

Mike Feagins
EL Tek of Indiana
1863 Lammens Pike
Batesville, Indiana 47006

Dear Mike Feagins:

Re: Exempt Construction and Operation Status,
137-12893-00017

The application from EL Tek of Indiana, received on October 24, 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 incinerator operations, to be located at 1863 Lammens Pike, Batesville, Indiana 47006, is classified as exempt from air pollution permit requirements:

- (a) Two (2) natural gas incinerators for removing paint from miscellaneous metal parts, with a maximum heat input capacity of 0.7 million Btu per hour each, with maximum painted metal throughput of 80 pounds per hour each and exhausting to internal afterburners, with a maximum heat input capacity of 1.4 million Btu per hour each and exhausting to two stacks.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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.
- (2) Pursuant to 326 IAC 4-2-2 these two natural gas fired 0.7 million Btu per hour incinerators, rated at overall capacity of 80 pounds per hour each, shall:
 - (1) consist of primary and secondary chambers or the equivalent;
 - (2) be equipped with a primary burner unless burning wood products;
 - (3) comply with 326 IAC 5-1 and 326 IAC 2;
 - (4) be maintained properly as specified by the manufacturer and approved by the commissioner;
 - (5) be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner;
 - (6) comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
 - (7) be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
 - (8) not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per

- one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
(9) not create a nuisance or a fire hazard.

This source was granted an exempt status with exemption letter CP137-9480-00017 dated March 4, 1998. The equipment covered in this earlier exemption has been incorporated in this exemption 137-12893-00017 and it supercedes the earlier exemption.

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

GS

cc: File - Ripley County
Ripley County Health Department
Air Compliance – D.J.Knotts
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 Exemption

Source Background and Description

Source Name: EL Tek of Indiana
Source Location: 1863 Lammens Pike, Batesville, Indiana 47006
County: Ripley
SIC Code: 3449
Operation Permit No.: 137-12893-00017
Permit Reviewer: Gurinder Saini

The Office of Air Management (OAM) has reviewed an application from EL Tek of Indiana relating to the construction and operation of burn-off ovens.

Permitted Emission Units and Pollution Control Equipment

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

- (a) Two (2) natural gas incinerators for removing paint from miscellaneous metal parts, with a maximum heat input capacity of 0.7 million Btu per hour each, with maximum painted metal throughput of 80 pounds per hour each and exhausting to internal afterburners, with a maximum heat input capacity of 1.4 million Btu per hour each and exhausting to two stacks.

Unpermitted Emission Units and Pollution Control Equipment

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

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 137-9480-00017, issued on March 4, 1998

All conditions from previous approvals were incorporated into this permit. This exemption supercedes the CP 137-9480-00017.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
--	Oven/after burner	17	1.83	1555	1600
--	Oven/after burner	17	1.83	1555	1600

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.

A complete application for the purposes of this review was received on October 24, 2000.

Emission Calculations

See Appendix A page 1 through 3 of this document for detailed emissions calculations.

Potential To Emit of Source Before Controls

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	2.5
PM-10	2.6
SO ₂	0.9
VOC	1.2
CO	5
NO _x	2.9

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any criteria pollutant is less than the threshold for permitting. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 and an exemption will be issued.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Ripley County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Ripley County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Ripley County has been classified as attainment or unclassifiable for all criteria 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

Existing Source PSD, Part 70 or FESOP 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	2.5
PM10	2.6
SO ₂	0.9
VOC	1.2
CO	5
NO _x	2.9

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing 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 status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Ripley County and the potential to emit any criteria pollutant is less than

one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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 4-2-2 (Incinerators: Requirements)

This rule applies to the incinerator operation. Pursuant to 326 IAC 4-2-2 (Incinerators: Requirements), All incinerators shall:

1. consist of primary and secondary chambers or the equivalent;
2. be equipped with a primary burner unless burning wood products;
3. comply with 326 IAC 5-1 and 326 IAC 2;
4. be maintained properly as specified by the manufacturer and approved by the commissioner;
5. be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner;
6. comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
7. be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
8. not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
9. not create a nuisance or a fire hazard.

Based on condition 8 above, allowable PM emissions are:

Allowable PM = 0.5 pounds per one thousand (1,000) pounds of dry exhaust gas at standard conditions. As stated in the permit application the Manufacturer's guaranteed particulate emission rate complies with this limit. Therefore this operation will comply with 326 IAC 4-2-2.

Conclusion

The construction and operation of this burn-off ovens shall be subject to the conditions of the attached proposed Exemption 137-12893-00017.

**Appendix A: Emission Calculations
Incinerator**

Company Name: EL Tek of Indiana
Address City IN Zip: 1863 Lammens Pike, Batesville, Indiana 47006
CP: 137-12893
Pit ID: 137-00017
Reviewer: GS
Date: November 21, 2000

<p align="center">THROUGHPUT lbs/hr 160</p>

THROUGHPUT
ton/yr
700.8

Emission Factor in lb/ton	POLLUTANT				
	PM	SO2	CO	VOC	NOX
7.0	2.5	10.0	3.0	3.0	
Potential Emissions in ton/yr	2.5	0.9	3.5	1.1	1.1

Methodology

Emission factors are from AP 42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Main Burners

Company Name: EL Tek of Indiana
Address City IN Zip: 1863 Lammens Pike, Batesville, Indiana 47006
CP: 137-12893
Pit ID: 137-00017
Reviewer: GS
Date: November 21, 2000

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

2.8

24.5

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.1	0.0	1.2	0.1	1.0

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Main Burners

Company Name: EL Tek of Indiana
Address City IN Zip: 1863 Lammens Pike, Batesville, Indiana 47006
CP: 137-12893
Pit ID: 137-00017
Reviewer: GS
Date: November 21, 2000

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.4

12.3

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.0	0.0	0.0	0.6	0.0	0.5

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).