



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

December 9, 2003

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TO: Interested Parties / Applicant
RE: Ports Petroleum / 087-17781-00055
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 9/16/03

December 9, 2003

Ms. Valerie McCammon
Ports Petroleum
P.O. Box 1096, 1337 Blackleville Road
Wooster, OH 44691

Dear Ms McCammon:

Re: Exempt Construction and Operation Status,
087-17781-00055

The application from Ports Petroleum, received on July 2, 2003, 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, to be located at 112 East Central Avenue in LaGrange, Indiana, 46761, is classified as exempt from air pollution permit requirements:

one (1) high vacuum multiple phase hydrocarbon extraction system, identified as MPE1, with emissions controlled by one (1) 2.9 MMBtu/hr propane fired catalytic oxidizer, identified as CO1, with all emissions exhausted through Stack C1.

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 Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

SDF

cc: File - LaGrange County
LaGrange County Health Department
Air Compliance - Doyle Houser
Northern Regional Office
Permit Tracking
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Ports Petroleum
Source Location: 112 East Central Avenue, LaGrange, Indiana 46761
County: LaGrange
SIC Code: 2911
Exemption No.: 087-17781-00055
Permit Reviewer: SDF

Request

On May 29, 2003, Ports Petroleum submitted an application to construct and operate one (1) high vacuum multiple phase hydrocarbon extraction system, identified as MPE1, with emissions controlled by one (1) 2.9 MMBtu/hr propane fired catalytic oxidizer, identified as CO1, with all emissions exhausted through Stack C1.

The emissions generated by the proposed extraction system are the extraction system volatile organic compounds (VOC) and hazardous air pollutant (HAP) emissions, and the catalytic oxidizer combustion emissions.

The source VOC, single HAP, and combined HAP UPTE are estimated to be 3.32, 1.40, and 3.32 tons/yr respectively. Therefore, the source shall be issued an exemption pursuant to 326 IAC 2-1.1-3(d)(1) which states that all new sources with VOC, single HAP, and combined HAP UPTE less than 10, 1, and 2.5 tons per year, respectively, qualify for exempt status.

Therefore, the source shall be issued an exemption letter.

Existing Approvals

The proposed exemption will be the first source approval.

Recommendation

The staff recommends to the Commissioner that the exemption be approved. This recommendation is based on information derived from the application and subsequent information submitted on September 29, 2003.

Emission Calculations

1. Source Unrestricted Potential to Emit (UPTE):

The unrestricted potential to emit (UPTE) due to the proposed extraction system are the extraction system VOC and HAP emissions and the catalytic oxidizer combustion emissions.

a. Extraction System Emissions:

The following calculations determine the extraction system VOC, single HAP, and combined HAP UPTE based on the maximum estimated concentration, the molecular weight, the maximum flow rate, emissions before controls, and 8760 hours of operation.

All of the following pollutants are HAPs and VOCs.

$$\text{Tons/yr} = \frac{C * MW * Q * 60 \text{ min/hr} * 8760 \text{ hr/yr} * 1/2000 \text{ tons/lb}}{385,260,000 \text{ cuft/lb-mol}}$$

where: C = concentration (ppmv)
 MW = molecular weight (lb/lb-mol)
 Q = flow rate (cf/min)

Pollutant	Concentration (ppmv)	Molecular Weight (lb/lb-mol)	Flow Rate (cfm)	Emissions (tons/yr)
Benzene	22	78.11	720	0.84
Toluene	31	92.13	720	1.40
Ethylbenzene	1.3	106.16	720	0.07
Xylene	4.4	106.16	720	0.23
MTBE	18	88.15	720	0.78
Total				3.32

The VOC UPTE is determined to 3.32 ton/yr. The worst case single and combined HAP UPTE are determined to be 1.40 and 3.32 ton/yr, respectively.

b. Catalytic Oxidizer Combustion Emissions:

The following calculations determine the catalytic oxidizer combustion emissions based on propane combustion, a maximum design capacity of 2.9 MMBtu/hr, AP-42 emission factors, emissions before controls and 8760 hours of operation.

$$2.9 \text{ MMBtu/hr} * 1\text{E}6 \text{ Btu/MMBtu} * 1/94000 \text{ gal/Btu} * 1/1000 \text{ Tgal/gal} * \text{Ef lb/Tgal} * 1/2000 \text{ ton/lb}$$

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Ef (lb/Tgal)	0.40	0.40	0.02	14.00	0.50	1.90	-	-
Emissions	neg.	beg.	neg.	neg.	neg.	neg.	<10	neg.

2. Source Emissions After Controls:

a. Extraction System Emissions:

The extraction system emissions will be controlled by a catalytic oxidizer with an overall control efficiency of 97%. However, the oxidizer is not required to achieve compliance with any state or federal rules.

Therefore, no requirements shall be established to make the reductions associated the catalytic oxidizer federally enforceable. Since there are no requirements that make the reductions associated with the catalytic oxidizer federally enforceable, the reductions will not be included in the source potential to emit (PTE) determination.

Thus, for the purposes of this review, the source emissions after controls are determined to be equal to the estimated source UPTE.

b. Catalytic Oxidizer Combustion Emissions:

The catalytic oxidizer combustion emissions are uncontrolled. Therefore, the proposed emissions after controls equal the estimated UPTE.

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 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.”

This table reflects the PTE before controls based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	neg.
PM-10	neg.
SO ₂	neg.
VOC	3.32
CO	neg.
NO _x	neg.

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Pollutant	Potential To Emit (tons/year)
Worst Case Single HAP	1.40
Combined HAP	3.32

The source VOC, single HAP, and combined HAP UPTE are estimated to be 3.32, 1.40, and 3.32 tons/yr respectively. Therefore, the source shall be issued an exemption pursuant to 326 IAC 2-1.1-3(d)(1) which states that all new sources with VOC, single HAP, and combined HAP UPTE less than 10, 1, and 2.5 tons per year, respectively, qualify for exempt status.

County Attainment Status

The source is located in LaGrange County.

Pollutant	Status
PM ₁₀	attainment or unclassifiable
SO ₂	attainment or unclassifiable
NO ₂	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaGrange County has been designated as attainment or unclassifiable for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) LaGrange County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 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 emissions are not counted toward determination of PSD and Emission Offset applicability.

New Source Status

New Source Definition (emissions based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Extraction System	-	-	-	-	3.32	-	1.40	3.32
Combustion	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Total	neg.	neg.	neg.	neg.	3.32	neg.	1.40	3.32

PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

(a) This new source is not a major PSD stationary source because no regulated pollutant emissions are greater than their respective major source levels and the source is not one of the 28 listed source categories.

(b) This new source is not a Title V major stationary source because no criteria pollutant potential to emit (PTE) exceeds the applicable level of 100 tons/yr, no single hazardous air pollutant PTE exceeds the applicable levels of 10 tons/yr, and the combined hazardous air pollutant PTE does not exceed the applicable level of 25 tons/yr.

Federal Rule Applicability

(a) New Source Performance Standards (NSPS):

There are no New Source Performance Standards (40 CFR 60 and 326 IAC 12) that apply to the units of the proposed extraction system.

(b) National Emissions Standards for Hazardous Air Pollutants:

There are no National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 40 CFR 63, and 326 IAC 14) that apply to the units of the proposed extraction system.

State Rule Applicability - Entire Source

(a) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)):

The source is not one of the 28 listed source categories and there are no criteria pollutant emissions that exceed the PSD major source applicable level of 250 tons per year.

Therefore, the PSD requirements under 326 IAC 2-2 do not apply.

(b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants):

The single and combined HAP emissions are less than the respective applicable levels of 10 and 25 tons per year.

Therefore, the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) do not apply.

(c) 326 IAC 2-6 (Emission Reporting):

The requirements of 326 IAC 2-6 do not apply because the source PM10, SO2, NOx, VOC, and CO emissions are less than the LaGrange County applicable level of 100 tons per year.

(d) 326 IAC 2-7 (Part 70 Requirements):

No criteria pollutant emissions exceed the Part 70 major source level of 100 tons per year and the single and combined HAP emissions are less than the respective Part 70 major source levels of 10 and 25 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

State Rule Applicability - Extraction System

326 IAC 8-1-6 (New Facilities; General Reduction Requirements):

The proposed extraction system is not subject to the requirements of 326 IAC 8-1-6 because the VOC UPTE (0.38 ton/yr) is less than the applicable level of 25 tons/yr.

Conclusion

The proposed extraction system shall be constructed and operated according to the requirements specified in Exemption 087-17781-00055.