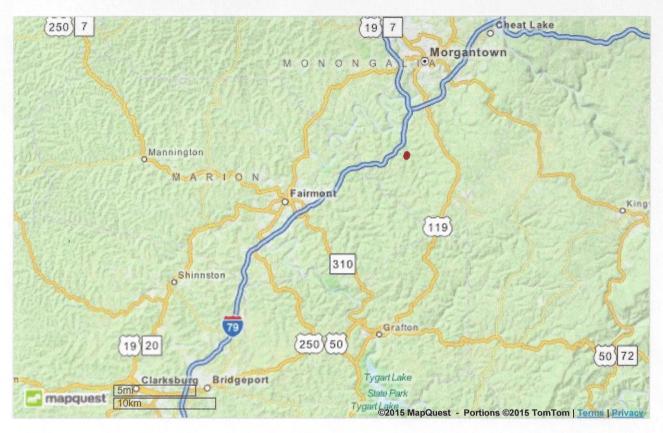
Red Dot, High Meadow Pet Crematory Location

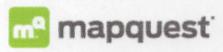




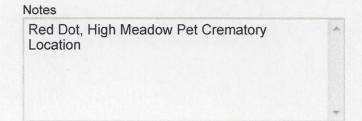
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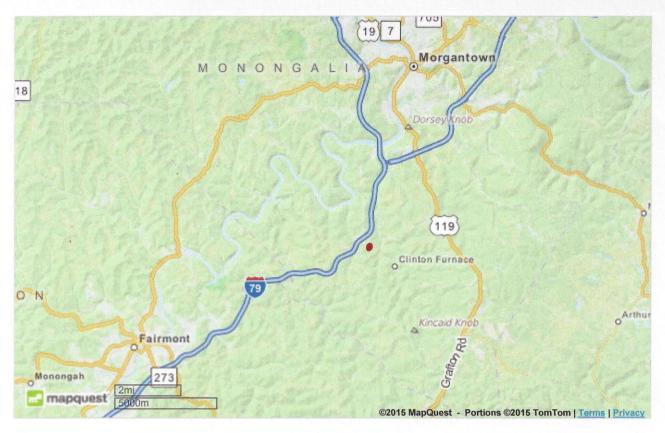






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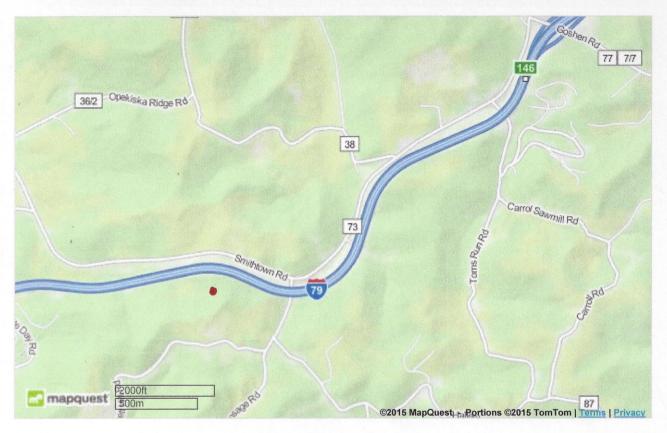


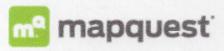




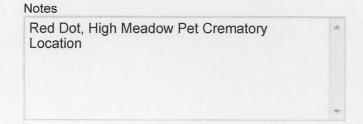
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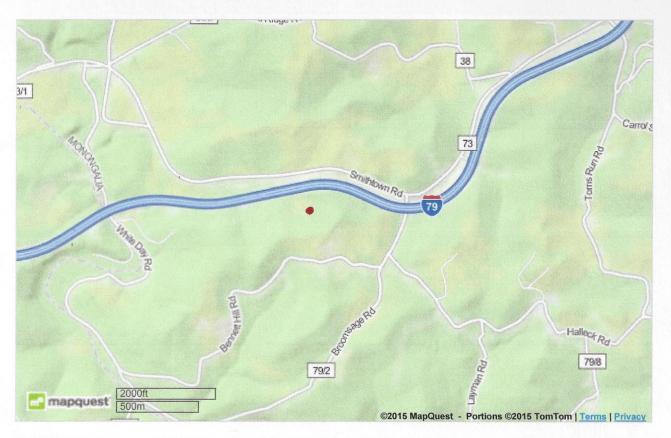


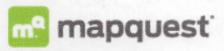




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This map doesn't contain any items.

Notes

Red Dot, High Meadow Pet Crematory Location



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Attachment C High Meadow Pet Crematory LLC

158 High Meadow Pass Fairmont, WV 26554 304-677-1858 Jim Ward - Member/Operator

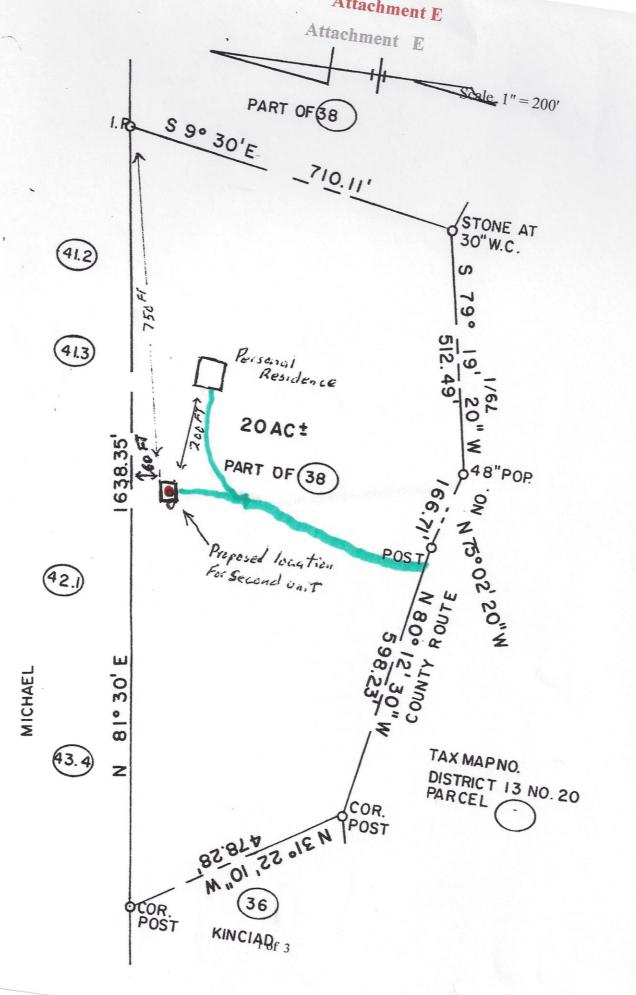
Attachment C

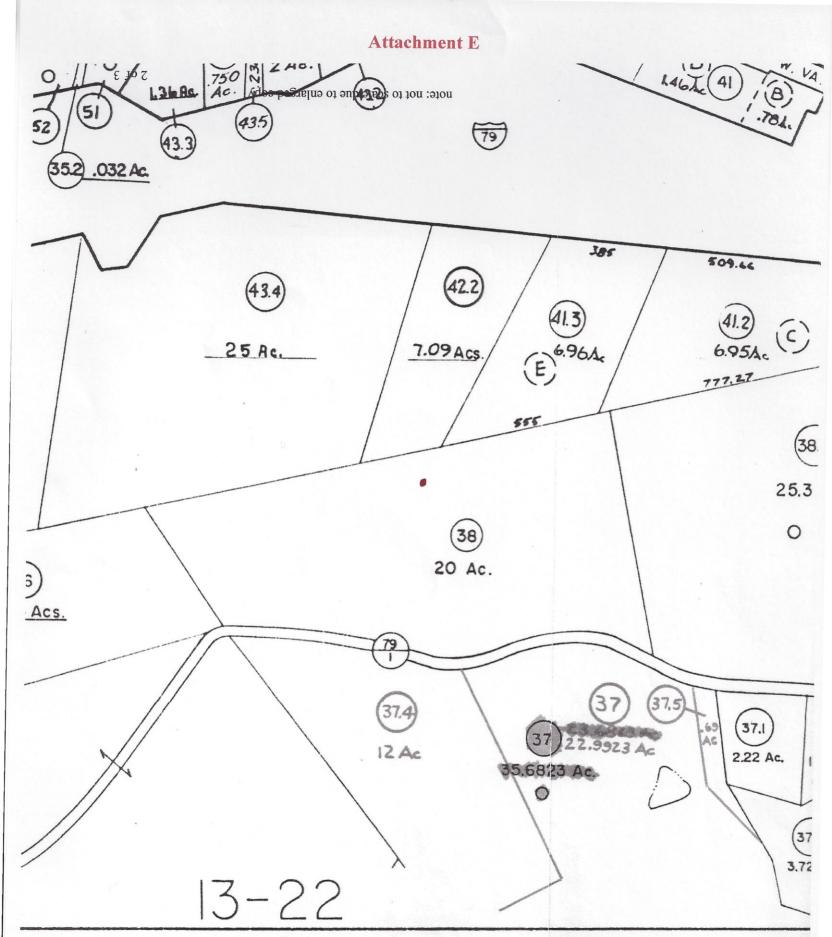
Schedule of installation and start-up

5/01/2015

The installation date is completely contingent on the approval of this application for permit. Once approval is given, it takes approximately six weeks for the manufacturer to build and deliver the cremation unit. The unit will be delivered complete and self-contained except for attaching the exhaust stack and connecting the unit to the gas line and electric.

After the unit is installed, manufacturer technicians will fire the unit to cure and adjust the unit. This process takes about 36 hours. They will also give on-site training at that time. At the end of that time, operation can begin. Our hope is to have the unit in operation by May 03, 2015.





Davisian

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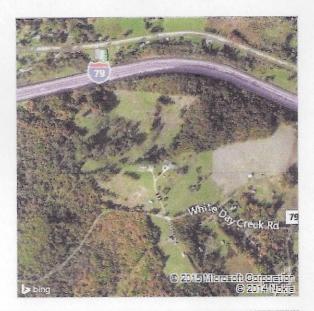


@ Montana State University

bing Maps

My Notes

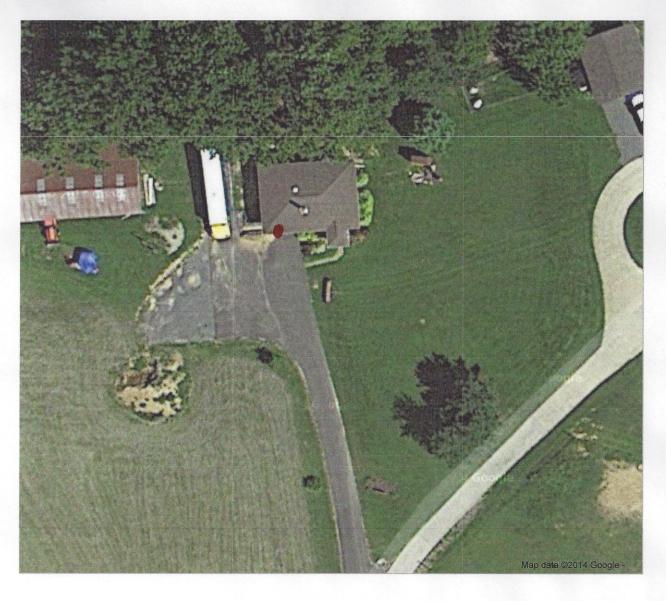
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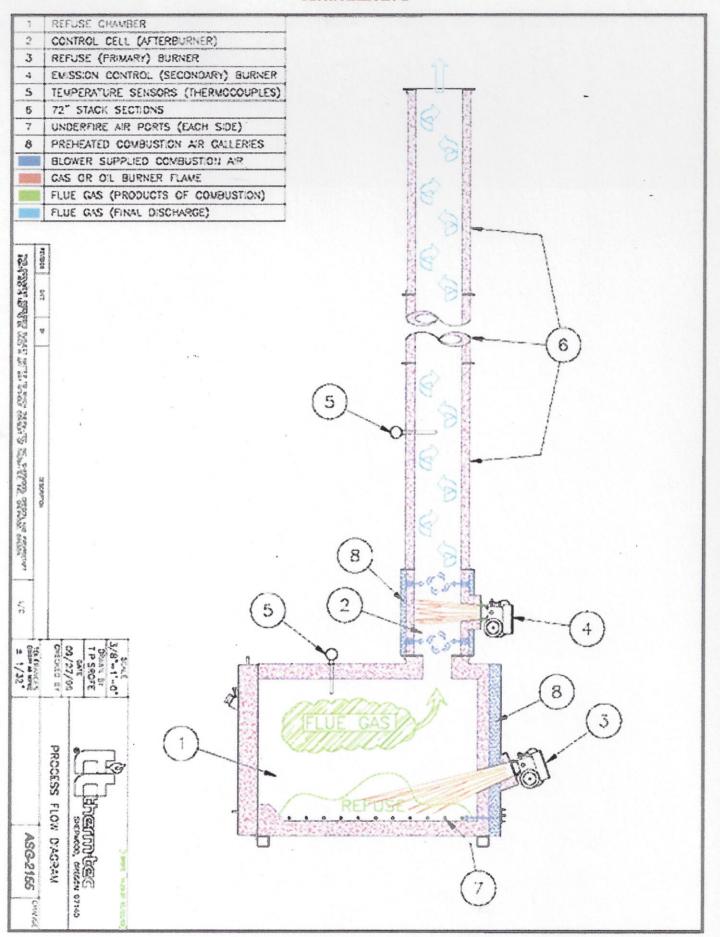






To see all the details that are visible on the screen, use the "Print" link next to the map.





Therm-Tec Model S-27 Small Animal Crematory

Process Description:

- 1. Batch load primary chamber with individual or multiple deceased small animals.
- 2. Adjust burn timer according to total weight of batch load.
- 3. Start unit with push button.
- 4. After secondary has reached operating temperature primary burner and auxiliary combustion air blower will start.
- 5. After burn down and cool down of unit remains are removed and returned to owner.



MSDS

A Division of PMC (Nova Scotia) Company

COMMERCIAL PROPANE MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

Commercial Propane

SYNONYMS:

Propane, Dimethylmethane, Odorized Propane, Stenched Propane,

Liquefied Petroleum Gas (LPG)

CHEMICAL NAME:

Propane

CHEMICAL FAMILY:

Petroleum Hydrocarbon

MANUFACTURER:

Plains Midstream Canada A Division of PMC Nova Scotia) Company

Suite 1400, 607 - 8th Avenue S.W.

Calgary, AB, T2P 0A7

Emergency Telephone:

1-866-875-2554

Canutec (613) 996-6666 or *666 Cellular

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	%	CAS#	ACGIH TLV-TWA
Propane	90-99	74-98-6	1,000 ppm / Alkane [C1-C4]
Ethane	0 - 5	74-84-0	1,000 ppm / Alkane [C1-C4]
Propylene	0 - 5	115-07-1	Not applicable - asphyxiant
n-Butane	0 - 2.5	106-97-8	1,000 ppm / Alkane [C1-C4]
iso-Butane	0 - 2.5	75-28-5	1,000 ppm / Alkane [C1-C4]

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER!!

EXTREMELY FLAMMABLE Will be easily ignited by heat, sparks or flames. Will form explosive mixtures with air. Vapors from liquefied gas are initially heavier than air and spread along ground. Vapors may travel to source of ignition and flash back. Vapors may cause dizziness or asphyxiation without warning. Some may be irritating if inhaled at high concentrations. Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite. Fire may produce irritating and/or toxic gases.

High fire hazard. Keep away from heat, spark, open flame, and other ignition sources.

POTENTIAL HEALTH EFFECTS

ROUTE(S) OF ENTRY

Eyes: Yes

Skin:

Yes

Inhalation:

Yes

Ingestion:

No

EYES

MODERATE TO SEVERE IRRITANT. Contact with liquid will cause cryogenic (freezer) burns or frostbite. Vapors may cause irritation to the eyes, conjunctiva, and mucous membranes, causing redness and tearing.

SKIN

SLIGHT TO MODERATE IRRITANT. Direct contact with the liquefied product causes burns & frostbite. Inhalation, skin and eye contact by liquid. Contact with liquid will cause cryogenic (freezer) burns or frostbite. High pressure skin injections are serious medical emergencies. The appearance of injury may be delayed for a few hours, but may cause tissue to become swollen, discolored and extremely painful; permanent damage or death may result without adequate medical treatment.

INGESTION

Propane is extremely unlikely to be swallowed and much more likely to be inhaled. If propane is swallowed severe burns will occur wherever propane contacts any tissues.

Plains Midstream Canada L.P.

COMMERCIAL PROPANE MSDS

INHALATION

Vapors may cause nose and throat irritation, anesthetic effects and central nervous system (CNS) depression. Inhalation may result in dizziness, drowsiness, headaches. An increased pulse rate may occur. Hyperventilation may develop. headache, dizziness, mood disturbances, numbness of the extremities, sleepiness, mental confusion, poor judgment and coordination, and memory loss may occur.

WARNING: The burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

CHRONIC EFFECTS/CARCINOGENICITY

n-Butane has been reported to cause some symptoms in the central nervous system. Not known to contain carcinogens. .

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash) conditions. Chronic respiratory disease, liver or kidney dysfunction, or pre-existing central nervous system disorders may be aggravated by exposure.

4. EIRST AID MEASURES

EYES

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

SKIN

This material will cause cryogenic (freezer) burns if clothing is frozen treat by immersing in lukewarm water for 30 minutes. Remove clothing unless stuck to a burn area in which case cut around the burn leaving cloth fixed to the burn. Obtain medical attention immediately.

INGESTION

This product is unlikely to be ingested and more likely to be inhaled. DO NOT INDUCE VOMITING BECAUSE OF DANGER OF BREATHING LIQUID INTO LUNGS. Seek immediate medical attention. Rinse mouth with water. Administer 1 to 2 glasses of water or milk to drink. Never administer liquids to an unconscious person.

If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Seek medical attention. Monitor for breathing difficulty.

INHALATION

Remove person to fresh air. If person is not breathing, ensure an open airway and administer CPR. If necessary, provide additional air or oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: -104°C (-156 °F) Tagliabue Closed Cup. FLAMMABLE GAS

AUTOIGNITION: 466°C (871°F)

LOWER EXPLOSIVE LIMIT (%): 2.2%

UPPER EXPLOSIVE LIMIT (%): 9.5%

FIRE AND EXPLOSION HAZARDS

EXTREMELY FLAMMABLE. DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED. Move containers from fire area if you can do it without risk. Containers may explode. Will be easily ignited by heat, sparks or flames. Will form explosive mixtures with air. Vapors from depressurization of compressed liquefied gas will cause frostbite or cryogenic burns. Vapours from liquefied gas are initially heavier than air and spread along ground. Vapors may travel to source of ignition and flash back. Vapours may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Container may explode in heat or fire. Runoff to sewer may cause fire or explosion hazard. Review NAERG Guide 115.

EXTINGUISHING MEDIA

Plains Midstream Canada L.P.

COMMERCIAL PROPANE MSDS

SMALL FIRES: Use the following fire - extinguishers: dry chemical or CO2.

LARGE FIRES: Water spray or fog. Water may be ineffective for fighting the fire, but may be used to cool fireexposed containers. Consider initial downwind evacuation for at least 800 meters (1/2 mile). Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Do not direct water at source of leak or safety devices; icing may occur. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

FIRE FIGHTING INSTRUCTIONS

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment.

Fire fighting activities that may result in potential exposure to high heat, smoke or toxic byproducts of combustion should require approved self-contained breathing apparatus (SCBA) with full-facepiece and full protective firefighting clothing.

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water.

6. ACCIDENTAL RELEASE MEASURES

ACTIVATE YOUR FACILITY'S SITE SPECIFIC EMERGENCY RESPONSE PLAN if available.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate nonessential personnel. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel. diking, sewers, etc. to confirm spill areas. see Section 8 for personal protection. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Do not direct water at spill or source of leak. Prevent spreading of vapors through sewers, ventilation systems and confined areas. Isolate area until gas has dispersed. CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

Carefully contain and stop the source of the spill, if safe to do so.

SMALL SPILLS: Prevent additional leaking of material if safe to do so. Remove or shut off

LARGE SPILLS: CALL Emergency Response Telephone Number. Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of low areas. The proper use of water spray may effectively disperse product vapors, preventing contact with ignition sources or areas /equipment that require protection. Do not discharge solid water stream pattern into the liquid resulting in splashing. Do not flush down sewer or drainage systems. Protect bodies of water by diking, if possible. Evacuation: Fire: If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

Caution: the application of water and/or fire fighting foam may cause the spilled liquid to liberate increased amounts of vapors, particularly when the water/foam temperature is warmer than the liquid. However, this effect may be desirable under certain conditions to evaporate a spill quickly.

Consideration should be given to environmental clean-up and waste material generation when determining if the use of large volumes of water is appropriate for non-fire emergency situations. Clean-up crews must be properly trained and must utilize proper protective equipment.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS

Handle as a flammable gas. Keep away from heat, sparks, and open flame. No smoking or open flame in storage, use of handling areas. Keep containers closed and clearly labeled. Ground all containers and transfer vessels when handling. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition. Use only with adequate ventilation. Avoid breathing vapors. Do not use as a cleaning agent. Wash thoroughly after handling. Electrical equipment should be approved for classified area. Emergency eye wash capability should be available in the vicinity of any potential splash exposure.

STORAGE PRECAUTIONS

Store in a well ventilated area. This storage area should comply with NFPA 30 ("Flammable and Combustible Liquid Code"). Avoid storage near incompatible materials.

The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

NATURALLY OCCURRING RADIOACTIVE MATERIAL (NORM):

Industry experience indicates that propane contains small amounts of a radioactive gas called radon; radon decays into other radioactive products (called radon daughters). These naturally occurring radioactive materials (called NORM) can accumulate in production and process equipment handling propane liquids. Scales, deposits, and sludges from this equipment may have a significant accumulation of NORM. Gamma radiation above background may be detected external to equipment contaminated with NORM; such equipment should be assumed to be internally contaminated with long half-life decay products that emit alpha radiation, which is a radiation hazard if inhaled. Steps should be taken to minimize skin and inhalation exposure to NORM dusts/mists by wearing personal protective clothing [such as disposable Tyvek (@DuPont)], utilizing respiratory protection (minimum of HEPA filter), and practicing good personal hygiene. Please refer to API Bulletin E2, "Bulletin on Management of Naturally Occurring Radioactive Materials in Oil and Gas Production", April 1, 1992 for additional information on managing NORM.

WORK/HYGIENIC PRACTICES

Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not eat, drink or smoke in areas of use or storage. Do not use gasoline or solvents (naphtha, kerosene, etc) for washing this product from exposed skin areas. Waterless hand cleansers are effective.

Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use adequate ventilation to keep vapor and gas concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use explosion-proof equipment and lighting.



EYE/FACE PROTECTION

Wear appropriate eye/face protection to prevent contact with the liquid that could result in burns or tissue damage from frostbite.

SKIN PROTECTION

Avoid repeated or prolonged skin contact. Insulated gloves should be used to prevent the potential of frostbite or

Plains Midstream Canada L.P.

COMMERCIAL PROPANE MSDS

cryogenic burns.

RESPIRATORY PROTECTION

This product is a known asphyxiant and air supplied respirators are required if there is a potential for decreased oxygen concentrations.

If exposure assessment indicates NO reduced oxygen content: use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, or any other circumstance where an air-purifying respirator may not provide adequate protection.

When assessing the proper type of respiratory protection, also consider the occupational exposure limits applicable to individual ingredients.

Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, CSA Standard "Selection, Use and Care of Respirators" (Z94.4-02) and NIOSH Respirator Decision Logic for additional guidance on respiratory protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

A colorless, liquefied gas.

ODOR

A slight sweet hydrocarbon odor. This product may be odorless for some individuals.

BASIC PHYSICAL PROPERTIES

BOILING POINT:

-42.1°C (-40°F) @ 1 ATM

VAPOR PRESSURE:

7162 mm Hg at 25 deg C

MELTING POINT:

-189.7 DEG C,

VAPOR DENSITY (Air = 1):

1.56 @ 0 ° C (AIR= 1)

SPECIFIC GRAVITY:

0.5853 @ -45°C

SOLUBILITY (H₂O):

Insoluble

PERCENT VOLATILES:

100

ODOR THRESHOLD:

5,000-20,000 ppm

pН

Not applicable

10. STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITIONS TO AVOID (STABILITY)

Material is stable under normal conditions but will rapidly volatilize. Avoid high temperatures, open flames, sparks, welding, smoking and other ignitions sources.

INCOMPATIBLE MATERIALS

Keep away from strong oxidizers, ignition sources and heat.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

HAZARDOUS POLYMERIZATION: Will Not Occur.

11. TOXICOLOGICAL INFORMATION

CHRONIC EFFECTS/CARCINOGENICITY

n-Butane has been reported to cause some symptoms in the central nervous system.

Product carcinogenicity according to: NTP: No

IARC: No

ACGIH: No

COMMERCIAL PROPANE MSDS

12. ECOLOGICAL INFORMATION

Environmental Fate: volatilization is expected to be the dominant fate process. Provincial, state and federal regulations may require notification of spills. Keep out of sewage, drainage and waterways. Report spills and releases, as applicable, under provincial and local regulations.

13. DISPOSAL CONSIDERATIONS

Incinerate at a licensed disposal facility. Dispose of waste in accordance with all applicable federal, provincial, and/or local regulations.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME:

LIQUIFIED PETROLEUM GAS,

HAZARD CLASS:

2.1 Flammable Gases

TDG/DOT IDENTIFICATION NUMBER: UN1075

TDG/DOT SHIPPING LABEL:

Flammable Gas

SHIPPING PAPER DESCRIPTION

LIQUIFIED PETROLEUM GAS, Class 2.1, UN1075

15. REGULATORY INFORMATION

Canada

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)



Workplace Hazardous Materials Information Systems (WHMIS): This product has been classified in accordance with the hazard criteria of the CPR (Controlled Product Regulations), and the MSDS contains all of the information required by the CPR.

Class A, (Compressed Gas)

Class B, Division 1 (Flammable Gas)

All ingredients are listed on the Domestic Substance List (DSL)

CEPA Schedule 1: Ethane 74-84-0 is on the list.

Priority Substances Lists 1 and 2: there are no ingredients listed.

NFPA HAZARD RATING -

HEALTH:

Slight

FIRE:

1

Extreme

REACTIVITY: 0

Negligible

COMMERCIAL PROPANE MSDS

16. OTHER INFORMATION

Issued by: Health and Safety Department, Plains Midstream Canada L.P. Telephone 403-261-7466 Technical Development by Deerfoot Consulting Inc. Telephone 403-720-3700

Acronyms:		
ANSI	=	American National Standards Institute
ACGIH	=	American Conference of Governmental Industrial Hygienists
API	=	American Petroleum Institute
CEPA	=	Canadian Environmental Protection Act
HMIS	=	Hazardous Materials Information System
MSHA	=	Mine Safety and Health Administration
NAERG	=	North American Emergency Response Guide
NFPA	=	National Fire Protection Association
NIOSH	=	National Institute of Occupational Safety and Health
NTP	==	National Toxicology Program
OSHA	=	U.S. Occupational Safety & Health Administration
ppm	=	parts per million (volume/volume)
SCBA	=	Self-Contained Breathing Apparatus
WHMIS	=	Workplace Hazardous Materials Information System - Canadian

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information presented in the Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. However, neither Plains Midstream Canada L.P., Deerfoot Consulting Inc. nor any of their subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use.

Emission Units Table

(includes all emission units and air pollution control devices that will be part of this permit application review, regardless of permitting status)

Emission Unit ID ¹	Emission Point ID ²	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type ³ and Date of Change	Control Device 4
SI	51	CREMATORY	2005	85# hs		
52	52	CREMATORY	2015	85ths	NEW	
		-				
		, *•				
		-				
		op garmen die einstern den belande eins Enneuer aus en verein einste eins geben der einstelle eins der einstelle der der der der der der der der der de		***************************************		*************
		**************************************		-		

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		A Company of the Comp				

¹ For Emission Units (or Sources) use the following numbering system:1S, 2S, 3S,... or other appropriate designation.

² For Emission Points use the following numbering system:1E, 2E, 3E, ... or other appropriate designation.

³ New, modification, removal

⁴ For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

Page _____ of ____

Emission Units Table 03/2007

Attachment J EMISSION POINTS DATA SUMMARY SHEET

							Table 1:	Emissions D	ata						
Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type ¹	Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)		Air Pollution Control Device (Must match Emission Units Table & Plot Plan)		Emiss (chemical	ime for ion Unit processes	All Regulated Pollutants - Chemical Name/CAS³ (Speciate VOCs & HAPS) Maximum Potential Uncontrolled Emissions 4		Maximum Potential Uncontrolled		ximum tential itrolled ssions ⁵	Emission Form or Phase (At exit conditions, Solid, Liquid or	Est. Method Used ⁶	Emission Concentration ⁷ (ppmv or mg/m ⁴)
		ID No.	Source	ID No.	Device Type	Short Term ²	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr	Gas/Vapor)		
SI	VERT. STACK	51	CREMATOR		A	NI	A	PM-10 50 X NO K VO C	.60	1.09	N	JA.	GAS VAPOR	ST	PPM
S2	UPWARE VERT. STACK	S2	CREAMANON	N/	4	N/	A	PM 10	.60	1.09	<i> U</i>	A	GAS UAPOR	ST	PPM

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).

List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO. CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (Including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.

Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁵ Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (66 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

Jan 06 15 01:25p

Attachment J **EMISSION POINTS DATA SUMMARY SHEET**

			Table 2: Rel	ease Param	eter Data				
Emission	Inner		Exit Gas		Emission Point El	evation (ft)	UTM Coordinates (km)		
Point ID No. (Must metch Emission Units Table)	Diameter (ft.)	Temp. (°F)	Volumetric Flow ¹ (acfm) at operating conditions	Velocity (fps)	Ground Level (Height above mean sea level)	Stack Height ² (Release height of emissions above ground level)	Northing	Easting	
51	10-611	1400	1250	20.8	1550 ft.	18'-2"			
52	1-1"	1400	1250	20.8	1550 ft.	18'-2"			
						above the second se			
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						•			

¹ Give at operating conditions. Include inerts.
² Release height of emissions above ground level.

Attachment K

FUGITIVE EMISSIONS DATA SUMMARY SHEET

The FUGITIVE EMISSIONS SUMMARY SHEET provides a summation of fugitive emissions. Fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Note that uncaptured process emissions are not typically considered to be fugitive, and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET.

Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions).

	APPLICATION FORMS CHECKLIST - FUGITIVE	EMISSIONS
1.)	1.) Will there be haul road activities?	*
	☐ Yes X No	And the second
	☐ If YES, then complete the HAUL ROAD EMISSIONS UNIT DATA SH	IEET.
2.)	2.) Will there be Storage Piles?	
	☐ Yes X No	
	☐ If YES, complete Table 1 of the NONMETALLIC MINERALS PROCES	SING EMISSIONS UNIT DATA SHEET.
3.)	3.) Will there be Liquid Loading/Unloading Operations?	
	☐ Yes X No	
	☐ If YES, complete the BULK LIQUID TRANSFER OPERATIONS EMIS	SSIONS UNIT DATA SHEET.
4.)	4.) Will there be emissions of air pollutants from Wastewater Treatment Eva	aporation?
	☐ Yes X No	
	$\hfill \square$ If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.	
5.)	5.) Will there be Equipment Leaks (e.g. leaks from pumps, compressors, devices, open-ended valves, sampling connections, flanges, agitators, c	
	☐ Yes X No	
	☐ If YES, complete the LEAK SOURCE DATA SHEET section of the CUNIT DATA SHEET.	HEMICAL PROCESSES EMISSIONS
6.)	6.) Will there be General Clean-up VOC Operations?	
	☐ Yes X No	
	$\hfill \square$ If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.	
7.)	7.) Will there be any other activities that generate fugitive emissions?	
	☐ Yes X No	
	☐ If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET or	the most appropriate form.
	f you answered "NO" to all of the items above, it is not necessary to complete Summary."	the following table, "Fugitive Emissions

Attachment L Emission Unit Data Sheet (INCINERATOR)

Control Device ID No. (must match List Form):

	Equipment	Information				
1.	Manufacturer: Therm Tec	2. Model No. S-27				
3.	out) of (1) the primary combustion chamber, (2) the auxiliary burners, and (5) dampers with special emp	cinerator showing the location and dimensions (inside and a secondary combustion chamber, (3) the flame port, (4) chasis on dimensions of the flame port and secondary e minimum distance the gas travels through the secondary				
4.	Rated capacity of the incinerator for the type of waste	e to be burned: Maximum: 85 lb/hr				
		Typical: 40 lb/hr				
		Annual: /55 tons/yr				
5.	By what means is waste charged?	☐ Continuous ☐ Periodically				
6.	Type: Multiple Chamber Single Chamber	Other, specify:				
7.	Projected operating schedule:	hr/day 365 day/yr				
	Primary Comb	ustion Chamber				
8.	Volume: 27 ft ³	9. Effective grate area: NA ft²				
10.	Maximum temperature: /500 °F	11. Burning rate: 9.55 lb/ft²/hr				
12.	Heat release in primary chamber:	13. Total heat release in incinerator:				
,	500,000/18,518 BTU/hr/ft ³	750,000/22,935 BTU/hr/ft3				
	Secondary Com	bustion Chamber				
14.	Volume: 5. 7 ft ³	15. Cross sectional area: 92 ft²				
16.	Volume of gas through secondary combustion	17. Gas velocity through secondary combustion				
	chamber: / 250 ACFM@ / 49/ °F	chamber: 208 ft/sec				
18.	Minimum gas temperature: 1400 °F	19. Minimum retention time of gas: 1/3 sec				
20.	Minimum distance of gas travel through secondary	21. Location of air admission:				
	combustion chamber: 6'2" ft					
Lane	Flam	e Port				
22.	Flame port area: 35 ft²	23. Velocity through flame port: / O, 4/ ft/sec				
	Dan	npers				
24.	Type: NONE	25. Number NA				
26.	Diameter: 1/A inches	27. Capacity: ///// ACFM@ °F				

		Combu	stion Air				
28.	Type of draft: Natural Sliding damper Forced Barametric damper Induced Windshielding? Yes No		29. If draft is forced or induced, describe blowers: Number HP rating			ibe ID fans or	
30.	Theoretical air/refuse ratio: /. &	heoretical air/refuse ratio: / 8 lb air/lb refuse		Rated flow		ft³/min	
31.	Percent of total air applied as:			Rated speed		RPM	
	NIA	overfire air underfire air	Fan rated draft			in. H ₂ O	
Auxiliary Burners							
32.	32. Proposed type and fuel: Packaged Power Gas Burner Propane) 33. Primary Burner 34. Secondary Burner						
33.	Primary Burner		34.	Secon	dary Burner		
	Capacity: 8	MMBTU/hr	Capa	city: , 8		MMBTU/hr	
	Number: /	Number: /					
	Manufacture: MIDCO	Manufacture: MIDC∈					
	Model: J-83DS	Model: J-83DS					
	Estimated capacity: 400, 000	Estimated capacity: 450,000 BTU/hr					
	Fuel: PROPANE	Fuel: PROPAINE					
	How controlled? Thermocouple	How controlled? High Low OFF					
	Is there a temperature indicator?	Is there a temperature indicator? ☑ Yes ☐ No					
Miscellaneous Devices and Controls							
35.	Automatic loading device.	∕es ⊠ No	36. Self clo	osing doors.	Yes	⊠ No	
37.	Sparks arrestor Yes	⊠ No	38. Flame	failure protection	equipment [Yes No	
39.	Method of creating turbulence of gases. Tangential Air Describe. Piping and Band Band Mounting	40. Method of cleaning secondary or settling chamber. Describe. Vertical - Self Cleaning					
41. Other interlocking devices or controls. If yes, describe. X Yes No Secondary chamber temperature interlock Preneat Set point must be achieved before Primary burner will ignite.							
42.	Indoor Installation: X Yes	□No	43. Outdoo	or Installation:	Yes	⊠ No	
-	If yes, describe method of supplying combustion air.						
	Louvered Opening -		>				

Attachment L

Stack or Vent Data

44. Inside diameter or dimensions: / '_ / " ft	45. Gas exit temperature: /400 °F
46. Height: / 8' 2" ft	47. Stack serves: This equipment only
48. Gas flow rate: ft/min	Other equipment also (submit type and rating of all other equipment exhausted through this stack
49. Estimated percent of moisture: /4,4 %	or vent)
W	aste
50. Source of waste: Hospital Restaura	ant Store Industry Apartment
▼ Crematory	
51. Describe fully, in detail, the composition of waste fee Small Animals	d to the incinerator:
52. Expected BTU/lb as fired: 8500 BTU/lb	53. Daily amount: 450 lb
54. Does incinerator have a charge hopper ☐ Yes No	55. What is the volume of the charge hopper?
56. Does the charge hopper have automatic control? ☐ Yes ☐ No NA	57. Is the waste charged to the incinerator weighed?
58. Is the secondary chamber preheated prior to charging waste? ☑ Yes ☐ No	59. At what secondary temperature does waste charging begin? /600 °F
60. Is the ash waste quenched? ⊠ Yes ☐ No	61. Is all the waste burned generated on site? ☐ Yes ☐ No
62. For hospital waste, is the ash inspected for recognize	able combustible components? Yes NA No
63. For hospital waste, are recognizable combustible cor	mponents of the ash reburned? Yes NA No
64. Is any waste received from outside the local government	nent boundary?
65. Are hazardous or special waste burned?	66. Are potential infectious waste burned?
☐ Yes 🔲 No	☐ Yes ☐ No
If yes, please describe:	
67. How will the waste material from process and control Remains Returned to Owner	equipment be disposed of?
68. Method of charging waste solids: ☑ Manual ☐ Manual charge hopper ☐ Automatic charge hopper ☐ Other, specify:	69. Method of feeding liquids: Lab pack Injection as a primary burner fuel Injection as a secondary burner fuel Other, specify:
70. Rated steam flow – heat recovery boiler:	71. Rated pressure – recovery boiler:
N/A lbs/hr	N/H PSIG

Attachment L

Emissions Stream

Pollutant	Pounds per Hour lb/hr	grain/ACF	@°F	PSIA	Tons per Year Tons/yr	Parts per Million ppm
co	.007		1490		.007	.6
Hydrocarbons	NA		u		NA	NA
NO _x	013		И		.13	NA
Pb	NA		и	3	NA	NA
PM ₁₀	.07		u		•07	NA
SO₂	011	-	и	2	-11	NA
VOCs	•13		и		.13	NA
Other (specify)					1	
4,14,7,144						0
			2			

^{73.} If an Air Pollution Control Device is not submitted, the emission rates should be the same as those reported home "Maximum Potential and Maximum Actual Emissions" on the Emission Points Data Summary Sheet.

Fuel Usage Data

75.	Estimated a	annual fuel cost:	:	\$ 0	28,908			
76.	Firing rate:	Maximum: ,	85	mmBTU/hr	77. Fuel type:	☐ Natural Gas	☐ Coal	
		Typical: • 45		mmBTU/hr	7	☐ Fuel Oil, No.		
		Design: 1.6	>	mmBTU/hr		Other, specify:	PROPANE	,
78.	Typical hea	iting content of f	fuel: 91,600	BTU GAL	79. Typical fuel	sulfur content:	NA	wt. %
80.	Typical fuel	ash content:	NA	wt. %	81. Annual fuel	usage: /3, /4	10	
82.	 Please complete an Air Pollution Control Device Sheet(s) for the control(s) used on this Emission Unit, if applicable. 							
83.	Have you ir	ncluded the air	pollution ra	tes on the Em	issions Points D	ata Summary Shee	et? Yes	

^{74.} Emissions rates should be substantiated by submitting stack test data and/or calculations.

p.15

Attachment L

84. Proposed Monitoring, Recordkeeping, Reporting, and Testing

High Meadow Pet Crematory

Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the

MONITORING PLAN: Please list (1) describe the process parameters and how they were chosen (2) the ranges and how they were established for monitoring to demonstrate compliance with the operation of this process equipment operation or air pollution control device.

Load & 450 # DAY

Visually observe secondary & Primary Temperature

TESTING PLAN: Please describe any proposed emissions testing for this process equipment or air pollution control device. Stack test provided

RECORDKEEPING: Please describe the proposed recordkeeping that will accompany the monitoring.

Hours of operation Daily load Porte

REPORTING: Please describe the proposed frequency of reporting of the recordkeeping.

As Required

85. Please describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty. Charge Rate of 450# DAY OR LESS

Secondary chamber operates below 2000 F Primary chamber operates below 1600 F Inspect Refractory, burners, controllers, Thermocouple Repair or Replace as needed



Attachment L

Bestech Environmental Resources Inc. 138 Industrial Park Drive Woodstock, AL. 35188 Phone: (205) 428-0210 Fax: (205) 428-0211

Afterburner System

Therm Tec Model S-27 Afterburner:

The afterburner (control chamber) consist of a vertical combustion chamber setting on top of the primary chamber. The afterburner has two distinct auxiliary combustion air zones, each with six air injectors installed for tangential air injection, creating cyclonic air flow to assure complete mixing of the exhaust gas with the combustion air. The auxiliary combustion air volume is controlled by a modulating air damper based on afterburner temperature.

See flow diagram.

Attachment

Therm Tec, Inc.

P.O. Box 1105 Tualatin, Oregon 97062 Phone (503) 625-7575 (800) 292-9163 Fax (53) 625-6161

Calculations Based On Information From Air Pollution Engineering Manual AP-42
And "FIRE 6.22" Emissions Factors Program From U.S. EPA

Reference Calculations Provided For: SCC-5-02-001-1
(Standard Commercial Code Number For Human & Animal Cremation)

Calculations For:

Model Number

S-27

Animal Crematory

Operating Schedule			Throug	ghput			
				Pounds	Tons		
Hrs/Day	10	Lbs/Hr	85	85	0.0425		
Days/Yr	364	Hr/Day	10	850	0.425		
		Days/Wk	7	5,950	2.975		
Hrs/Yr (Avg)	3640	Weeks/Yr	52	309,400	154.7		
		Days/Year	364]			
		Ton/Year	154.7]			
Factors are From		Fire 6.22					
EPA Guidelines		Factor					(ACTUA
		(Lbs/ton)					From To
Pollutants		Burned	Lbs/Hr	Lbs/Day	Lbs/Year	Tons/Year	Repoi
PM-10 (Particulate)		4.7	0.20	2.00	727	0.36 *	0.13
SOx Table		2.5	0.11	1.06	387	0.19	0.15
NOx		3.0	0.13	1.28	464	0.23	0.19
VOC Table		3.0	0.13	1.28	464	0.23	0.19
CO		1.0	0.04	0.43	155	0.08 *	0.01
narge Using AP-42 - Fire 6.2	2 Calculatio	Totals	0.60	6.04	2,197	1.10	

Total Using ACTUAL Test Reports For PM-10 & CO And EPA Factors (About 50% less than calculated at the minimum levels considered by EPA)

0.80

Actual Performance As Recorded From Independent Test Laboratory

* PM-10 (Particulate)

CO

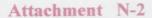
0.07 0.007 0.70 254.80 0.07 25.48 0.13

Average acceptable Pollutants per a single category is approximately 25 tons per year (or a total of 125 tons per year from a facility)

Combustion Efficiency: 99.995%

Note: Test Report Submitted with application. (PM-10 Lower than Fire 6.22 calculation used for the above)

Therm-Tec, Inc. 20525 SW Cipole Road Sherwood, Orgon 97140 After CH N





13585 N.E. Whitaker Way • Portland, OR 97230 Phone (503)255-5050 • Fax (503)255-0505 www.horizonengineering.com

Project No. 1730

SOURCE EVALUATION TEST REPORT

THERM-TEC, INC.

Model S-27 Incinerator Exhaust

Particulate and Opacity
Pathological Waste Burning

January 22 & 23, 2002

Prepared for Therm-Tec, Inc. 20525 SW Cipole Road Sherwood, Oregon 97140

by
Michele R. Kinney &
David R. Rossman, P.E.



Expires 12/31/02

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1. CERTIFICATIONS

1.1 Field Technician

I hereby certify that the test detailed in this report, to the best of my knowledge, was accomplished in conformance with applicable rules and good practices. The results submitted herein are accurate and true to the best of my knowledge.

Name: Tim J. Hertel

Signature Tim THAND Date 2/25/02

1.2 Report Reviewer

I hereby certify that I have reviewed this report and find it to be true and accurate, and in conformance with applicable rules and good practices, to the best of my knowledge.

Name: David R. Rossman, P.E.

Signature David Rossmen Date 2/26/02

2. INTRODUCTION

2.1 Client:

Therm Tec, Inc.

2.2 Physical Location:

20525 SW Cipole Road

Sherwood, Oregon 97140

2.3 Mailing Address:

P.O. Box 1105

Tualatin, Oregon 97062

2.4 Test Log

Test Date	Source Name	Pollutants and Test Methods (EPA
		unless otherwise specified)
January 22 & 23, 2002	Incinerator	Method 5 Particulate
	Model S-27	Method 10 for CO

2.5 Test Purpose: Testing on the incinerator was for air quality information.

2.6 Background Information: None.

2.7 Participants

Horizon Personnel:

Tim J. Hertel, Team Leader

Brian Galvin, Field Technician

Michael E. Wallace, QA/QC Officer

David R. Rossman, P.E., Report Review

Michele R. Kinney, Technical Writer

Test Arranged by and Test Plan Sent to: Dean Robbins, Therm Tec, Inc.

Source Operator: Gary Thorn

3. SUMMARY OF RESULTS

3.1 Table of Results

Table 1

Therm-Tec, Inc. Incinerator Model S-27 Exhaust – Test Results

Test Date: January 22 & 23, 20	002				
	Units	Run 1	Run 2	Run 3	Average
Start Time		11:53	1437	10:10	
End Time		13:10	16:01	11:54	
Sampling Time	minutes	60	60	60	60
Sampling Results					
Particulate Conc.(Actual)	gr/scfd	0.037	0.027	0.020	0.028
Conc. @ 7% O ₂	gr/scfd	0.046	0.035	0.023	0.035
Rate	lb/hr	0.1	0.06	0.05	0.07
Opacity	%	0	0	0	0
Sample Volume	dscf	40.3	32.2	39.9	37.4
Sample Weight, Total	mg	97.7	55.3	52.1	68.4
Percent Isokinetic	%	104	100	105	104
O ₂	%	9.7	10.5	8.6	9.6
CO ₂	%	7.8	7.0	8.0	7.6
CO Concentration	ppmv	14	0	2	6
Rate	lb/hr	0.02	0.00	0.003	0.007
Source Parameters					
Flow Rate (Actual)	acf/min	1,400	1,070	1,280	1,250
Flow Rate (Standard)	dscf/min	306	252	301	286
Temperature	°F	1,594	1,435	1,446	1,491
Moisture	%	14.2	14.7	15.2	14.4
Process/Production Data					
Fuel – natural gas					
Waste Charge Weight (dogs)	lbs	441→	Cont. R1	156	
Control Burner Temp.	°F	1,681	1,651	1,640	1,657
Refuse Burner Temp.	°F	1,444	1,681	1,138	1,421

3.2 Description of Collected Samples:

Filters: Dark Gray, Light Gray and Spotted Tan

Impinger Contents: Clear

3.3 Discussion of Errors and Quality Assurance Procedures

This table is taken from a paper entitled "Significance of Errors in Stack Sampling Measurements", by R.T. Shigahara, W.F. Todd and W.S. Smith. It summarizes the maximum error expressed in percent, which may be introduced into the particulate test procedures by equipment or instrument limitations.

Measurement	% Max Error
Stack Temperature Ts	1.4
Meter Temperature Tm	1.0
Stack Gauge Pressure Ps	0.42
Meter Gauge Pressure Pm	0.42
Atmospheric Pressure Patm	0.21
Dry Molecular Weight Md	0.42
Moisture Content Bws (Absolute)	1.1
Differential Pressure Head ΔP	10.0
Orifice Pressure Differential ΔH	5.0
Pitot Tube Coefficient Cp	2.4
Orifice Meter Coefficient Km	1.5
Diameter of Probe Nozzle Dn	0.80

QA procedures outlined in the test methods were followed, including equipment specifications and operation, calibrations, sample recovery and handling, calculations and performance tolerances. On-site quality control procedures include pre- and post-test leak checks on trains and pitot systems. If pre-test checks indicate problems, the system is fixed and rechecked before starting testing. If post-test leak checks are not acceptable, the test run is voided and the run is repeated. Thermocouples and readouts are verified in the field to read ambient prior to the start of any readings.

The results of the quantifiable QA checks for the test runs are on the Field Data sheets and are summarized on Table 2a. Table 2b is a compilation of equipment calibration checks.

Table 2a

QA/QC Checks - Manual Sample Train Operations

	Meter Lea	ak Checks	Pitot Syster	n Leak Check
Acceptable Result	Pre-test <0.02 cfm ¹	Post-test <0.02 cfm ¹	Pre-test stable for 15 seconds @ >3 in.	Post-test stable for 15 seconds @ >3 in.
Incinerator E	xhaust			
Run 1	0.003	0.004	stable	stable
Run 2	0.010	0.008	stable	stable
Run 3	0.008	0.013	stable	stable

Table 2b

QA/QC Checks – Manual Sampling Equipment Calibrations

Acceptable Results		0.97 and 1.03	y within 5% last calib.
	Pre-test	Post-test	
No. 6	1.00669	1.00018	0.7%

Note: y is the ratio of reading of standard meter to test meter

Analyzer system checks performed are noted on the Calibration Field Record sheet, with procedures documented in the QA/QC section in the Appendix. All calibration standards used in the testing were EPA Protocol 1 or traceable to NIST standards. Certificates for the gases are in the Appendix. Tables 2c and 2d summarize the quantifiable QA checks for the continuous emissions monitors.

^{1 &}lt;0.02 cfm (pre-test at 15 inches Hg vacuum; post-test at vacuum >highest vacuum during test of 57 post-test) or 4% of average sampling rate (whichever is less).

Table 2c

QA/QC Checks – Continuous Analyzers, Daily Checks

	Cal. Error <2% span or <5% span ²	System Bias <5%	Cylinder value, % of span ³	Instrument Span
O ₂ :				25%
high	0%		84%	
mid	0%	0%	46%	
zero	0%	0%	0%	
CO ₂ :				25%
high	0%	-	87%	
mid	1%	0%	50%	
zero	0%	0%	0%	
CO:				1000 ppmv
high	0%		87%	
mid	0%	3%	50%	
zero	0%	0%	0%	
Response	Time:	30-seconds		

Table 2d

QA/QC Checks – Continuous Analyzers Individual Run Checks

	O ₂	CO ₂	CO
Zero Drift	(<3% spar	1)	
Run 1	0%	0%	0%
Run 2	0%	0%	0%
Run 3	0%	0%	0%
Calibratio	n Drift <3%	% span	
Mid-Range	е		
Run 1	-		
Run 2			
Run 3			

² Calibration Error specifications: 2% for Methods 3A, 6C, and 7E; 5% for Method 25A.

³ Acceptable values for all calibration gases except VOC: High-level=80-100% of span, mid-level=40-60% of span; for VOC calibration gases: high-level=80-90%, mid-level=45-55%, low-level=25-35%.

	Attachn	nent N-2	
Mid-Range			
Run 1		-	
Run 2			
Run 3		-	
Mid-Range			
Run 1	0%	0%	0%
Run 2	0%	0%	2%
Run 3	0%	0%	0%
High-range			
Run 1		-	
Run 2			0%
Run 3	1%	0%	1%

4. SOURCE DESCRIPTION AND OPERATION

4.1 Process and Control Device Description and Operation:

The incinerator is a Therm-Tec Model S-27 for pathological waste burning. One batch (burned through Runs 1 and 2) consisted of about 440 pounds of waste (dogs) during the testing. Primary and secondary burners were both fired by natural gas.

The refractory lined stack has an outer diameter of 18 inches and an inner diameter of about 12 inches. Process flow diagrams in the Appendix describe the unit.

4.2 Test Ports: Ports and traverse points are described and diagrammed on the Field Data sheets.

4.2.1 Test Duct Characteristics:

Construction: Steel Shape: Circular

Size: 12 7/16-inch inner diameter

Orientation: Vertical

Flow straighteners: None

Extension: None

Cyclonic Flow: No Cyclonic flow expected.

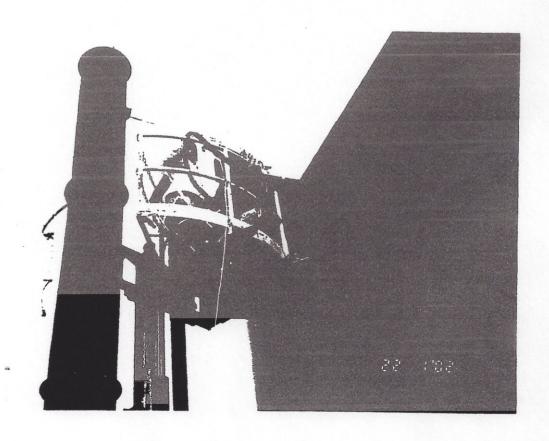
Meets EPA M-1 Criteria: Yes

4.3 Operating Parameters: See Production/Process Data section of Appendix.

4.4 Process Startups/Shutdowns or Other Operational Changes During Tests: Process was continuous during testing.

4.5 On-Site Photographs

Figure 1
Sampling Location and Setup



5. SAMPLING AND ANALYTICAL PROCEDURES

5.1 Sampling Procedures

5.1.1 Sampling and Analytical Methods

Testing was conducted in accordance with EPA Methods in <u>Title 40 Code of</u> Federal Regulations Part 60 (40 CFR 60), Appendix A, July 1, 2000.

Flow Rate: EPA Methods 1 and 2 (S-type pitot w/particulate traverses)

Moisture: EPA Method 4 (incorporated w/ M-5)

Particulate: EPA Method 5 (front and back halves)

CO₂ and O₂: EPA Method 3A

CO: EPA Method 10

Opacity: EPA Method 6 (six minutes per test)

5.1.2 Method Modifications or Deviations

None.

5.2 Sampling Train Diagrams

Figure 2
EPA Methods 1, 2, 4, & 5 Particulate Sample Train Diagram

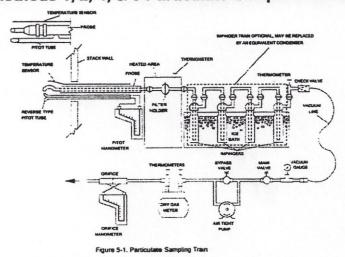
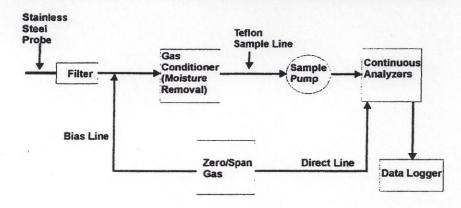


Figure 3
EPA Methods 3A & 10 Analyzer Sample System Diagram



5.3 Horizon Test Equipment

5.3.1 Support Equipment

Equipment Name	<u>Identification</u>
Meter Box	Graseby Model 2010A, Horizon No. 6
Inclined Liquid Manometer	Incorporated with H.E. No. 6
Pitots and Thermocouples	3s-1
Electronic Micromanometer	Shortridge Micromanometer No. 2
Nozzles	Quartz
Barometer	Test Van II

A bare quartz probe with integral nozzle was used for the particulate sampling. A separate pitot was used to check velocity pressure at the sampling points.

5.3.2 Continuous Emissions Monitors and Methods

Ğas	Brand	Model	Range	Measurement Method	d Metho	C
O_2	Servomex	1400	0-25%	Paramagnetic	3A	
CO ₂	Servomex	1400	0-25%	Chopperless NDIR	3A	
CO	Thermo Env	48	0-1000 ppm	Gas Filter Correlation	10	

5.3.3 Continuous Emissions Monitors Sampling Setup

Sampling:

Above listed gases.

Probe:

Stainless

Conditioning:

Ice-Cooled Sample Conditioner

Sample Line(s):

Teflon, unheated

Pump:

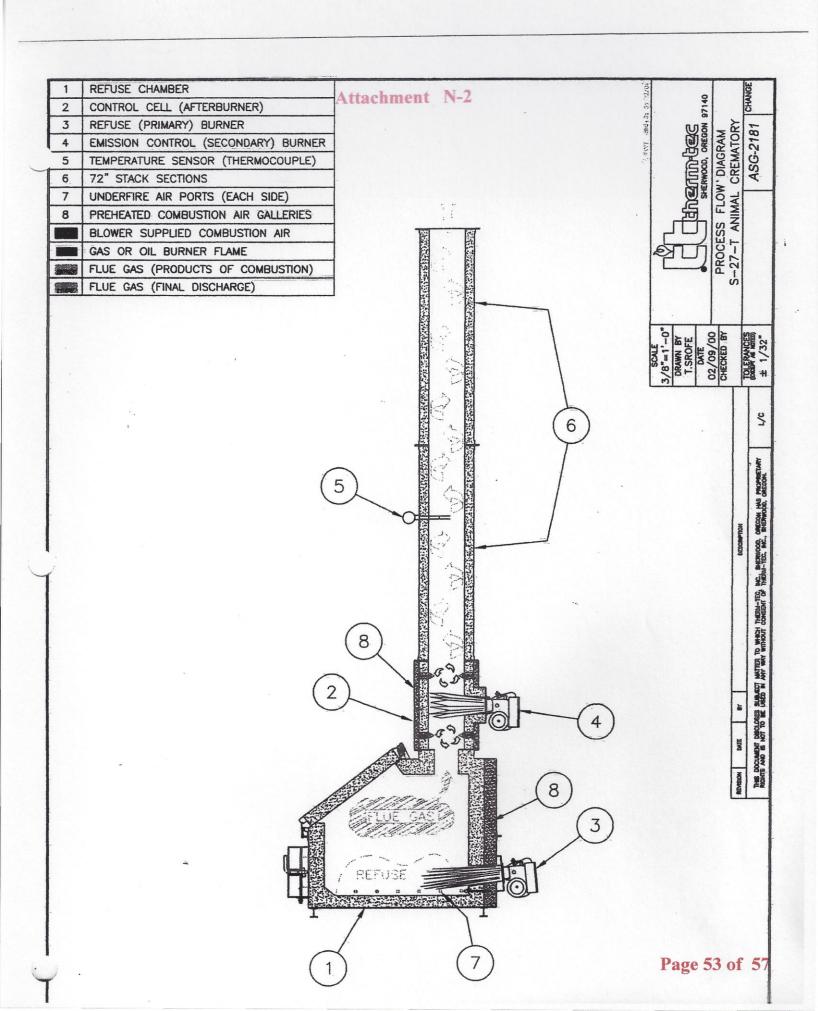
Teflon lined

Data Logger:

ESC Model 8816

6. DISCUSSION

The results of the testing should be valid in all respects. All quality assurance checks including leak checks, instrument checks, and calibrations, were within method-allowable tolerances.



Attachment O

Reference back to page 5 of attachment L

Legal Advertisement

Notice is given that High Meadow Pet Crematory LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Modification Permit for a pet crematory located on 158 High Meadow Pass near Morgantown, in Monongalia County, West Virginia. The latitude and longitude coordinates are: lat 39.518252/ lng 80.023992

The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be: CO/.007 tons/yr, NOx/.13 tons/yr, PM10/.07 tons/yr, SO2/.11 tons/yr, VOCs/.13 tons/yr.

Startup of operation is planned to begin on or about the 3rd day of May, 2015. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304)926-0499, extension 1227, during normal business hours.

Dated this the 28^{H} day of January, 2015.

By: High Meadow Pet Crematory LLC
James D. Ward III
Member/Operator
158 High Meadow Pass
Fairmont, WV 26554

010055880 January 29 AIR QUALITY PERMIT NOTICE Notice of Application Legal Advertisement Notice is given that High Meadow Pet Crematory LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Modification Permit for a pet crematory located on 158 High Meadow Pass, off of Halleck Road, near Morgantown, in Monongalia County, West Virginia. The latitude and longitude coordinates are lat 39.518252/ lng 80.023992. The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be: CO/ .007 tons/yr, NOx/ .13 tons/yr, PM10/.07 tons/yr, S02/ .11 tons/yr, VOCs/.13 tons/yr. Startup of operation is planned to begin on or about the 3rd day of May, 2015. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice. Any questions regarding this permit application should be directed to the DAQ at (304)9260499, extension 1227, during normal business hours.

y: High Meadow Pet Crematory LLC James D. Ward III Member/Operator 158 High Meadow Pass, Fairmont, WV 26554

Dated this the 29th day of January, 2015.

By:

PUBLISHER'S CERTIFICATE

Vs.
STATE OF WEST VIRGINIA COUNTY OF MONONGALIA
Eric Wilson Advertising Director of
THE DOMINION POST, a newspaper of general circulation
published in the City of Morgantown, County and State
aforesaid, do hereby certify that the annexed
Legal Notice
was published in the said THE DOMINION POST once a week
for1 successive weeks commencing on the
29th day of Jan., 2015 and ending on the
29th day of
The publisher's fee for said publication is \$63.75
Given under my hand this 29th day of
January , 2015
3 0
(1.7/10.
(SEAL)
Advertising Director of THE DOMINION POST
Subscribed and sworn to before me this 29th
day of, 2015
Notary Public of Monorgalia County, W. Va.
1246 .000
2024
Official Seal Notary Public, State of West Virginia Kathy J Cluster 469 Westwood St Star City WY 26505 My Commission Expires April 13, 2024 Page 56 of 57

Attachment R AUTHORITY OF LIMITED LIABILITY COMPANY (LLC)

TO:		The West Virginia Departm	ent of Environmental Protection, Division of Air Quality	
DATE:		January 26	, 20 <u>15</u>	
ATTN:		Director		
LLC's F	ederal	Employer I.D. Number	46-4420552	
Quality,	a peri		ne West Virginia Department of Environmental Protection, Division of Air ertifies that the said name is a trade name which we are using in the	
	Furthe	er, we have agreed or certified	d as follows:	
ı	(1)	The undersigned is a member and in that capacity may represent the interests of the LLC and may obligate and legally bind all current or future members and the LLC.		
	(2)	The LLC is authorized to do business in the State of West Virginia.		
	(3) The name and business address of each member:			
		Member:	James D. Ward III	
		Address:	158 High Meadow Pass Fairmont, WV 26554	
			Telephone No.: 304-366-4222	
		Member:	Brenda J. Ward	
		Address:	158 High Meadow Pass Fairmont, WV 26554	
			Telephone No.: 304-366-4222	
		Member:		
		Address:		
			Telephone No.:	
	(4)		members of the undersigned or our relations as such be altered in any d become incorporated, the undersigned will notify you promptly.	
			Address:	
			158 High Meadow Pass	
MEMBER OF LLC (Signature)		LLC (Signature)	Fairmont, WV 26554	
	l-	omos D. Ward III	Telephone No.: <u>304-366-4222</u>	
VEMBE		ames D. Ward III LLC (Typed)		
VILIVIDE	01	LLO (1 ypou)		
	Hi	igh Meadow Pet Crematory I	I.C.	

LIMITED LIABILITY COMPANY=S NAME