



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19506, SPRINGFIELD, ILLINOIS 62794-9506 - (217) 782-2113

PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-2113

CONSTRUCTION PERMIT

RECEIVED

MAR 03 2011

PERMITTEE

Shell Oil Products US
Attn: Kevin E. Dyer
17 Junction Drive PMB 399
Glenn Carbon, Illinois 62034

Application No.: 10120040

I.D. No.: 119090AAO

Applicant's Designation: Roxana Site

Date Received: January 28, 2011

Subject: SVE System With ICE Control

Date Issued: March 1, 2011

Location: Corner Chaffer St. and 8th Street, Roxana, Madison County

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission unit(s) and/or air pollution control equipment consisting of a soil vapor extraction (SVE) system using an internal combustion engine (ICE) unit pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

1. The Permittee can operate the system under this Construction Permit for one year from the date of issuance of this Construction Permit.
- 2a. The Permittee shall operate the system such that the emissions and operation of the SVE/ICE system not exceed the following limits:

	Maximum VOM/HAP Emissions		
	(Lbs/Hour)	(Tons/Month)	(Tons/Year)
	8.0	1.0	7.9

These limits are based on 35 Ill. Adm. Code 219.301 and emissions shall be calculated using the following equation:

$$\text{Emissions (cons)} = \left[\frac{\text{Total SVE/ICE System Exhaust Contaminant Concentration (ppmv)} \times \text{SVE/ICE System Exhaust Flowrate (scfm)} \times 100 \text{ lb/lb - Mole}}{10^6 \times 387 \text{ cu ft/lb - Mole}} \right] \times \frac{\text{Hours Operated}}{2000} \div \frac{\#}{\text{Ton}}$$

- b. Combustion emissions of the ICE shall not exceed the following limits:

Total Maximum firing rate = 5.67 mmBtu/hour

Pollutant	Emission	Emissions	
	Factor (Lb/mmBtu)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	0.082	0.20	2.04
Nitrogen Oxides (NO _x)	0.32	0.79	7.9
Particulate Matter (PM)	0.0066	0.02	0.16
Sulfur Dioxide (SO ₂)	0.0034	0.01	0.08
Volatile Organic Material (VOM)	0.0021	0.01	0.05

These limits are based on maximum firing rate, operating hours (8,760 hours/year), standard AP-42 - Tables 3.1-1 and 3.1-2a emission factors and information in the application.

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.
- 3. At all times, the Permittee shall maintain and operate the remediation system in a manner consistent with good air pollution control practice for minimizing emissions.
- 4. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 5a. The issuance of this permit does not relieve the Permittee of the responsibility of complying with the applicable provisions of the State of Illinois Rules and Regulations, Title 35: Subtitle C, Water Pollution Control, Chapter 1. The Permittee may need to obtain a permit from the Division of Water Pollution Control for operation of the system.
- b. It should be noted that issuance of this permit does not relieve the Permittee from compliance with the applicable portions of 35 Ill. Adm. Code Part 731 Underground Storage Tanks or the permit requirements of Sections 21 and 39 of the Environmental Protection Act with respect to a waste management operation, nor does it constitute a release from further responsibility for preventive or corrective action as defined under Section 4(y) of the Environmental Protection Act. Pursuant to 35 Ill. Adm. Code Part 731, approval may be required from the Bureau of Land - Leaking Underground Storage Tank Section prior to the installation or operation of this equipment.
- 6a. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic inspections and maintenance on the equipment covered under this permit such that the equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

- b. Pollution control devices shall be in operation at all times when the associated emission unit(s) is in operation and emitting air contaminants.
7. The Permittee shall maintain monthly records of the following items:
 - a. Measured exhaust total VOM and HAP contaminant concentration (ppmv) in exhaust air flow samples exhausting the SVE/ICE system. These samples and measurements shall be taken at start-up, once/day for first 3 days, 2 times/week for first 2 weeks and once every other month thereafter. Air samples from the first two weeks shall be sent to a certified lab and analyzed by USEPA method TO-14A using gas chromatography. After the first 2 weeks of operation, the Permittee may measure exhaust total VOM and HAP contaminant concentration (ppmv) in exhaust air using an appropriately calibrated photo or flame ionization detector on a once/every other month basis.
 - b. Exhaust air flow rate (dscfm) from the SVE/ICE system at start-up, once per week for first 2 weeks, and once every other month thereafter;
 - c. Hours of operation of the system (hours/month, hours/year)
 - d. Natural gas usage (mmscf/month, mmscf/year); and
 - e. VOM and HAP emissions (tons/month, tons/year) based on using the equation in Condition 2 and the data collected in a, b and c above.
 8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
 9. If there is an exceedance of or deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
 10. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276


and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

It should be noted that during the review of this application it was determined that your facility has the potential to emit (PTE) more than 10 tons per year of a single Hazardous Air Pollutant (HAP) (toluene) and will be classified as a major source under the Clean Air Act Permit Program (CAAPP). To avoid the CAAPP permitting requirements, you may want to consider applying for a Federally Enforceable State Operating Permit (FESOP) if your actual HAP emissions are below the major threshold level. A FESOP is an operating permit which contains federally enforceable limits in the form of permit conditions which effectively restrict the potential emissions of a source to below major source threshold, thereby excluding the source from the CAAPP.

Please be advised that CAAPP permit forms must be used when applying for a CAAPP or FESOP. For your convenience, the applicable forms are available on the Illinois EPA website.

If you have any questions on this permit, please contact Jocelyn Stakely at 217/782-2113.


Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: 03-01-2011

ECB:JRS:jws

cc: Region 3

DIRECTORY
ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF AIR

For assistance in preparing a permit application contact the Permit Section.

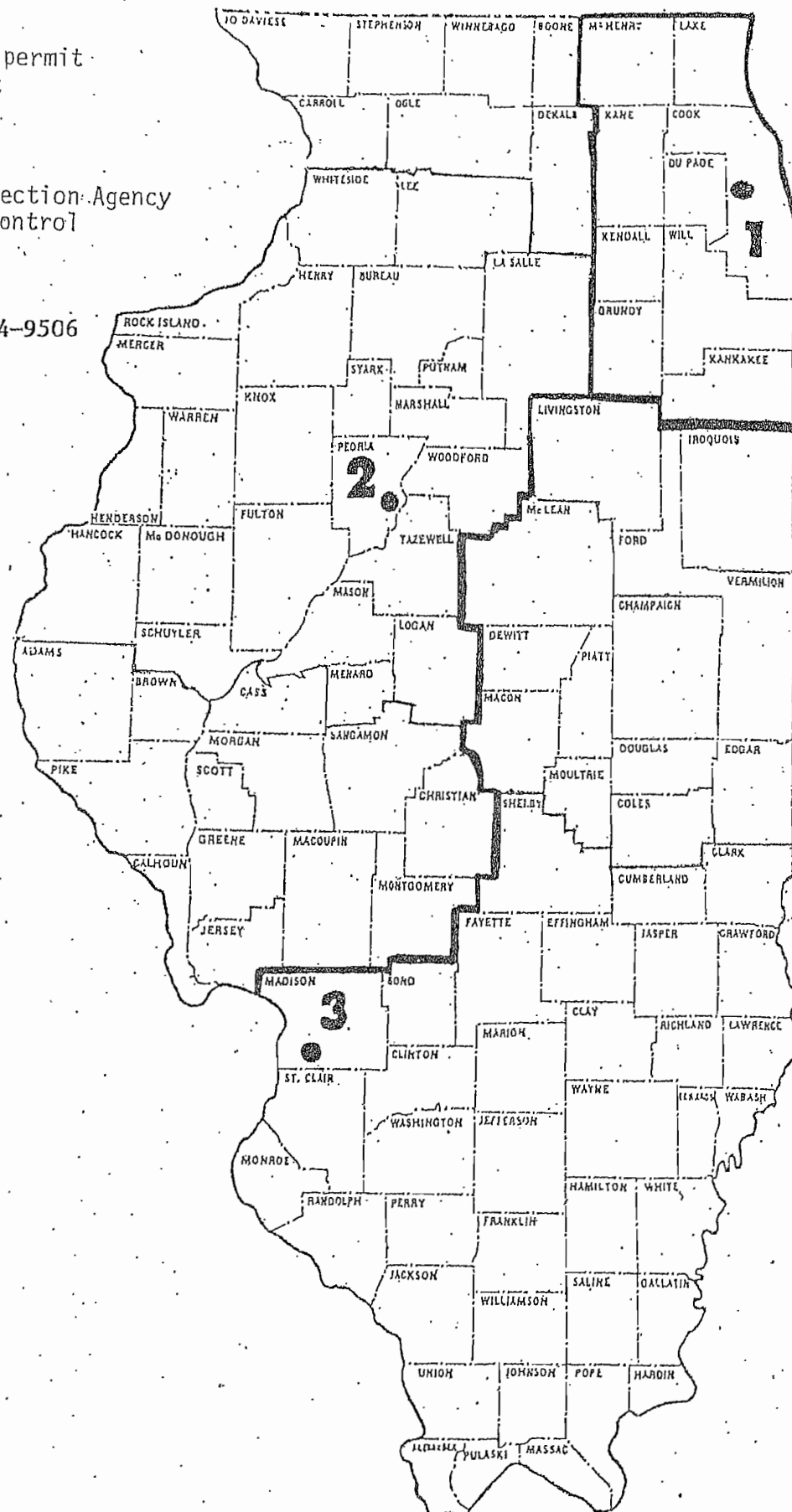
Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
1021 N. Grand Ave E.
P.O. Box 19506
Springfield, Illinois 62794-9506

or a regional office of the Field Operations Section. The regional offices and their areas of responsibility are shown on the map. The addresses and telephone numbers of the regional offices are as follows:

Illinois EPA
Region 1
Bureau of Air, FOS
9511 West Harrison
Des. Plaines, Illinois 60016
847/294-4000

Illinois EPA
Region 2
5415 North University
Peoria, Illinois 61614
309/693-5463

Illinois EPA
Region 3
2009 Mall Street
Collinsville, Illinois 62234
618/346-5120





STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

**STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
4. The permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emissions of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

The issuance of this permit:

- a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
- b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,
- c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,
- d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

- e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.
- b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
- a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or
 - b. upon finding that any standard or special conditions have been violated, or
 - c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

- e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
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 - c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.