Air Quality Permitting
Statement of Basis

January 21, 2005

Permit to Construct No. P-040212

Orchards Pet Hospital, Lewiston

Facility ID No. 069-00045

Prepared by:

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AIR QUALITY DIVISION

FINAL PERMIT

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Acronyms, Units, and Chemical Nomenclatures

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
BACT	Best Available Control Technology
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	Hazardous Air Pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pound per hour
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
Rules	Rules for the Control of Air Pollution in Idaho
SIP	State Implementation Plan
SO_2	sulfur dioxide
T/yr	tons per year
$\mu g/m^3$	micrograms per cubic meter
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

2. FACILITY DESCRIPTION

Orchards Pet Hospital operates an incinerator used to incinerate deceased pets from Orchards Pet Hospital, from area veterinarians, and from the public. The incinerator's rated capacity is 200 pounds per charge.

3. FACILITY / AREA CLASSIFICATION

Orchards Pet Hospital is defined as a minor facility because the potential to emit of all applicable pollutants are less than major source levels. Therefore, the AIRS classification is "B" because the source is a minor facility.

The facility is located within AQCR 62 and UTM zone 11. The facility is located in Nez Perce County which is designated as unclassifiable for all criteria pollutants (PM_{10}, CO, NO_X, SO_2, lead, and ozone).

The AIRS information provided in Appendix C defines the classification for each regulated air pollutant at Orchards Pet Hospital. This required information is entered into the EPA AIRs database.

4. APPLICATION SCOPE

Orchards Pet Hospital has applied for a permit to construct (PTC) for a pet incinerator.

4.1 Application Chronology

10/18/04	PTC application received
11/17/04	Application declared complete
12/10/04	Facility draft permit issued
12/20/04	Permit processing fee received

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC action.

5.1 Equipment Listing

Incinerator

Manufacturer: Shenandoah
Model No.: C6
Feed material: Deceased pets
Fuel: Natural gas

5.2 Emissions Inventory

The criteria pollutant emissions estimates are shown in Table 5.1. The annual emissions were estimated using an operating schedule of 1,040 hours per year, which is based on a total annual throughput of 26 tons per year of material incinerated.

Table 5.1 EMISSION INVENTORY

Source	PM_{10}[a]		Sulfur Dioxide		VOC[b]		Nitrogen Oxides		Carbon Monoxide		Lead	
	(lb/hr)[c]	(T/yr)[d]	(lb/hr)[c]	(T/yr)[d]	(lb/hr)[c]	(T/yr)[d]	(lb/hr)[c]	(T/yr)[d]	(lb/hr)[c]	(T/yr)[d]	(lb/hr)[c]	(T/yr)[d]
Animal incinerator	0.024	0.012	0.0004	0.0002	0.002	0.0008	0.07	0.04	0.015	0.008	3E-5	1.6E-5

[a] Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers. Total Suspended Particulate has the same estimated emission rate as PM_{10}.
[b] Volatile Organic Compounds
[c] Pounds per hour
[d] Tons per year

The emissions analysis, including toxic air pollutant emissions, is shown in Appendix A. The facility used stack emission test results for total suspended particulate and PM_{10} hourly emission estimates. The facility used CA AB2588 emissions factors for all other pollutants. These emission factors are available from the San Diego Air Pollution Control District for incinerators.

5.3 Modeling

Air dispersion modeling is not required for the criteria pollutants because the potential to emit of each criteria pollutant is below the modeling thresholds shown in DEQ's Air Quality Modeling Guideline, dated December 31, 2002.

The cadmium and hexavalent chromium estimated hourly emissions exceed the screening emissions levels (EL) specified in IDAPA 58.01.01.586. Therefore, air dispersion modeling is required to demonstrate compliance with the acceptable ambient concentration for carcinogens (AACC) specified in IDAPA 58.01.01.586. Screen3 was used for this modeling using a unit emission amount (one pound per hour (lb/hr)). The results of the modeling are shown in Appendix B. The maximum unit concentration for one pound per hour is 655.5 micrograms per cubic meter ($\mu g/m^3$). This is converted to an annual concentration for toxics by multiplying by the persistence factor of 0.125, which results in a concentration of 81.9 $\mu g/m^3$.

The modeled concentrations of cadmium and hexavalent chromium are calculated as follows:

Calculate annual average hourly cadmium emissions:

4E-06 lb/hr cadmium x 1040 hrs/yr/8760 hrs/yr = 4.7E-07 lb/hr avg. cadmium emissions

Calculate modeled annual concentration:

4.7E-07 lb/hr cadmium x 81.9 $\mu g/m^3$ per pound of emissions per hour = 3.8E-05 $\mu g/m^3$ cadmium

The modeled cadmium emissions are less than the IDAPA 58.01.01.586 AACC for cadmium of 5.6E-04 $\mu g/m^3$.

Calculate annual average hourly hexavalent chromium emissions:

4.7E-06 lb/hr hexavalent chromium x 1040 hrs/yr/8760 hrs/yr = 5.6E-07 lb/hr avg. emissions

Calculate modeled annual concentration:

5.6E-07 lb/hr hexavalent chromium x 81.9 $\mu g/m^3$ per pound of emissions per hour = 4.6E-05 $\mu g/m^3$

The modeled hexavalent chromium emissions are less than the IDAPA 58.01.01.586 AACC for hexavalent chromium of 8.3E-05 $\mu g/m^3$.

The results are summarized in Table 5.2.

Table 5.2 MODELED EMISSION RATES

Pollutant	Annual Average Emission Rate (lb/hr)[a]	Modeled Concentration ($\mu g/m^3$)[b]	AACC ($\mu g/m^3$)[b]
Cadmium	4.7E-07	3.8E-05	5.6E-04
Hexavalent Chromium	5.6E-07	4.6E-05	8.3E-05

a) pounds per hour
b) micrograms per cubic meter

5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.201 ..... Permit to Construct Required

A permit to construct for the incinerator at Orchards Pet Hospital is required because, without limits on the throughput of material burned, the estimated potentials to emit of cadmium and hexavalent chromium would exceed the AACCs specified in IDAPA 58.01.01.586.

No emission limits were set for the criteria pollutants or TAPs because the emissions are well below any regulatory limit.

IDAPA 58.01.01.625 ..... Visible Emissions

This regulation states that any point of emission shall not have a discharge of any air pollutant for a period aggregating more than 3 minutes in any 60-minute period of greater than 20% opacity. This regulation is applicable to the incinerator because the unit emits regulated air pollutants which are discharged from a stack.

IDAPA 58.01.01 675 ..... Fuel Burning Equipment

This regulation establishes particulate matter emission standards for fuel burning equipment. Fuel burning equipment is defined in IDAPA 58.01.01.006.41 as "Any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer." This regulation is not applicable to the incinerator because fuel is combusted for the primary purpose of direct heat transfer. The natural gas produces a flame which is in direct contact with the material burned.

IDAPA 58.01.01.700 ..... Particulate Matter - Process Weight Limitations

The purpose of Sections 700 through 703 is to establish particulate matter emission limitations for process equipment. The definition of process equipment, IDAPA 58.01.01.006.79, specifically excludes refuse-burning equipment. IDAPA 58.01.01.006.51 defines an incinerator, in part, as "Any source consisting of a furnace and all appurtenances thereto designed for the destruction of refuse by burning." Therefore, incinerators are not subject to IDAPA 58.01.01.700.

IDAPA 58.01.01.785 ..... Rules for Control of Incinerators

The purpose of Sections 785 through 788 is to prevent excessive emissions of particulate matter from incinerators. IDAPA 58.01.01.786.01 restricts incinerators to discharge no more than 0.2 pounds of particulates per 100 pounds of refuse burned. The Orchards Pet Hospital incinerator emission inventory shows that particulates are emitted, so IDAPA 58.01.01.785 is applicable. According to the emission estimates by the facility in their PTC application, the maximum estimated particulate emissions are 0.04 pounds per 100 pounds burned (stack test by manufacturer of this unit), which is less than the limit of 0.2 pounds per 100 pounds burned.

IDAPA 58.01.01.210 ..... Demonstration of Preconstruction Compliance with Toxic Standards

This regulation requires that the applicant demonstrate preconstruction compliance with Section 161 to the satisfaction of DEQ. The emission inventory for Orchards Pet Hospital's incinerator shows toxic emissions. Therefore, IDAPA 58.01.01.210 is applicable. Compliance is demonstrated by compliance with Permit Condition 2.6, which limits the throughput of material burned, and by Permit Condition 2.7, which requires the secondary combustion temperature to operate at a minimum temperature of 1400 °F. According to the California Air Resource Board publication for Incinerators Course No. 285, page 220-55, "Temperatures lower than 1400 degrees are not high enough to destroy all the products of combustion." Therefore, compliance with Permit Condition 2.7 is determined by reading and recording the temperature of the secondary combustion chamber immediately prior to loading the charge and at intervals of at least one hour during combustion. Based on the emission estimates made in Section 5.2 of this statement of basis, the estimated emissions of TAPs will not be exceeded.

40 CFR 60 ..... New Source Performance Standards

No NSPS applies to Orchards Pet Hospital's incinerator. Deceased animals meet the definition of pathological waste. Orchards Pet Hospital's incinerator is not subject to the municipal waste combustor NSPS requirements. 40 CFR 60 Subparts Ce and Ec and the associated IDAPA 58.01.01.861 regulate hospital/medical/infectious waste incinerators. Because the incinerator is a pathological waste incinerator and is not used for any amount of hospital, medical, or infectious waste, it does not meet the definition of a hospital/medical/infectious waste incinerator (HMIWI).

IDAPA 58.01.01.775-776 ..... Rules for the Control of Odors

"The permittee shall not allow, suffer, cause or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution."

This rule has been incorporated into the PTC as Permit Condition 2.5.

5.5 Fee Review

The PTC application fee of $1,000 was received on October 18, 2004. In accordance with IDAPA 58.01.01.225, a permit to construct processing fee of $1,000 is assessed because this is a new source with and increase of emissions of less than one ton per year. The processing fee was received on December 20, 2004. The facility is a minor source and is not subject to registration fees.

Table 5.3 PTC PROCESSING FEE TABLE

Emissions Inventory			
Pollutant	**Annual Emissions Increase (T/yr)**	**Annual Emissions Reduction (T/yr)**	**Annual Emissions Change (T/yr)**
NO_x	0.04	0	0.04
SO_2	0.0002	0	0.0002
CO	0.008	0	0.008
PM_{10}	0.012	0	0.012
VOC	0.0008	0	0.0008
TAPS/HAPS	0.01	0	0.01
Total:	0.07	0	**0.07**
Fee Due	**$ 1,000.00**		

6. PERMIT CONDITIONS

Permit Condition 2.8

The temperature of the secondary combustion chamber must operate at a minimum temperature of 1400 degrees in order to ensure adequate destruction of the products of combustion. Therefore, Permit Condition 2.8 requires the temperature of the secondary combustion chamber to be read and recorded once immediately prior to loading a charge into the incinerator and at least once per hour during combustion. This will be used to assess compliance with Permit Condition 2.7.

Permit Condition 2.9

The throughput of material in the incinerator is required to be tracked to assess compliance with the throughput limits specified in Permit Condition 2.6.

Permit Condition 2.10

The facility is required to maintain records of any odor complaints received and to take corrective action as expeditiously as practicable.

7. PUBLIC COMMENT

A facility draft permit was issued to the facility on December 10, 2004. The facility had no comments.

The DEQ Lewiston Regional Office was provided an opportunity to comment on the draft permit. The regional office had no comments.

An opportunity for public comment period on the PTC application was provided, in accordance with IDAPA 58.01.01.209.01.c. There were no comments on the application and no requests for a public comment period on DEQ's proposed action.

8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommend that Orchards Pet Hospital be issued PTC No. P-040212 for the pet incinerator. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

APPENDIX A

Emissions Inventory

FC industries, inc.

EMISSIONS CALCULATIONS
(Based on FIRE 6.22 Emissions Factors As Extrapolated From EPA's AP-42)
Equipment Model: Shenandoah C6

C6 Burn Rate: 50 lb/hr (.025 tons/hr)

Actual Operating Schedule:
1,000 lbs/wk / 50 lbs/hr = 20 hrs/wk
1,000 lbs/wk x 52 wks/yr = 52,000 lbs/yr / 2,000 lb/ton = 26 tons/yr

Pollutant	FIRE 6.22 Factor * (lb/ton waste burned)	Emissions (tons/yr)	Emissions (lb/hr)
PM_{10}	4.7	[redacted]	.12
SO_2	2.5	[redacted]	.06
NO_x	3.0	[redacted]	.08
VOC	3.0	[redacted]	.08
CO	10.0	[redacted]	.25

* Based on SCC 5-02-001-01

Note: Actual measurements of PM_{10} and CO are less than theoretical calculations, please see attached stack emissions test report.

EMISSIONS CALCULATIONS
(Based on Oct. 10, 1997 Stack Emissions Test Conducted at Bestech Environmental)
Equipment Model: Shenandoah C-6

Based on burn rate and operating schedule noted above.

Pollutant	Emissions from Test (lb/hr)	Emissions (tons/yr)
PM_{10}	.04	[redacted]
CO	.007	[redacted]

13508 Oak St. • Kansas City, Missouri 64145
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FC industries, inc.

Shenandoah C6 Emissions Calculations
Based on CA AB2588 emission factors

Capacity: 200 lb. batch load, 50 lb/hr (.025 tons/hr) burn rate
Operating schedule: 1,000/wk / 50 lbs/hr x 52 wks/yr = 1,040 hrs/yr
Burner firing rate: 690,000 BTUH = 690 CFH = .00069 MMCFH

Pollutant	CA AB2588 Factor (lbs/MMCF)	Emissions (lb/hr)	Emissions (tons/yr)	IDAPA Limit (tons/yr)	% of limit
NO_x	103.1	.07	.04	40	<1
CO	21.65	.015	.008	100	<1
SO_x	.6	.0004	.0002	40	<1
TOG				Not Regulated	Not Regulated
ROG (i.e. VOC)	2.87	.00198	.0008	40	<1

Pollutant	CA AB2588 Factor (lbs/ton)	Emissions (lbs/hr)	IDAPA Limit (lbs/hr)	% of limit
TSP	.02 lb/hr *1	.02	.3	8
PM_{10}	.02 lb/hr *1	.02	.3	8
Acetaldehyde	.0015	.0000375	.003	1.3
Arsenic	.00058	.0000145	.0000015	9.6
Benzene	.00072	.000018	.0008	2.3
Beryllium	.00002	.0000005	.000028	1.8
Cadmium	.00016	.000004	.0000037	>100
Chromium NonHexavalent	.00032	.000008	.033	<1
Chromium Hexavalent	.00019	.0000047	.00000056	>100
Copper	.0004	.00001	.08	<1
Formaldehyde	.0004	.00001	.00051	2.5
Hydrogen Chloride	.86	.0215	.05	43
Hydrogen Fluoride	.0078		Not Regulated	Not Regulated
Lead	.00098		Not Regulated	Not Regulated
Mercury	.048	.0012	.011	10.9
Nickel	.00057	.000014	.000027	52.6
PAHS, Unspecified	.000052	.0000013	.000091	1.4
Selenium	.00065	.000016	.013	<1
Toluene	.0099	.00025	25	<1
Xylenes	.0028	.00007	29	<1
Zinc	.00052	.000013	.667	<1

*1 See stack emission test

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APPENDIX B

Air Dispersion Modeling

12/03/04
12:57:08

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Orchards Pet Hospital

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	0.126000
STACK HEIGHT (M)	=	5.4864
STK INSIDE DIAM (M)	=	0.2795
STK EXIT VELOCITY (M/S)	=	7.8151
STK GAS EXIT TEMP (K)	=	1007.5944
AMBIENT AIR TEMP (K)	=	293.1500
RECEPTOR HEIGHT (M)	=	0.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	7.3152
MIN HORIZ BLDG DIM (M)	=	15.2400
MAX HORIZ BLDG DIM (M)	=	30.4800

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 1.061 M**4/S**3; MOM. FLUX = 0.347 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	0.000	0	0.0	0.0	0.0	0.00	0.00	0.00	NA
100.	110.5	4	1.5	1.5	480.0	8.31	17.51	9.13	SS
200.	70.17	4	1.5	1.5	480.0	8.31	24.50	12.45	SS
300.	56.23	6	1.5	1.5	10000.0	12.27	23.04	10.71	SS
400.	50.30	6	1.5	1.5	10000.0	12.27	26.24	11.79	SS
500.	44.89	6	1.5	1.5	10000.0	12.27	29.39	12.81	SS
600.	42.57	6	1.0	1.0	10000.0	20.57	21.24	13.22	SS
700.	39.48	6	1.0	1.0	10000.0	20.57	24.46	13.91	SS
800.	37.27	6	1.0	1.0	10000.0	20.57	27.63	14.78	SS
900.	35.04	6	1.0	1.0	10000.0	20.57	30.78	15.62	SS
1000.	32.90	6	1.0	1.0	10000.0	20.57	33.88	16.43	SS
1100.	30.87	6	1.0	1.0	10000.0	20.57	36.96	17.22	SS
1200.	28.97	6	1.0	1.0	10000.0	20.57	40.01	17.99	SS
1300.	27.22	6	1.0	1.0	10000.0	20.57	43.04	18.74	SS
1400.	25.60	6	1.0	1.0	10000.0	20.57	46.05	19.48	SS
1500.	24.11	6	1.0	1.0	10000.0	20.57	49.03	20.20	SS
1600.	22.74	6	1.0	1.0	10000.0	20.57	51.99	20.90	SS
1700.	21.47	6	1.0	1.0	10000.0	20.57	54.94	21.59	SS
1800.	20.38	6	1.0	1.0	10000.0	20.57	57.87	21.67	SS
1900.	19.34	6	1.0	1.0	10000.0	20.57	60.78	22.25	SS
2000.	18.38	6	1.0	1.0	10000.0	20.57	63.68	22.82	SS
2100.	17.50	6	1.0	1.0	10000.0	20.57	66.56	23.38	SS
2200.	16.68	6	1.0	1.0	10000.0	20.57	69.42	23.93	SS
2300.	15.93	6	1.0	1.0	10000.0	20.57	72.28	24.47	SS
2400.	15.22	6	1.0	1.0	10000.0	20.57	75.12	24.99	SS

					OPH				
2500.	14.57	6	1.0	1.0	10000.0	20.57	77.95	25.51	SS
2600.	13.96	6	1.0	1.0	10000.0	20.57	80.76	26.02	SS
2700.	13.39	6	1.0	1.0	10000.0	20.57	83.57	26.52	SS
2800.	12.96	6	1.0	1.0	10000.0	20.57	86.36	26.55	SS
2900.	12.46	6	1.0	1.0	10000.0	20.57	89.15	27.03	SS
3000.	12.00	6	1.0	1.0	10000.0	20.57	91.92	27.45	SS
3500.	10.11	6	1.0	1.0	10000.0	20.57	105.65	29.41	SS
4000.	8.673	6	1.0	1.0	10000.0	20.57	119.17	31.24	SS
4500.	7.559	6	1.0	1.0	10000.0	20.57	132.50	32.95	SS
5000.	6.672	6	1.0	1.0	10000.0	20.57	145.67	34.57	SS
5500.	5.952	6	1.0	1.0	10000.0	20.57	158.69	36.10	SS
6000.	5.357	6	1.0	1.0	10000.0	20.57	171.58	37.56	SS
6500.	4.858	6	1.0	1.0	10000.0	20.57	184.34	38.96	SS
7000.	4.450	6	1.0	1.0	10000.0	20.57	196.99	40.11	SS
7500.	4.096	6	1.0	1.0	10000.0	20.57	209.54	41.27	SS
8000.	3.789	6	1.0	1.0	10000.0	20.57	221.98	42.39	SS
8500.	3.521	6	1.0	1.0	10000.0	20.57	234.34	43.46	SS
9000.	3.285	6	1.0	1.0	10000.0	20.57	246.61	44.50	SS
9500.	3.075	6	1.0	1.0	10000.0	20.57	258.79	45.50	SS
10000.	2.888	6	1.0	1.0	10000.0	20.57	270.90	46.48	SS
15000.	1.754	6	1.0	1.0	10000.0	20.57	388.43	54.88	SS
20000.	1.253	6	1.0	1.0	10000.0	20.57	500.95	60.29	SS
25000.	0.9644	6	1.0	1.0	10000.0	20.57	609.75	64.86	SS
30000.	0.7787	6	1.0	1.0	10000.0	20.57	715.59	68.84	SS
40000.	0.5632	6	1.0	1.0	10000.0	20.57	920.22	74.49	SS
50000.	0.4382	6	1.0	1.0	10000.0	20.57	1117.42	79.19	SS

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

22.	639.6	6	1.0	1.0	10000.0	10.32	1.04	4.39	SS

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** REGULATORY (Default) ***
PERFORMING CAVITY CALCULATIONS
WITH ORIGINAL SCREEN CAVITY MODEL
(BRODE, 1988)
****

*** CAVITY CALCULATION - 1 ***		*** CAVITY CALCULATION - 2 ***	
CONC (UG/M**3) =	376.7	CONC (UG/M**3) =	655.5
CRIT WS @10M (M/S) =	1.65	CRIT WS @10M (M/S) =	2.30
CRIT WS @ HS (M/S) =	1.65	CRIT WS @ HS (M/S) =	2.30
DILUTION WS (M/S) =	1.00	DILUTION WS (M/S) =	1.15
CAVITY HT (M) =	8.10	CAVITY HT (M) =	7.37
CAVITY LENGTH (M) =	26.13	CAVITY LENGTH (M) =	17.54
ALONGWIND DIM (M) =	15.24	ALONGWIND DIM (M) =	30.48

****
END OF CAVITY CALCULATIONS
****

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION	MAX CONC	DIST TO	TERRAIN

PROCEDURE	(UG/M**3)	MAX (M)	OPH HT (M)	
SIMPLE TERRAIN	639.6	22.	0.	
BLDG. CAVITY-1	376.7	26.	--	(DIST = CAVITY LENGTH)
BLDG. CAVITY-2	655.5	18.	--	(DIST = CAVITY LENGTH)

APPENDIX C

AIRS Form

AIRS/AFS[a] FACILITY-WIDE CLASSIFICATION[b] DATA ENTRY FORM

Facility Name: Orchards Pet Hospital
Facility Location: 207 Thain Rd., Lewiston
AIRS Number: 069-00045

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO_2	B							U
NO_x	B							U
CO	B							U
PM_{10}	B							U
PT (Particulate)	B							U
VOC	B							U
THAP (Total HAPs)								
			APPLICABLE SUBPART					

[a] Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

[b] AIRS/AFS Classification Codes:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.

SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).