

Mr. Jim Deich  
City of Salem Animal Control  
38 Public Square  
Salem, IN 47168

Dear Mr. Deich:

Re: Exempt Construction and Operation Status,  
175-12336-00015

The application from City of Salem Animal Control, received on June 2, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following small animal incinerator, to be located at 204 Joseph Street, Salem, Indiana, is classified as exempt from air pollution permit requirements:

One (1) small animal incinerator, with a maximum capacity of 115 lbs/hr of waste, using 1,600,000 Btu/hr of liquified petroleum gas as supplemental fuel, and exhausting to stack 1.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 4-2 (Incinerators), this rule establishes standards for the use of incinerators which emit regulated pollutants. All incinerators shall:
  - (a) consist of primary and secondary chambers or the equivalent;
  - (b) be equipped with a primary burner unless burning wood products;
  - (c) comply with 326 IAC 5-1 and 326 IAC 2; and
  - (d) all other conditions in 326 IAC 4-2.
  
- (2) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
  
- (3) Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the incinerator shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The secondary chamber shall be in operation at all times the incinerator is in operation, in order to comply with this limit.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

DH

cc: File - Washington County  
Washington County Health Department  
Air Compliance - Joe Foyst  
Permit Tracking - Janet Mobley  
Technical Support and Modeling - Michele Boner  
Compliance Data Section - Karen Nowak

## Indiana Department of Environmental Management Office of Air Management

### Technical Support Document (TSD) for a New Source Construction and Exemption

#### Source Background and Description

**Source Name:** City of Salem Animal Control  
**Source Location:** 204 Joseph Street, Salem, Indiana 47168  
**County:** Washington  
**SIC Code:** 4953  
**Operation Permit No.:** 175-12336-00015  
**Permit Reviewer:** D. Harper

The Office of Air Management (OAM) has reviewed an application from the City of Salem Animal Control relating to the construction and operation of a small animal incinerator.

#### New Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

One (1) small animal incinerator, with a maximum capacity of 115 lbs/hr of waste, using 1,600,000 Btu/hr of liquified petroleum gas as supplemental fuel, and exhausting to stack 1.

#### Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

#### Existing Approvals

There are no existing approvals issued for this source during this review process.

#### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	incinerator	18	1	1300-1500	1300-1500

#### Enforcement Issue

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 2, 2000, with additional information received on June 23, 2000.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations. (2 pages)

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.09
PM-10	0.09
SO <sub>2</sub>	0.0
VOC	0.0
CO	0.2
NO <sub>x</sub>	1.1

### Actual Emissions

No previous emission data has been received from the source.

### County Attainment Status

The source is located in Washington County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Washington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Washington County has been classified as attainment or unclassifiable for all applicable pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.09
PM10	0.09
SO <sub>2</sub>	0.0
VOC	0.0
CO	0.2
NO <sub>x</sub>	1.1
Single HAP	0.0
Combination HAPs	0.0

This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

### Federal Rule Applicability

- (a) The small animal incinerator is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.30, Subpart Ce), due to the fact that only pathological waste will be burned.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

### State Rule Applicability - Entire Source

#### 326 IAC 2-6 (Emission Reporting)

This source is located in Washington County and the potential to emit VOC and NO<sub>x</sub> is less than ten (10) tons per year. The source is not one of the twenty-eight (28) listed sources and its potential to emit PM10 is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 4-2 (Incinerators)

Pursuant to 326 IAC 4-2 (Incinerators), this rule establishes standards for the use of incinerators which emit regulated pollutants. All incinerators shall:

- (a) consist of primary and secondary chambers or the equivalent;
- (b) be equipped with a primary burner unless burning wood products;
- (c) comply with 326 IAC 5-1 and 326 IAC 2; and
- (d) all other conditions in 326 IAC 4-2.

### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the incinerator shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10 (0.0575)^{0.67} \\ E = 0.605 \text{ lbs/hr}$$

The secondary chamber shall be in operation at all times the incinerator is in operation, in order to comply with this limit.

### Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

None of the listed air toxics will be emitted from this source.

### Conclusion

The construction and operation of this small animal incinerator shall be subject to the conditions of the attached proposed New Source Construction and Exemption 175-12336-00015.



Appendix A: Emission Calculations  
Small Animal Incinerator  
Company Name: City of Salem Animal Control  
Source Address: 204 Joseph St., Salem, IN 47168  
CP: 175-12336  
Pit ID: 175-00015  
Reviewer: D. Harper  
Date: 07/06/00

Manufacturer's guaranteed particulate emission rate: 0.02 lbs/hr

Potential to emit (PTE) of particulate matter (PM):

$$\begin{aligned} \text{PTE} &= (0.02 \text{ lbs PM/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) \\ &= 0.09 \text{ tons PM/yr} \end{aligned}$$