



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
SUMMIT COUNTY
Application No: 16-01987**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
Y	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 2/24/00

SAFETY-KLEEN (PPM), INC
JOHN LANCASTER
1672 E. HIGHLAND ROAD
TWINSBURG, OH 44087

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

ARAQMD



FINAL PERMIT TO INSTALL 16-01987

Application Number: 16-01987
APS Premise Number: 1677130050
Permit Fee: **\$1000**
Name of Facility: SAFETY-KLEEN (PPM), INC
Person to Contact: JOHN LANCASTER
Address: 1672 E. HIGHLAND ROAD
TWINSBURG, OH 44087

Location of proposed air contaminant source(s) [emissions unit(s)]:
1672 E. HIGHLAND ROAD
TWINSBURG, Ohio

Description of proposed emissions unit(s):
SCRAP METAL RECOVERY OVEN.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may

be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
particulate matter	6.3
nitrogen oxides	7.2
polychlorinated biphenyls	1 pound/year

2. Additional Terms and Conditions

- 2.a** The modification of the scrap metal recovery oven (N001) shall be properly performed, in accordance with the manufacturer's recommendations, instructions, and construction specifications, to the extent possible with good engineering design.
- 2.b** At all times during and after modification, N001 shall comply with all applicable requirements of 40 CFR Part 761-- Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution In Commerce, And Use Prohibitions, including the provisions of Section 761.72(a) of 40 CFR Part 761 for scrap metal recovery ovens, as listed below in Part II, Section A.2.e of this permit.
- 2.c** N001 shall be restricted to the disposal of residual PCBs associated with "non-PCB" and "PCB-Contaminated" articles (i.e., articles containing oils with a concentration of less than 500 ppm PCBs) regulated for disposal under paragraph 761.60(b)(4) of 40 CFR Part 761, from which all free-flowing liquids have been removed and disposed, including residuals from flushing and rinsing, in accordance with paragraph 761.60(a) of 40 CFR Part 761. In no instance shall the removed liquids, including residuals from flushing and rinsing, be processed by N001.
- 2.d** All equipment received by the permittee for processing in the oven shall be accompanied by a shipping document identifying the name and address of the generator and the date the materials were received by the permittee. Documentation must be available on the PCB content of the oil contained in the received equipment.
- 2.e** The following provisions of Section 761.72(a) of 40 CFR Part 761 shall apply to N001:
- (i) The oven shall have at least two enclosed (i.e., negative draft, no fugitive emissions) interconnected chambers (i.e., primary chamber(s) and secondary chamber).
 - (ii) The equipment with all free-flowing liquid removed shall first be placed in the primary chamber(s) at room temperature.
 - (iii) Each primary chamber shall operate at a temperature between 537 °C and 650°C for a minimum of 2 ½ hours and reach a minimum temperature of 650 °C (1,202 °F) during each heating cycle or batch treatment of unheated, liquid-free equipment.
 - (iv) Heated gases from each primary chamber must feed directly into the secondary chamber (i.e., afterburner) which must operate at a minimum temperature of 1,200 °C (2,192 °F) with at least a 3 percent excess oxygen and a retention time of 2.0 seconds with a minimum combustion efficiency of 99.9 percent according to the definition in paragraph 761.70(a)(2) of 40 CFR Part 761.
 - (v) Heating of each primary chamber shall not commence until the secondary chamber has reached a temperature of 1,200 ± 100 °C (2,192 ± 180 °F).

- (vi) Continuous emissions monitors and recorders for carbon dioxide, carbon monoxide, and excess oxygen in the secondary chamber and continuous temperature recorders in the primary chambers and secondary chamber shall be installed and operated while the primary chamber(s) and secondary chamber are in operation to assure that all oven chambers are within the operating parameters in paragraphs (a)(3) through (a)(5) of this section.
- (vii) Emissions from the secondary chamber must be vented through an exhaust gas stack in accordance with Ohio Administrative Code (OAC) chapter 3745-16.
- (viii) A measurement of the temperature in the secondary chamber at the time the primary chamber starts heating must be taken, recorded and retained at the facility for 3 years from the date each charge is introduced into the primary chamber.

2.f If N001, or any part of N001, breaks down in such a manner as to cause the emission of air contaminants in violation of any applicable law or permit term and condition, it shall be accompanied by an immediate total shutdown of the emissions unit.

B. Operational Restrictions

1. The permittee shall only burn natural gas as fuel in this emissions unit.
2. The permittee shall not process parts which may emit vapors of toxic metals such as lead, mercury, or cadmium. This permit does not allow the disposal of polyvinyl chloride (PVC), teflon, nor any material listed under 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants.
3. Batch ovens (fully loaded while cold and never opened until the burn cycle is complete) shall incorporate a lockout system, which will prevent the ignition of waste until the exhaust gas temperature of the secondary combustion chamber reaches 2192 degrees Fahrenheit.
4. The secondary combustion chamber of the emissions unit shall operate so that the exhaust gas is a minimum of 2192 degrees Fahrenheit until the wastes are completely combusted and the burn-down cycle is complete.
5. The oven shall be operated, maintained, and cleaned according to the manufacturer's recommendations so as to prevent the emissions of objectionable odors.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the secondary combustion chamber when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

2. The permittee shall collect and record the following information each day the emissions unit is in operation:
 - a. all periods of time during which the temperature of the exhaust gases from the afterburner, when the emissions unit was in operation, was below the minimum secondary combustion chamber exhaust gas temperature of 2192 degrees Fahrenheit as specified above; and
 - b. a log of the downtime for the monitoring/recording equipment, when the associated emissions unit was in operation.

3. The permittee shall operate and maintain continuous temperature monitors and recorders which measure and record the temperatures of the heated gases from the primary chambers when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

4. The permittee shall collect and record the following information each day the emissions unit is in operation:
 - a. all periods of time during which the temperature of the heated gases from the primary chamber(s), when the emissions unit was in operation, was below the minimum primary chamber heated gas temperature of 1202 degrees Fahrenheit as specified above; and
 - b. a log of the downtime for the monitoring/recording equipment, when the associated emissions unit was in operation.

5. The permittee shall install, operate and maintain equipment, in accordance with the manufacturer's recommendations, instructions, and operating manual(s), to continuously monitor and record the concentrations of carbon dioxide, carbon monoxide, and excess oxygen, respectively C(CO₂), C(CO), and C(excess O₂), in the secondary chamber of this emissions unit. Respective concentration units shall be in percent CO₂ (%CO₂), percent CO (%CO), and percent excess O₂ (%excess O₂).

The permittee shall maintain records of all data obtained by the continuous CO₂, CO, and excess O₂ monitoring system including, but not limited to, %CO₂, %CO, and %excess O₂ on an instantaneous (one-minute) basis and in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

From the above information, the combustion efficiency shall be computed as follows:

$$\text{combustion efficiency} = C(\text{CO}_2) / [C(\text{CO}_2) + C(\text{CO})] \times 100\%$$

where:

C(CO₂) = concentration of carbon dioxide

C(CO) = concentration of carbon monoxide

6. The permittee shall collect and record the following information each day the emissions unit is in operation:
 - a. Based on the appropriate averaging period selected in Part II, Section C.5 above, all periods of time during which the combustion efficiency and/or exhaust gas oxygen content of the afterburner, when the emissions unit was in operation, were below the respective minimum allowable afterburner combustion efficiency of 99.9% and 3% excess oxygen as specified above; and
 - b. a log of the downtime for the monitoring/recording equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit temperature deviation (excursion) reports that identify all periods of time (except momentary excursions) during which the temperature of the exhaust gases from the secondary combustion chamber and/or heated gases from the primary chamber(s) do not comply with the temperature limitations specified above.
2. The permittee shall submit combustion efficiency deviation (excursion) reports that identify all periods of time (based on the appropriate averaging period selected in Part II, Section C.5 above) during which the combustion efficiency of the afterburner does not comply with the combustion efficiency limitation specified above.
3. The permittee shall submit excess oxygen deviation (excursion) reports that identify all periods of time (based on the appropriate averaging period selected in Part II, Section C.5 above) during which the exhaust gas oxygen content of the afterburner does not comply with the excess oxygen limitation specified above.
4. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of continuous emission monitoring system(s) downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer(s) while the emissions unit was on line shall be included in the quarterly report. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.
5. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 2 of this permit.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than six months following the issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate matter, nitrogen oxides, and PCBs, and shall demonstrate combustion efficiency pursuant to Part II, Section A.2.e(iv) of these terms and conditions.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates of this permit:
 - (i) For particulate matter and carbon dioxide: Methods 1-5 of 40 CFR Part 60, Appendix A, shall be employed;
 - (ii) For PCBs, NIOSH 5503 shall be employed;
 - (iii) For carbon monoxide, Method 10 of 40 CFR Part 60, Appendix A, shall be employed.
 - (iv) For nitrogen oxides, Method 7E of 40 CFR Part 60, Appendix A, shall be employed.

Alternative USEPA test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
 - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

NEW SOURCE REVIEW FORM B

PTI Number: 16-01987

Facility ID: 1677130050

FACILITY NAME SAFETY-KLEEN (PPM), INC

FACILITY DESCRIPTION SCRAP METAL RECOVERY OVEN CITY/TWP TWINSBURG

SIC CODE 4953 SCC CODE 30400208 EMISSIONS UNIT ID N001

EMISSIONS UNIT DESCRIPTION MODIFICATION OF SCRAP METAL RECOVERY OVEN

DATE INSTALLED

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter				0.04gr/dscf at 12% carbon dioxide; and 1.4 lbs/hr	6.3
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides				1.6 lbs/hr	7.2
Carbon Monoxide					
Lead					
Other: PCBs				0.00012 lb/hr	1.0 lb/yr

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**Enter Determination** Continuous emission monitoring (CEM) and recording equipment; and compliance with all terms/conditions of this permit.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*?

YES

NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 16-01987

Facility ID: 1677130050

FACILITY NAME SAFETY-KLEEN (PPM), INC

FACILITY DESCRIPTION SCRAP METAL RECOVERY OVEN CITY/TWP TWINSBURG

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

emissions calculations

Please provide any additional permit specific notes as you deem necessary:

NONE

Permit To Install Synthetic Minor Write-Up

NONE

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
particulate matter	6.3
nitrogen oxides	7.2
polychlorinated biphenyls	1 pound/year