

UNITED STATES POSTAL SERVICE

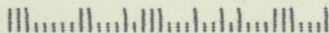
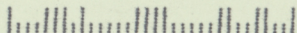
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First-Class Mail
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USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

A.K. ALEXANDER (3WP32)
U.S. EPA REGION III, WPD-SDWA
1650 ARCH STREET
PHILADELPHIA, PA 19103-2029

9103/2087



Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
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- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

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1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Ms. Kay Ensle
The Oil City Library
2 Central Avenue
Oil city, PA, 16301



4a. Article Number

Z 493 669 170

4b. Service Type

- | | |
|---|---|
| <input type="checkbox"/> Registered | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD |

7. Date of Delivery

8-18-99

5. Received By (Print Name)

1650 Arch Street

6. Signature (Addressee or Agent)

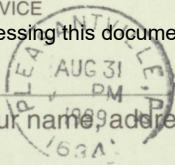
X *Kay Ensle*

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service

UNITED STATES POSTAL SERVICE

For assistance in accessing this document, please contact: R3_UIC_Mailbox.epa.gov

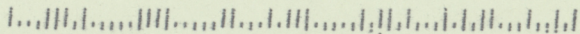


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A.K. ALEXANDER (3WP32)
U.S. EPA REGION III, WPD-SDWA
1650 ARCH STREET
PHILADELPHIA, PA 19103-2029

01



Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1, 2, 3, 4a, and 4b.
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I also want to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

MR. DAVID LESTER
LESTER OIL CO.
RD #1, BOX 313
PLEASANTVILLE, PA 16341

4a. Article Number

7 493 669 079

4b. Service Type

- | | |
|---|---|
| <input type="checkbox"/> Registered | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD |

7. Date of Delivery

8-31-99

5. Received By: (Print Name)

David Lester

6. Signature: (Addressee or Agent)

X [Signature]

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Z 493 669 079

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US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to DAVID LESHEN	
Street & Number LESHEN OIL CO., RD#1	
Post Office, State, & ZIP Code PLEASANTVILLE, PA 16341	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$

Postmark or Date

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Stick postage stamps to article cover. Pay **Cash postage**, add **return fee**, and **charges for any selected optional services** (See front).

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached, and present the article at a post office service window or hand it to your rural carrier (*no extra charge*).
2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach, and retain the receipt, and mail the article.
3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.
4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form
6. Save this receipt and present it if you make an inquiry.

102595-98 05

PS Form 3800, April 1995 (Reverse)

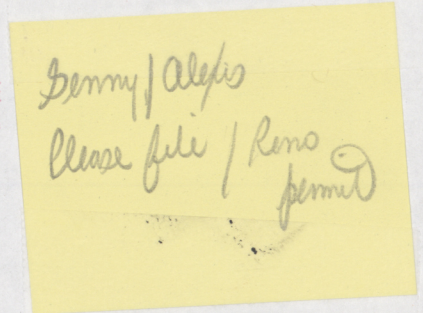


Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Post Office Box 1026
Harrisburg, Pennsylvania 17108-1026

July 26, 1999

TO EXPEDITE REVIEW USE
BHP REFERENCE NUMBER

S. Stephen Platt
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029



Re: File No. ER 99-2217-121-A
EPA, Underground Injection Control Permit
#PAS2R904BVEN, Recovery of Oil at Reno
Property, Shafer Run Road, Sugar Creek
Borough, Venango County

Dear Mr. Platt:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation. These requirements include consideration of the project's potential effect upon both historic and archaeological resources.

The project listed below does not constitute an undertaking under 36 CFR 800.2(o), and therefore, requires no comment from our office.

If you need further information in this matter please consult Ann Safley at (717) 787-9121. If you need a **status only** of the reviewed project please call Tina Webber at (717) 705-4036.

Sincerely,

A handwritten signature in black ink that reads "K. W. Carr".

Kurt W. Carr, Chief
Division of Archaeology &
Protection

KWC/tmw



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Dave Leshner
 814-589-7787
 904BVEN
 JUN 11 1999

Mr. David Leshner
 Leshner Oil Company
 RD #1 Box 313
 Pleasantville, PA 16341

RE: Underground Injection Control Permit (UIC) PAS2R904BVEN Reissue of Permit

Dear Mr. Leshner:

The Environmental Protection Agency has taken steps to reissue your UIC permit PAS2R904BVEN authorizing the injection of fluids through 3 Class IIR injection wells, from a facility located on the Reno Property at Shafer Run Road, Sugar Creek Borough, Venango County, Reno, Pennsylvania, in accordance with the conditions set forth herein. A draft permit has been developed for review, and after appropriate public notification may be reissued as final under the authority of the Federal UIC Regulations at 40 CFR Part 144, Section 144.37, "Continuation of Expiring Permits." EPA has issued a public notice to be placed in the Venango Newspapers, The Derrick and The News Herald, on June 16, 1999, announcing the anticipated reissuance of this permit.

A public hearing has been tentatively scheduled for Tuesday, July 27, 1999 at 7:00 P.M. at The Oil City Library, 2 Central Avenue, Oil City, Pennsylvania. EPA expressly reserves the right to cancel this hearing unless a significant degree of public interest is evidenced. The public record for this permit reissuance will remain open until July 27, 1999. If there is no opposition to the reissuance of this permit we will reissue the permit after that date.

You should review and examine the enclosed draft permit in detail and supply any comments you may have on this text as soon as possible. Please note that we have also included a copy of the Public Notice and the Statement of Basis.

Please contact Steve Platt of my staff at (215) 814-5464 if you have any questions on these materials or the permitting process in general.

Sincerely,

Karen D. Johnson, Chief					
SYMBOL	3WP32	3WP32	3WP32	Safe Drinking Water Act Branch	
SURNAME	Platt	SP Johnson	(3WP32)		
DATE		6/11/99	Office of Compliance and Enforcement		

EPA Form 1320-1 (12-70)
 Enclosures

OFFICIAL FILE COPY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JUN 22 1989

Mr. Tom Henry, President
Pennsylvania General Energy Corporation
208 Liberty Street
Warren, PA 16365

RE: PAS2R904BVEN, UIC Final Permit

Dear Mr. Henry:

Enclosed please find the executed final Underground Injection Control (UIC) program permit for your proposed five Class IIR injection wells located on the Reno Property, at Shafer Run Road, Sugar Creek Borough, Venango County, Pennsylvania.

As you know, the lack of substantial public interest in the draft proposal resulted in the cancellation of the June 8, 1989 public hearing. No public inquiries were received on the proposed action. Also enclosed is a copy of EPA's Public Notice announcing this final permit.

The permit's effective date is specified on the signatory page, as is its duration. All permit conditions are effective and enforceable as of that date and your compliance with these conditions is required.

You should note that under the terms of this permit you are only authorized to construct your facility. To commence injection operations, you must fulfill the conditions specified in the permit and obtain written authorization to inject from EPA after the submission of the required Completion Reports and supporting documentation.

In addition, please note that permit condition D.1. of Part II of this permit requires that you report back to EPA within thirty days of the receipt of this letter and attest to the fact that you have read and are personally familiar with all terms and conditions of this permit.

The final permit is exactly the same as the draft final version which was forwarded to you for review on May 3, 1989. The provisions of your permit may not be appealed under the provisions of 40 CFR § 124.19, since no comments were made on the draft.

Genny Disc #126:GH:Line 33: 6/14/89

CONCURRENCES

SYMBOL	3WM43	3WM43	3RC00	3WM43	3WM40	3WM00		
SURNAME	Hutchens	Platt	Lukens	Hoessel	Capacasa	Mitkus		
DATE	6/14/89	6/14/89	6/15/89	6/19/89	6/20	6/4		

5-18-99

Need written agreement
betw/ existing and new
permittee
How many wells for permit
reissuance (~~5 or 3~~)? 3

STEVE,

PLEASE FIND ATTACHED INFORMATION REQUIRED
FOR THE TRANSFER OF OWNERSHIP OF THE RENO
PROPERTY (PAS2R904BVEN) FROM PA GENERAL ENERGY
TO LESHER OIL CO. IF ANYTHING IS MISSING PLEASE
LET ME KNOW.

THANKS.

DAVE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. David Leshner
Leshner Oil Company
RD #1 Box 313
Pleasantville, PA 16341

JUN 11 1999

RE: Underground Injection Control Permit (UIC) PAS2R904BVEN Reissue of Permit

Dear Mr. Leshner:

The Environmental Protection Agency has taken steps to reissue your UIC permit PAS2R904BVEN authorizing the injection of fluids through 3 Class IIR injection wells, from a facility located on the Reno Property at Shafer Run Road, Sugar Creek Borough, Venango County, Reno, Pennsylvania, in accordance with the conditions set forth herein. A draft permit has been developed for review, and after appropriate public notification may be reissued as final under the authority of the Federal UIC Regulations at 40 CFR Part 144, Section 144.37, "Continuation of Expiring Permits." EPA has issued a public notice to be placed in the Venango Newspapers, "The Derrick" and "The News Herald" on June 16, 1999, announcing the anticipated reissuance of this permit.

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You should review and examine the enclosed draft permit in detail and supply any comments you may have on this text as soon as possible. Please note that we have also included a copy of the Public Notice and the Statement of Basis.

Please contact Steve Platt of my staff at (215) 814-5464 if you have any questions on these materials or the permitting process in general.

Sincerely,

A handwritten signature in blue ink that reads "J. Stephen Platt".

for Karen D. Johnson, Chief
Safe Drinking Water Act Branch (3WP32)
Office of Compliance and Enforcement

Enclosures

Permittee received "copy" instead of original

2

Please direct any questions you may have on the permit, its conditions or other UIC procedures to Steve Platt of my staff at (215) 597-2537.

Sincerely,

Alvin R. Morris, Director
Water Management Division

Enclosures

CONCURRENCES

SYMBOL								
SURNAME								
DATE								

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

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- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.



PENALTY FOR PRIVATE
USE, \$300

RETURN
TO



Print Sender's name, address, and ZIP Code in the space below.

United States

Environmental Protection Agency

Region III

UIC SECTION (3WM43)

ATTN:

G. Hutchens

841 Chestnut Building
Philadelphia, PA 19107

Re: PAS2R 904BVEN

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

3. Article Addressed to:

4. Article Number

Type of Service:

- Always obtain signature of addressee
or agent and DATE DELIVERED.

5. Signature – Addressee

X

6. Signature — Agent

X

Signature — Agent Raymond E. Hertz 600204151
Date of Delivery 2

7. Date of Delivery

8. Addressee's Address (*ONLY if requested and fee paid*)

P 034 511 968

e in accessing this document, please contact: R3_UIC_Ma

RECEIPT FOR CERTIFIED MAILNO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1984-446-014

PS Form 3800, Feb. 1982

Sent to	<i>Mr. Tom Henry</i>
	<i>Penn. General Energy Corp</i>
Street and No.	<i>208 Liberty St</i>
	<i>Monaca, Pa</i>
P.O., State and ZIP Code	<i>16365</i>

Postage

\$

Certified Fee

Special Delivery Fee

Restricted Delivery Fee

Return Receipt Showing
to whom and Date DeliveredReturn receipt showing to whom,
Date, and Address of Delivery

TOTAL Postage and Fees

\$

Postmark or Date

Hand carried by
*Steve Platt 6/26/89***CERTIFIED**

P 034 511 968

MAIL

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CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (see front)

1. If you want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier. (no extra charge)
2. If you do not want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, date, detach and retain the receipt, and mail the article.
3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article. **RETURN RECEIPT REQUESTED** adjacent to the number.
4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.
6. Save this receipt and present it if you make inquiry.

June 14, 1989

Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Box 1026
Harrisburg, PA 17108-1026

Attention: Kurt Carr, Chief Division of Archaeology
& Protection

RE: ER#89 1079 121A - Underground Injection Control
Reno Property, Venango County
UIC Permit PAS2R904BEVEN

Dear Mr. Carr:

Enclosed, as you requested is additional information
pertaining to the above referenced permit application.

1. Draft of Permit PAS2R904BEVEN
2. Statement of Basis
3. Topo Maps

I trust this information will meet your requirements.
If I can be of any further assistance, please let me know.

Sincerely,

Genevieve Hutchens
Genevieve Hutchens
Permit Coordinator
UIC Section, Drinking Water/
Ground Water Protection Branch

Enclosures



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION
BUREAU FOR HISTORIC PRESERVATION
BOX 1026
HARRISBURG, PENNSYLVANIA 17108-1026

June 1, 1989

Genevieve Hutchens
U.S. EPA Region III
841 Chestnut Building
Philadelphia, PA 19107

RE: ER# 89 1079 121 A
Underground Injection Control
Reno Property, Venango County

Dear Ms. Hutchens:

The above named project has been reviewed by the Bureau for Historic Preservation (the State Historic Preservation Office) in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation. These requirements include consideration of the project's potential effect upon both historic and archaeological resources.

All agency project assessments requiring the comments of the Pennsylvania State Historic Preservation Officer should include the funding program, a project description, project location, and cultural resource site information as outlined in 36 CFR Part 800.4 (Identifying Historic Properties). Because your request does not include sufficient information, we are unable to proceed with our review until the information on the attached form is provided.

If you need further information in this matter please consult the Division of Archaeology at (717) 783-9900.

Sincerely,

-9926
Kurt Carr

Kurt Carr, Chief
Division of Archaeology &
Protection

KC:jwb

PENNSYLVANIA GENERAL ENERGY, CORP.

*Have found
Gen. mgr.*

208 Liberty Street
Warren, Pa. 16365
(814) 723-3230

May 22, 1989

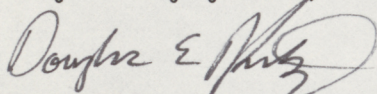
Ms. Genevieve Hutchens
U.S. Environmental Protection Agency
Region III
UIC Permits
841 Chestnut Building
Philadelphia, PA 19107

Dear Ms. Hutchens:

Enclosed in an original and a copy of our Irrevocable Standby Letter of Credit and our Standby Trust Agreement with Pennbank, 315 Second Avenue, Warren, PA 16365. These should be inserted as Appendix "R", "Necessary Resources" in our permit application of April 29, 1989.

If you should have any questions or comments concerning this matter, please do not hesitate to contact me.

Very truly yours,



Douglas E. Kuntz
Geologist

DEK/dls

Enclosures

RECEIVED
MAY 25 1989
DW/GW PROTECTION
BRANCH 3WM40

PENNSYLVANIA GENERAL ENERGY, CORP.

208 Liberty Street
Warren, Pa. 16365
(814) 723-3230

May 3, 1989

Mr. George H. Hoessel, Chief
UIC Section
U. S. Environmental Protection Agency
Region III
841 Chestnut Building
Philadelphia, PA 19107

RE: UIC Permit Application PAS2R904BVEN

Dear Mr. Hoessel:

The issues that you asked to be clarified are addressed as follows:

Attachment L: Construction Procedures

Well 18Q is the same as Reno 18Q.

The completion of the wells excluding well 18Q will be completed by cementing the 4 1/2" long string in a manner that the casing seat will be just on top of or slightly into the injection zone. This will prevent the injection fluids and pressure from coming in contact with the confining zone.

For injection to take place, one of the following will be implemented:

1. The 7" surface casing will be pulled, run back, and cemented to the surface then 4 1/2" long string will be cemented in. The injection will be down through the 4 1/2" long string.
2. The 4 1/2" long string will be cemented from the top of the injection zone to the surface. Then a tension packer on 2" pipe will be set in the bottom of the 4 1/2" long string. The injection will be done through 2" pipe.

Attachment P: Monitoring Program

The Monitoring Program discusses the monitoring of the adjacent wells annulus pressure. The wells will be produced to control

RECEIVED

MAY 09 1989

DW/GW PROTECTION
BRANCH 3WM40

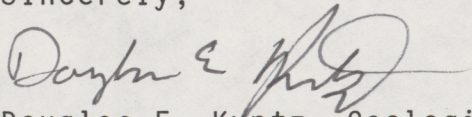
the fluid level, however, the annuluses are currently at 10 lbs. to 30 lbs. therefore the monitoring of the annulus pressures as discussed in Attachment P will be used.

Attachment R: Necessary Resources

The necessary forms will be sent under seperate cover in the near future.

If you should have any questions, please call me at (814) 723-3230.

Sincerely,

A handwritten signature in dark ink, appearing to read "Douglas E. Kuntz", written over the typed name.

Douglas E. Kuntz, Geologist
for T. H. Henry, President

DEK/dls

Mr. Tom Henry, President
 Pennsylvania General Energy Corporation
 208 Liberty Street
 Warren, PA 16365

MAY 3 1989

RE: PAS2R904BVEN, UIC Permit

Dear Mr. Henry:

Your application for an Underground Injection Control (UIC) permit for five Class IIR enhanced recovery injection wells used in the enhanced recovery of oil at a facility known as the Reno Property, located at Shafer Run Road, Sugar Creek Borough, Venango County, Pennsylvania, was deemed complete on April 26, 1989, in accordance with UIC regulations.

Your application is now being processed for the issuance of the final permit. While your application is being processed, please be advised that we will contact you for further technical information if the need arises. I have enclosed a copy of the proposed permit and other materials for your review.

You should examine this draft permit in detail and supply any comments you have on this text as soon as possible. Please note that I have also included a copy of the Public Notice announcing the opportunity for a public hearing on this proposed permit. EPA may cancel this hearing if there is no significant public interest. The Statement of Basis, which is an informational document made available to the public on proposed conditions, is also included.

The time frame for the issuance of a final permit determination is related to both the quality and quantity of public comments received on the draft permit and their impacts on the provisions of the permit.

You are reminded that a final determination on this permit cannot be made until we have received and approved your financial responsibility demonstration.

Please contact Steve Platt of my staff at 215-597-2537, if you have any questions on these materials or the permitting process in general.

Sincerely,

George Hoessel

George Hoessel, Chief
 CONCURRENCES

Genny Disc #2:GH:4/28/89

SYMBOL	3WM43	3WM43	3WM43	UIC Section (3WM43)		
SURNAME	Hutchens	Platt	Hoessel	Drinking Water/Ground Water Protection Branch		
DATE	4/14/89	4/28/89				

APR 26 1989

Mr. T. H. Henry, President
Pennsylvania General Energy Corporation
208 Liberty Street
Warren, PA 16365

Re: UIC Permit Application PAS2R904BVEN

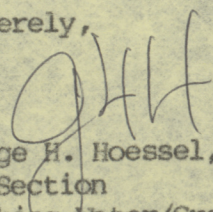
Dear Mr. Henry:

Your application for an Underground Injection Control (UIC) permit for the five Class IIR enhanced recovery well project known as Reno Property located on Shaffer Run Road, Sugar Creek Township, Venango County, Reno, Pennsylvania, has been reviewed for completeness in accordance with the Underground Injection Control regulations.

Your application is now deemed complete and EPA has set forth the date of this letter as the effective date to proceed with the processing of your application for the issuance of a final permit. While your application is now considered complete, EPA does, under the authority of 40 CFR Part 124.3(c), request clarification of the issues listed in the attachment. These issues are not considered to be substantial deficiencies in your application and, therefore, do not seriously impact on the permit processing. However, I do request that you resolve these issues as expeditiously as possible to ensure timely continuation of the permit processing.

Please do not hesitate to contact Steve Platt at (215) 597-2537 if you have any questions on these issues.

Sincerely,


George H. Hoessel, Chief
UIC Section
Drinking Water/Ground Water
Protection Branch

Enclosure

Platt:GH:LL 4.24.89 disk2(9) 3WM43				CONCURRENCES rewritten 4.25.89 3WM43			
SYMBOL	3WM43	3WM43	3WM43				
SURNAME	Hoessel	Platt	Hutchens				
DATE		5/26/89	4.15.4/24/89				

U. S. Environmental Protection Agency

Region III

Underground Injection Control Program

Issues for Clarification

EPA Permit Application PAS2R904BVEN

Attachment L: Construction Procedures

Is well 18Q and Reno 18Q the same well? All the injection wells, with the exception of well 18Q, will be completed similar to the schematic provided for well 53Q. This schematic shows completion of this well with 4-1/2" long string casing seated within the confining zone and cemented to the surface. The 4-1/2" casing should be seated at the top of, or slightly into, the injection zone to prevent injection fluids and pressure from coming into contact with the confining zone.

For injection to take place through the 4-1/2" casing, we must have assurance that the 7" surface casing has been cemented to the surface. If the 7" casing is not cemented to the surface, injection would have to occur through tubing and packer.

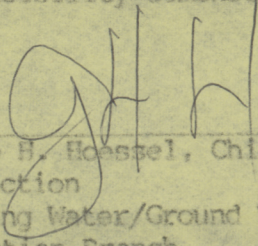
Attachment P: Monitoring Program

The monitoring program discusses the monitoring of adjacent wells for annulus pressure. From a review of your completion reports submitted for wells within the area of review, the wells you plan to monitor appear to be active producers. How do you plan to monitor an unpressurized annulus? Is this monitoring program more equivalent to a fluid level monitoring effort?

Based on your response to Attachment L, this may require you to modify slightly your P&A plan.

Attachment R: Necessary Resources

Please keep in mind that we cannot issue a final permit until we have received an acceptable financial responsibility demonstration from you.


George H. Hoessel, Chief
UIC Section
Drinking Water/Ground Water
Protection Branch

PENNSYLVANIA GENERAL ENERGY, CORP.

208 Liberty Street
Warren, Pa. 16365
(814) 723-3230

March 13, 1989

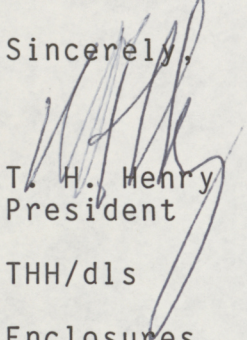
Mr. Steve Platt
UIC Permits
U.S. Environmental Protection Agency
Region III
PA Implementation Section
841 Chestnut St. Building
Philadelphia, PA 19107

Dear Mr. Platt:

Enclosed are two copies of our UIC Permit application for the Reno Property in Venango County, Pennsylvania.

If you should have any questions, please call us at (814) 723-3230.

Sincerely,


T. H. Henry
President

THH/dls

Enclosures

RECEIVED

MAR 20 1989

**WATER SUPPLY BRANCH,
EPA REGION III**

PAS 29040VEN

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION
BUREAU FOR HISTORIC PRESERVATION

Section 106 Review
Information Request (36 CFR 800.4)

() A. FUNDING PROGRAM

1. federal and/or state agency
2. type of assistance (grant, loan, permit, etc.)
3. name of assistance program
4. name and address of office at which application has been/will be filed

() B. PROJECT DESCRIPTION

- () 1. narrative/description of assisted and related work including:
 - () a. new construction, demolition or rehabilitation
 - () b. size of project (# buildings, # units, # stories, acreage)
 - () c. use or purpose
 - () d. extent and nature of ground disturbing activities (trenching, grading, foundation excavation, etc.)
- () 2. annotated site plan/map
- () 3. architectural plans and specifications
- () 4. 3" x 5" black & white photographs
 - () a. exterior
 - () b. interior
 - () c. surrounding environment

() C. PROJECT LOCATION

- () 1. map
 - () a. U.S.G.S. 7.5 min. series (topographic) with project location(s) and limits clearly marked. If you send a copy, be sure to identify quadrangle name.
 - () b. street map (for projects in populated areas)
- () 2. identify project address

() D. PROJECT SITE

- () 1. describe all buildings on site - complete Bureau for Historic Preservation Resource Form (attached with instructions) for each building built before 1940.
- () 2. describe previous land uses
- () 3. what National Register listed or potentially eligible sites (buildings, historic districts, archaeological sites) are known to be in the area? Tell us what sources were consulted (local historical societies, local or county planning agencies, previous historic site surveys, etc.).

777777

RECEIVED
JUN 9 1989
WATER SUPPLY BRANCH
EPA - REGION III

90-1000-151-0

NAME

ADDRESS

CITY/STATE/ZIP

PERMITTEE Pa. General Energy Corp. 208 Liberty Street 814-723-3230
Union, Pa. 16365
EIC PERMIT NUMBER _____ DATE RECEIVED 3/21/89
FACILITY NAME Remo Property, Shaffer Run Rd. DATE APPLICATION _____
LOCATION Sugar Creek Twp., Venango County, Pa. IS COMPLETE _____
NO/TYPE WELLS 5 ILR (18Q, 53Q, 91Q, RST-1, 100Q)
COVER PAGE: (NOTE PROBLEMS) _____

ATTACHMENTS/ISSUES

A. AREA OF REVIEW

- ☒ USED FIXED 1/4 MILE RADIUS
- USED OTHER CALCULATION
- USED CALCULATION CORRECTLY
- EPA CONFIRMATION OF CALCULATION
- RADIUS FROM WELL BORE
- ☒ PROJECT BOUNDARY
- PROPERTY BOUNDARY

B. MAPS OF WELLS/A OF R *see R-12 + R-21*

- ✓ - SUBMITTED TOPO MAP
- ✓ - MAP EXTENDS 1 MILE BEYOND PROPERTY
- ✓ - FEATURES DEPICTED
- DISTRIBUTION MANIFOLD *n/a*
- ✓ - ALL WELLS AND WATER SOURCES SHOWN
- ✓ - ALL IDENTIFIED WITHIN 1/4 MILE A OF R *(C+B coincide)*

C. CORRECTIVE ACTION PLAN AND WELL DATA

- IDENTIFICATION OF THE NAMES & ADDRESSES OF OWNERS OF RECORD WITHIN A OF R *Need statement of records reviewed!*
- PUBLIC RECORD INFO ON WELLS IN A OF R WHICH PENETRATE INJECTION ZONE *(Completion/Plugging records submitted)*
- ADEQUACY OF PUBLIC RECORD INFO (SEARCH OF LOCAL/COUNTY/STATE RECORDS) *(Well Records submitted) Need statement of records reviewed*
- ✓ - WELL DATA (DATE/TYPE CONSTRUCTION/LOCATION/DEPTH/RECORD OF PLUGGING AND/OR COMPLETION) *(Well Records)*
- ✓ - CORRECTIVE ACTION PLAN ON UNPLUGGED OR IMPROPERLY ABANDONED WELLS - *Statement if old wells are discovered they will be plugged & abandoned according to P+A plan*
- X - WELLS IN OTHER FORMATIONS AFFECTED BY PROPOSED PRESSURE ABOVE INJECTION ZONE FRACTURE PRESSURE

D. MAPS/CROSS SECTIONS OF USDW (N.A. TO II's)

E. NAME AND DEPTH OF USDW's (II)

- GEOLOGIC NAME OF USDW's *Shenango formation*
- DEPTH TO BOTTOM OF USDW's *~ 200 feet*

F. MAPS/CROSS SECTIONS OF GEOLOGIC STRUCTURE (N.A. TO II's)

G. GEOLOGICAL DATA-INJECTION AND CONFINING ZONES

INJECTION - CONFINING

- LITHOLOGIC DESCRIPTION
- GEOLOGIC NAME
- THICKNESS
- DEPTH
- FRACTURE PRESSURE

Sandstone
Venango Second Sand
Net Sand ~ 25 feet
~ 544 feet B.L.S.
500 ISIP

Shale
Conneaut Group
~ 100 feet
~ 440 feet B.L.S.
** Amity shale ~ 60 feet thick below Venango.*

Identified thru G.W. Publications

Steve Identified thru logs

from intake 180

H. OPERATING DATA (II)

- AVERAGE AND MAXIMUM DAILY RATE
- AVERAGE AND MAXIMUM DAILY VOLUME
- ✓ AVERAGE AND MAXIMUM INJECTION PRESSURE
- NATURE OF ANNULUS FLUID

AVERAGE

MAXIMUM

27.5 BBL/D

50 BBL/D

"

"

*need to call.
O.K.*

*round to 400 psi
393 requested
490 calculated*

- SOURCE AND ANALYSIS (PHYSICAL AND CHEMICAL)

Chemically treated brines from nearby production wells + treated fresh water for makeup

I. FORMATION TESTING PROGRAM (II)

- DESCRIPTION OF PROGRAM
- DATA ON FLUID PRESSURE
- DATA ON ESTIMATED FRAC PRESSURE
- PHYSICAL/CHEMICAL CHARACTERISTIC OF INJECTION ZONE

J. STIMULATION PROGRAM

- OUTLINE OF STIMULATION PLAN

K. INJECTION PROCEDURES

- ✓ DESCRIBE PROCEDURES *schematic provided*
- ✓ PUMP, SURGE, TANK, ETC.

L. CONSTRUCTION PROCEDURES - §147.155(b)

- SURFACE CASING FROM SURFACE TO 50' BELOW BASE OF LOWERMOST USDW
- CASING CEMENTED BY RECIRCULATION TO SURFACE OR NO LESS THAN 120% OF C.A. VOL.
- FOR IIR - LONG STRING OR TUBING TO INJECTION ZONE
- FOR IID - LONG STRING AND TUBING TO INJECTION ZONE
- ISOLATE INJECTION ZONE BY PLACING CEMENT TO FILL CALCULATED VOL - 50' ABOVE INJECTION ZONE
- R. A. SPECIFIED ADDITIONAL CASING AND CEMENTING §146.22
- SITED IN FORMATION SEPARATED BY A FAULT/FRACTURE-FREE CON ZONE

Questions re: construction (well 18Q)

18Q and the same well?

Diagram of well 63Q shows completion of well w/ 4 1/2" L.S. casing sealed w/ confining zone above inj zone. The 4 1/2" L.S. should actually be set @ top of or into injection zone, are you planning to inj. through tubing and packer?

Otherwise inj could occur into confining zone!

** If every well has L.S. cemented to surface then inj can take place through 4 1/2" casing*

L. (CONTINUED)

- CASING AND CEMENTING DESIGNED FOR LIFE EXPECTANCY OF WELL
- DESCRIPTIVE REPORT ON LOGS/TEST RELATING USDW/CON ZONES TO INJECTION AND ADJACENT FORMATIONS
- WHERE LITHOLOGY IS UNKNOWN
- FOR SURFACE CASING:
- ELECTRIC AND CALIPER LOGS IN OPEN HOLE
- CEMENT BOND, TEMP OR DENSITY LOG
- AFTER CASING IS SET AND CEMENTED
- FOR INTERMED AND LONG STRING CASING
- ELECTRIC-FOROSITY-GAMMA RAY IN OPEN HOLE
- FRACTURE FINDER LOGS AND
- CEMENT BOND, TEMP OR DENSITY LOG AFTER CASING IS SET AND CEMENTED

M. CONSTRUCTION DETAILS

- SCHEMATICS/DRAWINGS OF SURFACE AND SUBSURFACE CONSTRUCTION OF WELL

N. CHANGES IN INJECTED FLUID (III)
(N.A. TO II)

O. PLANS FOR WELL FAILURES

- ✓ CONTINGENCY PLANS FOR SHUT-INS OR WELL FAILURES TO PREVENT FLUID MIGRATION INTO USDW's

(will have a high/low pressure, automatic shut off)

P. MONITORING PROGRAM

- ✓ MONITORING WELLS AND DEVICES *Propose to monitor wells already existing in field.*
- X- EVALUATION OF MANIFOLD MONITORING IN COMPARISON TO INDIVIDUAL WELL MONITORING
- ✓ MECHANICAL INTEGRITY TEST PROPOSAL (\$146.08) O.K.

The monitoring program of adjacent wells discussed annulus pressure monitoring. most of these wells, if not all, appear to be oil wells. How do you plan to monitor an unpressurized annulus? so this more a fluid level monitoring effort?

Q. PLUGGING AND ABANDONMENT PLAN

- TYPE, NUMBER, PLACEMENT (ELEVATION TOP TO BOTTOM) OF PLUGS TO BE USED
- ✓ TYPE GRADE AND QUANTITY OF CEMENT TO BE USED

Review calculations

Q. (CONTINUED)

- METHOD OF PLUG PLACEMENT (146.10)
- METHOD USED TO ACHIEVE STATIC EQUILIBRIUM
- ✓ - ESTIMATE OF WELL CLOSURE COSTS
- ✓ - FORM 7520-14 SUBMITTED + signed

*may require slight modification if
constructive change*

R. NECESSARY RESOURCES

- DEMONSTRATION SUBMITTED (*not received*)
- EQUAL TO P/A COSTS ..
- METHODOLOGY CORRECT OF DEMO
- PAYABLE TO STAND-BY TRUST
(OTHER THAN FINANCIAL STATEMENTS)

S. AQUIFER EXEMPTION

- IF REQUESTED, DEMONSTRATION DATA *not requested*

T. EXISTING EPA PERMITS

- PROGRAM AND NUMBER *none submitted*
NPDES, RCRA

U. ✓ DESCRIPTION OF BUSINESS

For assistance in accessing this document, please contact: R3_UIC_Mailbox.epa.gov

FINAL PERMIT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

UNDERGROUND INJECTION CONTROL PERMIT NUMBER PAS2R904BVEN

AUTHORIZATION TO OPERATE CLASS IIR INJECTION WELLS

In compliance with provisions of the Safe Drinking Water Act, as amended, (42 U. S. C. §§ 300f et seq, commonly known as the SDWA), the Resource Conservation and Recovery Act (42 U. S. C. §§ 6901 et seq, commonly known as RCRA) and attendant regulations promulgated by the U. S. Environmental Protection Agency under Title 40 of the Code of Federal Regulations,

Leshar Oil Company

RD #1, Box 313

Pleasantville, Pennsylvania 16341


is authorized by this permit to inject fluids through the 3 Class IIR enhanced oil recovery injection wells, referenced in the permit application, from a facility located on the Reno Property at Shafer Run Road, Sugar Creek Borough, Venango County, Reno, Pennsylvania, in accordance with the conditions set forth herein.

All references to Title 40 of the Code of Federal Regulations are to all regulations that are in effect on the date that this permit is effective.

This permit shall become effective on August 12, 1999.

This permit and its authorization to inject shall remain in effect for the operational life of the facility, which includes proper well closure, plugging and abandonment.

Signed this 12th day of August 1999.



for Thomas J. Maslany, Director
Water Protection Division

PART I

A. Effect of Permit

The Permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The underground injection activity, otherwise authorized by this permit or rule, shall not allow the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 141 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Part C or the imminent and substantial endangerment provisions in Part D of the Safe Drinking Water Act (SDWA) or any other common or statutory law for any breach of any other applicable legal duty.

B. Permit Actions

This permit can be modified, revoked and reissued, or terminated for cause or upon request as specified in 40 CFR §§ 144.12, 144.39 and 144.40. Also, the permit is subject to minor modifications as specified in 40 CFR § 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee shall not stay the applicability or enforceability of any permit condition.

C. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

D. General Requirements

1. Duty to Comply. The permittee shall comply with all applicable UIC Program regulations and conditions of this permit. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance or modification, or for denial of a permit renewal application.

2. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

4. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

5. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit. If the permittee becomes aware of any incomplete or incorrect information in the permit application or subsequent reports, the permittee shall promptly submit information addressing these deficiencies.

6. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor any substances or parameters at any location, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA.

7. Penalties. Any person who violates a permit requirement is subject to civil penalties, fines and other enforcement actions under the SDWA and may be subject to the same such actions

pursuant to RCRA. Any person who willfully violates permit conditions is subject to criminal prosecution.

8. Transfer of Permits. This permit is not transferable to any person except after notice is sent on EPA Form 7520-7 (Rev. 8-91) and approval is given by the Director and the requirements of 40 CFR § 144.38 are satisfied. The Director may require modification or revocation of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act.

9. Signatory Requirements.

a. All reports required by this permit and other information requested by the Director shall be signed as follows:

- (1) for a corporation, by a responsible corporate officer of at least the level of vice-president;
- (2) for a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- (3) for a Municipality, State, Federal, or other public agency by either a principal executive or a ranking elected official.

b. A duly authorized representative of the official designated in paragraph a. above may also sign only if:

- (1) the authorization is made in writing by a person described in paragraph a. above;
- (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
- (3) the written authorization is submitted to the Director.

c. If an authorization under paragraph b. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this section must be submitted to

the Director prior to or together with any reports, information or applications to be signed by an authorized representative.

d. Any person signing a document under paragraph a. or b. of this section shall make the following certification:

"I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

10. Confidentiality of Information.

a. In accordance with 40 CFR Parts 2 (Public Information), and § 144.5, any information submitted to the Director pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 and § 144.5 (Public Information).

b. Claims of confidentiality for the following information will be denied:

- (1) The name and address of any permit applicant or permittee.
- (2) Information which deals with the existence, absence, or level of contaminants in drinking water.

11. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.

PART II

A. General

Copies of all reports and notifications required by this permit shall be signed and certified in accordance with the requirements of Section D.9 of Part I of this permit and shall be submitted to the Director at the following address:

Water Protection Division
Safe Drinking Water Act Branch (3WP32)
U. S. Environmental Protection Agency
Region III
1650 Arch Street Building
Philadelphia, Pennsylvania 19103-2029

B. Record Retention

1. The permittee shall retain records of all monitoring and other information required by this permit, including the following (if applicable), for a period of at least five years from the date the application was signed. This period may be extended by request of the Director at any time.

a. All data required to complete the permit application form for this permit and any supplemental information submitted under 40 CFR § 144.31;

b. Calibrations and maintenance records and all original strip chart recordings for continuous monitoring instrumentation;

c. Copies of all reports required by this permit;

d. The nature and composition of all injected fluids until three years after the completion of any plugging and abandonment procedures specified by this permit and 40 CFR § 146.10.

2. The permittee shall continue to retain the records after the above specified retention periods unless he or she delivers the records to the Director or obtains written approval from the Director to discard the records.

3. Records of monitoring information shall include:

a. The date, exact place, and the time of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. A precise description of both sampling methodology and the handling (custody) of samples;

d. The date(s) analyses were performed;

e. The individual(s) who performed the analyses;

f. The analytical techniques or methods used;

g. The results of such analyses;

4. Monitoring of the nature of injected fluids shall comply with applicable analytical methods cited below.

5. All environmental measurements required by the permit, including, but not limited to measurements of pressure, temperature, mechanical integrity (as applicable) and chemical analyses shall be done in accordance with EPA guidance on quality assurance.

C. Monitoring Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the fluid to be analyzed and the procedure for analysis of the sample shall be in accordance with test procedures approved under 40 CFR § 136.3 unless otherwise approved by the Director. The permittee shall identify the types of tests and methods used to generate the monitoring data.

2. Observation and recording of injection pressure, flow rate and cumulative volume shall at a minimum be observed weekly, recorded monthly, and submitted annually.

3. The nature of the injected fluid shall at minimum be monitored for the parameters listed below, once at the initiation of the injection operation and, thereafter, whenever the injected fluid is changed or when a representative sample is requested by the Director.

- | | |
|------------------------|--------------------------|
| - pH | - Manganese |
| - Specific Gravity | - Total Dissolved Solids |
| - Specific Conductance | - Barium |
| - Sodium | - Hydrogen Sulfide |
| - Chloride | - Alkalinity |
| - Iron | - Dissolved Oxygen |
| - Magnesium | - Hardness |

4. A demonstration of mechanical integrity in accordance with 40 CFR § 146.8 shall, after the initial demonstration, be made at least once every five years. In addition to the above requirement, a mechanical integrity test demonstration shall be conducted whenever protective casing or tubing is removed from the well, the packer is reseated, or a well failure is evident. The permittee may continue operation only if he has successfully demonstrated to the Director the mechanical integrity of the permitted wells. The permittee shall cease injection operations if a loss of mechanical integrity becomes evident or if mechanical integrity cannot be demonstrated. Any such test shall be conducted in keeping with the notification requirements of Permit Condition D.12 of Part II of this permit.

D. Reporting and Notification Requirements

1. Report on Permit Review. Within 30 days of receipt of this permit, the permittee shall report to the Director that he or she has read and is personally familiar with all terms and conditions of this permit.

2. Commencing Injection. The operator of an injection well may not commence injection until:

a. The permittee has demonstrated to EPA that the injection well(s) have mechanical integrity in accordance with 40 CFR § 146.8 and the permittee has received written notice from the Director that such demonstration is satisfactory; and

b. The permittee has submitted notice of completion of construction (EPA Form 7520-10) to the Director; and

c. The Director has inspected or otherwise reviewed the new injection well(s) and finds they are in compliance with the conditions of the permit; or

d. The permittee has not received notice from the Director of his or her intent to inspect or otherwise review the injection well(s) within 13 days of the date of the notice in paragraph (a) of this permit condition in which case prior inspection or review is waived and the permittee may commence injection.

3. Twenty-four Hour Reporting.

a. The permittee shall report to the Director any noncompliance which may endanger health or the environment. Any information shall be provided orally by calling (215) 814-5445 or (215) 814-5464 within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

(1) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.

(2) Any noncompliance with a permit condition, malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water, or failure of Mechanical Integrity Test demonstrations.

b. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

4. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

5. Other Noncompliance. The permittee shall report all other instances of noncompliance not reported at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition D.3 of Part II of this permit.

6. Planned Changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.

7. Conversion. The permittee shall notify the Director 30 days prior to the conversion of the well(s) to an operating status other than an injection well.

8. Temporary Abandonment. The permittee shall notify the Director prior to the temporary abandonment of an injection well.

9. Annual Report. The permittee shall submit an annual report (EPA Form 7520-11) to the Director summarizing the results of the monitoring required by Permit Condition C of Part II of this permit. This report shall include monthly monitoring records of injected fluids, the results of any mechanical integrity test(s), and any major changes in characteristics or sources of injected fluids. The Annual Report shall be submitted not later than January 31st, summarizing the activity of the calendar year ending the previous December 31st.

10. Plugging and Abandonment Reports and Notifications.

a. The permittee shall notify the Director 45 days before plugging and abandonment of any well. The Director may allow a shorter notice period upon written request.

b. Revisions to the Plugging and Abandonment Plan must be submitted to the Director no less than 45 days prior to plugging and abandonment. The Director must approve the revisions prior to the start of plugging operations.

c. Within 60 days after plugging the well(s), the permittee shall submit a report to the Director which shall consist of either:

(1) A statement that the well was plugged in accordance with the plan previously submitted to and approved by the Director; or

(2) Where actual plugging differed from the plan previously submitted, an updated version of the plan, on the form supplied by the Director, specifying the different procedures used. Any deviation from a previously approved plan which may endanger Underground Sources of Drinking Water is cause for the Director to require the operator to replug the well.

d. The report shall be certified as accurate by the person who performed the plugging operation.

11. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each schedule date.

12. Mechanical Integrity Tests. The permittee shall notify the Director of his or her intent to conduct a Mechanical Integrity Test at least 30 days prior to such a demonstration.

13. Cessation of Injection Activity. After a cessation of injection for two years the owner or operator shall plug and abandon the wells in accordance with the Plugging and Abandonment Plan unless he:

a. Provides written notice to the Director; and

b. Describes actions or procedures, satisfactory to the Director, that the owner or operator will take to ensure that the wells will not endanger USDWs during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived, in writing, by the Director.

E. Mechanical Integrity.

1. Standards. The permittee shall have and maintain the mechanical integrity of the permitted injection wells pursuant to 40 CFR § 146.8.

2. Request from Director. The Director may by written notice require the permittee to demonstrate mechanical integrity at any time.

Part III

A. Construction Requirements

1. Notwithstanding any other provision of this permit, the injection wells shall inject only into a formation(s) which is separated from any Underground Source of Drinking Water by a confining zone that is free of known open faults or fractures within the Area of Review.

2. Casing and Cementing. The permittee has cased and cemented the wells to prevent the movement of fluids into or between Underground Sources of Drinking Water. The casing and cement used in the construction of the wells are designed for the life expectancy of the wells. Cemented surface casing has been installed from the surface to a depth as least fifty feet below the lowermost underground source of drinking water. The injection zone has been isolated by the placement of long string casing to the top of the injection zone and by the circulation of cement behind the total length of long string casing. Injection will occur through tubing and packer.

3. Logs and Tests. The permittee has submitted a narrative report that interpreted log and test results which specifically relate (1) the lowermost underground source of drinking water to the confining zone adjacent to it and (2) the injection zone to the adjacent formations. The report indicated the results of the surface casing cementing operation. Further, the narrative detailed the rationale used to make these interpretations. The narrative report was prepared by a knowledgeable log analyst and submitted to the Director. The Director may prescribe additional logs or waive logging requirements in the future should field conditions so warrant.

B. Operating Requirements

1. Injection Formation. Injection shall be limited to the Venango Second Sand in the subsurface interval between approximately 540 and 565 feet.

2. Injection Fluid. The permittee shall not inject any hazardous substances, as defined by 40 CFR 261 nor any other fluid, other than chemically treated brines from nearby production wells and treated fresh water for makeup.

3. Injection Volume Limitation. Injection volume shall not exceed, on average, 50 bbl per day per well.

4. Injection Pressure Limitation. Injection pressure, measured at the surface, shall not exceed a maximum of 400 psi. Injection at a pressure which initiates fractures in the confining zone adjacent to underground sources of drinking water or causes the movement of injection or formation fluids into an underground source of drinking water is prohibited.

5. Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited, as is injection into any underground source of drinking water.

C. Plugging and Abandonment

1. Plugging and Abandonment. The permittee shall plug and abandon the wells as provided in the approved plugging and abandonment plan (EPA Form 7520-14) of the permit application and in accordance with the reporting and notification provisions of Section D.10. of Part II of this permit.

2. Plugging and Abandonment shall be conducted in such a manner that movement of fluids will not be allowed into an underground source of drinking water nor will one underground source of drinking water be allowed to move into another.

D. Financial Responsibility.

1. The permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug and abandon the underground injection wells in the amount of at least \$1000/well. If the acceptability of the Irrevocable Letter of Credit No. 577 issued by Hamlin Bank and Trust Company, incorporated in the State of Pennsylvania, and the Standby Trust Agreement drawn in EPA's favor should change, the permittee shall not substitute an alternative demonstration of financial responsibility from that which the Director has approved, unless he has previously submitted evidence of that alternative demonstration to the Director and the Director notifies him that the alternative demonstration of financial responsibility is acceptable. The Director may require the permittee to submit a revised demonstration of Financial Responsibility if the Director has reason to believe that the original demonstration is no longer adequate to cover the costs of plugging and abandonment.

2. Insolvency of Financial Institution. In the event of the bankruptcy of the trustee or issuing institution of the financial mechanism, or a suspension or revocation of the authority of the trustee institution to act as a trustee or the institution issuing the financial mechanism to issue such an instrument, the permittee must immediately notify the Director and submit an alternative demonstration of financial responsibility acceptable to the Director within sixty days after such an event.



DRAFT

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

UNDERGROUND INJECTION CONTROL PERMIT NUMBER PAS2R904BVEN

AUTHORIZATION TO OPERATE CLASS IIR INJECTION WELLS

In compliance with provisions of the Safe Drinking Water Act, as amended, (42 U. S. C. §§ 300f et seq, commonly known as the SDWA), the Resource Conservation and Recovery Act (42 U. S. C. §§ 6901 et seq, commonly known as RCRA) and attendant regulations promulgated by the U. S. Environmental Protection Agency under Title 40 of the Code of Federal Regulations,

Leshar Oil Company

RD #1, Box 313

Pleasantville, Pennsylvania 16341

is authorized by this permit to inject fluids through the 3 Class IIR enhanced oil recovery injection wells, referenced in the permit application, from a facility located on the Reno Property at Shafer Run Road, Sugar Creek Borough, Venango County, Reno, Pennsylvania, in accordance with the conditions set forth herein.

All references to Title 40 of the Code of Federal Regulations are to all regulations that are in effect on the date that this permit is effective.

This permit shall become effective on _____.

This permit and its authorization to inject shall remain in effect for the operational life of the facility, which includes proper well closure, plugging and abandonment.

Signed this ____ day of _____ 1999.

Thomas J. Maslany, Director
Water Protection Division

DRAFT

PART I

A. Effect of Permit

The Permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The underground injection activity, otherwise authorized by this permit or rule, shall not allow the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 141 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Part C or the imminent and substantial endangerment provisions in Part D of the Safe Drinking Water Act (SDWA) or any other common or statutory law for any breach of any other applicable legal duty.

B. Permit Actions

This permit can be modified, revoked and reissued, or terminated for cause or upon request as specified in 40 CFR §§ 144.12, 144.39 and 144.40. Also, the permit is subject to minor modifications as specified in 40 CFR § 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee shall not stay the applicability or enforceability of any permit condition.

C. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

D. General Requirements

1. Duty to Comply. The permittee shall comply with all applicable UIC Program regulations and conditions of this permit. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance or modification, or for denial of a permit renewal application.

2. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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3. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

4. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

5. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit. If the permittee becomes aware of any incomplete or incorrect information in the permit application or subsequent reports, the permittee shall promptly submit information addressing these deficiencies.

6. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor any substances or parameters at any location, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA.

7. Penalties. Any person who violates a permit requirement is subject to civil penalties, fines and other enforcement actions under the SDWA and may be subject to the same such actions pursuant to RCRA. Any person who willfully violates permit conditions is subject to criminal prosecution.

8. Transfer of Permits. This permit is not transferable to any person except after notice is sent on EPA Form 7520-7 (Rev. 8-91) and approval is given by the Director and the requirements of 40 CFR § 144.38 are satisfied. The Director may require modification or revocation of the permit

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to change the name of the permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act.

9. Signatory Requirements.

a. All reports required by this permit and other information requested by the Director shall be signed as follows:

- (1) for a corporation, by a responsible corporate officer of at least the level of vice-president;
- (2) for a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- (3) for a Municipality, State, Federal, or other public agency by either a principal executive or a ranking elected official.

b. A duly authorized representative of the official designated in paragraph a. above may also sign only if:

- (1) the authorization is made in writing by a person described in paragraph a. above;
- (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
- (3) the written authorization is submitted to the Director.

c. If an authorization under paragraph b. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this section must be submitted to the Director prior to or together with any reports, information or applications to be signed by an authorized representative.

d. Any person signing a document under paragraph a. or b. of this section shall make the following certification:

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"I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

10. Confidentiality of Information.

a. In accordance with 40 CFR Parts 2 (Public Information), and § 144.5, any information submitted to the Director pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 and § 144.5 (Public Information).

b. Claims of confidentiality for the following information will be denied:

- (1) The name and address of any permit applicant or permittee.
- (2) Information which deals with the existence, absence, or level of contaminants in drinking water.

11. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.

PART II

A. General

Copies of all reports and notifications required by this permit shall be signed and certified in accordance with the requirements of Section D.9 of Part I of this permit and shall be submitted to the Director at the following address:

Water Protection Division
Safe Drinking Water Act Branch (3WP32)
U. S. Environmental Protection Agency
Region III
1650 Arch Street Building
Philadelphia, Pennsylvania 19103-2029

B. Record Retention

1. The permittee shall retain records of all monitoring and other information required by this permit, including the following (if applicable), for a period of at least five years from the date the application was signed. This period may be extended by request of the Director at any time.

a. All data required to complete the permit application form for this permit and any supplemental information submitted under 40 CFR § 144.31;

b. Calibrations and maintenance records and all original strip chart recordings for continuous monitoring instrumentation;

c. Copies of all reports required by this permit;

d. The nature and composition of all injected fluids until three years after the completion of any plugging and abandonment procedures specified by this permit and 40 CFR § 146.10.

2. The permittee shall continue to retain the records after the above specified retention periods unless he or she delivers the records to the Director or obtains written approval from the Director to discard the records.

3. Records of monitoring information shall include:

a. The date, exact place, and the time of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. A precise description of both sampling methodology and the handling (custody) of samples;

d. The date(s) analyses were performed;

e. The individual(s) who performed the analyses;

f. The analytical techniques or methods used;

g. The results of such analyses;

4. Monitoring of the nature of injected fluids shall comply with applicable analytical methods cited below.

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5. All environmental measurements required by the permit, including, but not limited to measurements of pressure, temperature, mechanical integrity (as applicable) and chemical analyses shall be done in accordance with EPA guidance on quality assurance.

C. Monitoring Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the fluid to be analyzed and the procedure for analysis of the sample shall be in accordance with test procedures approved under 40 CFR § 136.3 unless otherwise approved by the Director. The permittee shall identify the types of tests and methods used to generate the monitoring data.

2. Observation and recording of injection pressure, flow rate and cumulative volume shall at a minimum be observed weekly, recorded monthly, and submitted annually.

3. The nature of the injected fluid shall at minimum be monitored for the parameters listed below, once at the initiation of the injection operation and, thereafter, whenever the injected fluid is changed or when a representative sample is requested by the Director.

- | | |
|------------------------|--------------------------|
| - pH | - Manganese |
| - Specific Gravity | - Total Dissolved Solids |
| - Specific Conductance | - Barium |
| - Sodium | - Hydrogen Sulfide |
| - Chloride | - Alkalinity |
| - Iron | - Dissolved Oxygen |
| - Magnesium | - Hardness |

4. A demonstration of mechanical integrity in accordance with 40 CFR § 146.8 shall, after the initial demonstration, be made at least once every five years. In addition to the above requirement, a mechanical integrity test demonstration shall be conducted whenever protective casing or tubing is removed from the well, the packer is resealed, or a well failure is evident. The permittee may continue operation only if he has successfully demonstrated to the Director the mechanical integrity of the permitted wells. The permittee shall cease injection operations if a loss of mechanical integrity becomes evident or if mechanical integrity cannot be demonstrated. Any such test shall be conducted in keeping with the notification requirements of Permit Condition D.12 of Part II of this permit.

D. Reporting and Notification Requirements

1. Report on Permit Review. Within 30 days of receipt of this permit, the permittee shall report to the Director that he or she has read and is personally familiar with all terms and conditions of this permit.

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2. Commencing Injection. The operator of an injection well may not commence injection until:

a. The permittee has demonstrated to EPA that the injection well(s) have mechanical integrity in accordance with 40 CFR § 146.8 and the permittee has received written notice from the Director that such demonstration is satisfactory; and

b. The permittee has submitted notice of completion of construction (EPA Form 7520-10) to the Director; and

c. The Director has inspected or otherwise reviewed the new injection well(s) and finds they are in compliance with the conditions of the permit; or

d. The permittee has not received notice from the Director of his or her intent to inspect or otherwise review the injection well(s) within 13 days of the date of the notice in paragraph (a) of this permit condition in which case prior inspection or review is waived and the permittee may commence injection.

3. Twenty-four Hour Reporting.

a. The permittee shall report to the Director any noncompliance which may endanger health or the environment. Any information shall be provided orally by calling (215) 814-5445 or (215) 814-5464 within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

(1) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.

(2) Any noncompliance with a permit condition, malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water, or failure of Mechanical Integrity Test demonstrations.

b. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

4. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

5. Other Noncompliance. The permittee shall report all other instances of noncompliance not reported at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition D.3 of Part II of this permit.

6. Planned Changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.

7. Conversion. The permittee shall notify the Director 30 days prior to the conversion of the well(s) to an operating status other than an injection well.

8. Temporary Abandonment. The permittee shall notify the Director prior to the temporary abandonment of an injection well.

9. Annual Report. The permittee shall submit an annual report (EPA Form 7520-11) to the Director summarizing the results of the monitoring required by Permit Condition C of Part II of this permit. This report shall include monthly monitoring records of injected fluids, the results of any mechanical integrity test(s), and any major changes in characteristics or sources of injected fluids. The Annual Report shall be submitted not later than January 31st, summarizing the activity of the calendar year ending the previous December 31st.

10. Plugging and Abandonment Reports and Notifications.

a. The permittee shall notify the Director 45 days before plugging and abandonment of any well. The Director may allow a shorter notice period upon written request.

b. Revisions to the Plugging and Abandonment Plan must be submitted to the Director no less than 45 days prior to plugging and abandonment. The Director must approve the revisions prior to the start of plugging operations.

c. Within 60 days after plugging the well(s), the permittee shall submit a report to the Director which shall consist of either:

(1) A statement that the well was plugged in accordance with the plan previously submitted to and approved by the Director; or

(2) Where actual plugging differed from the plan previously submitted, an updated version of the plan, on the form supplied by the Director, specifying the different procedures used. Any deviation from a previously approved plan which may endanger Underground Sources of Drinking Water is cause for the Director to require the operator to replug the well.

d. The report shall be certified as accurate by the person who performed the plugging operation.

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11. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each schedule date.

12. Mechanical Integrity Tests. The permittee shall notify the Director of his or her intent to conduct a Mechanical Integrity Test at least 30 days prior to such a demonstration.

13. Cessation of Injection Activity. After a cessation of injection for two years the owner or operator shall plug and abandon the wells in accordance with the Plugging and Abandonment Plan unless he:

a. Provides written notice to the Director; and

b. Describes actions or procedures, satisfactory to the Director, that the owner or operator will take to ensure that the wells will not endanger USDWs during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived, in writing, by the Director.

E. Mechanical Integrity.

1. Standards. The permittee shall have and maintain the mechanical integrity of the permitted injection wells pursuant to 40 CFR § 146.8.

2. Request from Director. The Director may by written notice require the permittee to demonstrate mechanical integrity at any time.

PART III

A. Construction Requirements

1. Notwithstanding any other provision of this permit, the injection wells shall inject only into a formation(s) which is separated from any Underground Source of Drinking Water by a confining zone that is free of known open faults or fractures within the Area of Review.

2. Casing and Cementing. The permittee cased and cemented the wells to prevent the movement of fluids into or between Underground Sources of Drinking Water. The casing and cement used in the construction of the wells are designed for the life expectancy of the wells. Cemented surface casing has been installed from the surface to a depth as least fifty feet below the lowermost underground source of drinking water. The injection zone has been isolated by the placement of long string casing to the top of the injection zone and by the circulation of cement behind the total length of long string casing. Injection will occur through tubing and packer.

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3. Logs and Tests. The logs and tests listed below were conducted during the construction of the wells. The permittee submitted a narrative report that interpreted log and test results which specifically relate (1) the lowermost underground source of drinking water to the confining zone adjacent to it and (2) the injection zone to the adjacent formations. The report indicated the results of the surface casing cementing operation. Further, the narrative detailed the rationale used to make these interpretations. The narrative report was prepared by a knowledgeable log analyst and submitted to the Director. The Director may prescribe additional logs or waive logging requirements in the future should field conditions so warrant.

B. Operating Requirements

1. Injection Formation. Injection shall be limited to the Venango Second Sand in the subsurface interval between approximately 540 and 565 feet.

2. Injection Fluid. The permittee shall not inject any hazardous substances, as defined by 40 CFR 261 nor any other fluid, other than chemically treated brines from nearby production wells and treated fresh water for makeup.

3. Injection Volume Limitation. Injection volume shall not exceed, on average, 50 bbl per day per well.

4. Injection Pressure Limitation. Injection pressure, measured at the surface, shall not exceed a maximum of 400 psi. Injection at a pressure which initiates fractures in the confining zone adjacent to underground sources of drinking water or causes the movement of injection or formation fluids into an underground source of drinking water is prohibited.

5. Injection between the outermost casing protecting Underground Sources of Drinking Water and the well bore is prohibited, as is injection into any Underground Source of Drinking Water.

C. Plugging and Abandonment

1. Plugging and Abandonment. The permittee shall plug and abandon the wells as provided in the approved plugging and abandonment plan (EPA Form 7520-14) of the permit application and in accordance with the reporting and notification provisions of Section D.10. of Part II of this permit.

2. Plugging and Abandonment shall be conducted in such a manner that movement of fluids will not be allowed into an Underground Source of Drinking Water nor will one Underground Source of Drinking Water be allowed to move into another.

D. Financial Responsibility

1. The permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug and abandon the underground injection wells in the amount of at least \$1000/well. If the acceptability of the Irrevocable Letter of Credit No. 577 issued by Hamlin Bank and Trust Company, incorporated in the State of Pennsylvania, and the Standby Trust Agreement drawn in EPA's favor should change, the permittee shall not substitute an alternative demonstration of financial responsibility from that which the Director has approved, unless he has previously submitted evidence of that alternative demonstration to the Director and the Director notifies him that the alternative demonstration of financial responsibility is acceptable. The Director may require the permittee to submit a revised demonstration of Financial Responsibility if the Director has reason to believe that the original demonstration is no longer adequate to cover the costs of plugging and abandonment.

2. Insolvency of Financial Institution. In the event of the bankruptcy of the trustee or issuing institution of the financial mechanism, or a suspension or revocation of the authority of the trustee institution to act as a trustee or the institution issuing the financial mechanism to issue such an instrument, the permittee must immediately notify the Director and submit an alternative demonstration of financial responsibility acceptable to the Director within sixty days after such an event.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

841 Chestnut Building
Philadelphia, Pennsylvania 19107

UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

NOTICE OF FINAL PERMIT

United States Environmental Protection Agency, Region III, announced on June 22, 1989, the issuance of a final permit under the authority of the Federal UIC Regulations at 40 CFR Parts 124, 144, 146, and 147 to Pennsylvania General Energy Corporation of Warren, Pennsylvania. The project has been authorized to operate five Class IIR enhanced recovery injection wells used in the enhanced recovery of oil at a facility known as the Reno Property, located on Shafer Run Road, Sugar Creek Borough, Venango County, Pennsylvania.

The Administrative Record for this permit action remains available for public inspection during normal business hours at the office of the UIC Section in the Drinking Water/Ground Water Protection Branch of EPA Region III, 841 Chestnut Building, in Philadelphia, Pennsylvania. All information submitted by the applicant, unless deemed confidential, is available to the public in the Administrative Record. The Administrative Record includes the permit application and all related correspondence. A copy of the final permit is available for inspection at the Oil City Library, 2 Central Avenue, Oil City, PA.

EPA solicited public comment on the proposal to issue a final UIC permit for this facility. Written public comments and requests for a public hearing were to be submitted until June 5, 1989. The public hearing scheduled for June 8, 1989, at the Sugar Creek Borough Municipal Building, 212 Fox Street, Franklin, PA, was not held since EPA did not receive any written requests for a public hearing neither did this office receive any public comments on the draft permit as requested. EPA expressly reserved the right to cancel this hearing unless a significant degree of public interest was evidenced.

Interested persons may obtain further information, including copies of the permit, by contacting Genevieve Hutchens, UIC Section (3WM43), Drinking Water/Ground Water Protection Branch, U. S. EPA, 841 Chestnut Building, Philadelphia, Pennsylvania, 19107, or by phone at (215) 597-8129.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III

841 Chestnut Building
Philadelphia, Pennsylvania 19107

UNDERGROUND INJECTION CONTROL PERMIT NUMBER PAS2R904BVEN

AUTHORIZATION TO OPERATE CLASS IIR INJECTION WELLS

In compliance with provisions of the Safe Drinking Water Act, as amended, (42 U.S.C. §§ 300f-300j-11, commonly known as the SDWA), the Resource Conservation and Recovery Act (42 U.S.C. §§ 6901-6991i, commonly known as RCRA) and attendant regulations promulgated by the U.S. Environmental Protection Agency under Title 40 of the Code of Federal Regulations,

PENNSYLVANIA GENERAL ENERGY CORPORATION

208 Liberty Street

Warren, Pennsylvania 16365

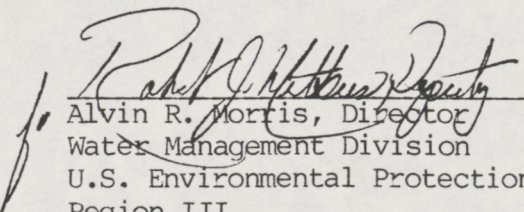
is authorized by this permit to construct and operate five Class IIR enhanced oil recovery injection wells, numbered as referenced in the permit application, with the conditions as set forth herein. This facility is known as the Reno Property and is located at Shafer Run Road, Sugar Creek Borough, Venango County, Reno, Pennsylvania.

All references to Title 40 of the Code of Federal Regulations are to all regulations that are in effect on the date that this permit is effective.

This permit shall become effective on June 22, 1989.

This permit and its authorization to inject shall remain in effect until midnight June 22, 1999.

Signed this 22d day of June, 1989.


Alvin R. Morris, Director
Water Management Division
U.S. Environmental Protection Agency
Region III

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PART I

A. Effect of Permit

The Permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The underground injection activity, otherwise authorized by this permit or rule, shall not allow the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 141 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Part C or the imminent and substantial endangerment provisions in Part D of the Safe Drinking Water Act (SDWA) or any other common or statutory law for any breach of any other applicable legal duty.

B. Permit Actions

This permit can be modified, revoked and reissued, or terminated for cause or upon request as specified in 40 CFR §§ 144.12, 144.39, 144.40, and 144.41. Also, the permit is subject to minor modifications for cause as specified in 40 CFR § 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee shall not stay the applicability or enforceability of any permit condition.

C. Severability

The provisions of this permit are severable, and if any provisions of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

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D. General Requirements

1. Duty to Comply. The permittee shall comply with all applicable UIC Program regulations and conditions of this permit. Any permit non-compliance constitutes a violation of SDWA and is grounds for enforcement action, permit termination, revocation and reissuance or modification, or for denial of a permit renewal application.

2. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

4. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

5. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit. If the permittee becomes aware of any incomplete or incorrect information in the permit application or subsequent reports, the permittee shall promptly submit information addressing these deficiencies.

6. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA any substances or parameters at any location.

7. Penalties. Any person who violates a permit requirement is subject to civil penalties, fines and other enforcement actions under the SDWA and may be subject to the same such actions pursuant to the RCRA. Any person who willfully violates permit conditions is subject to criminal prosecution.

8. Transfer of Permits. This permit is not transferable to any person except after notice is sent on EPA Form 7520-7 and approval is given by the Director and the requirements of 40 CFR § 144.38 are satisfied. The Director may require modification or revocation of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act.

9. Signatory Requirements.

a. All reports required by this permit and other information requested by the Director shall be signed as follows:

- (1) for a corporation, by a responsible corporate officer of at least the level of vice-president;
- (2) for a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- (3) for a municipality, State, Federal, or other public agency by either a principal executive or a ranking elected official.

b. A duly authorized representative of the official designated in paragraph a. above may also sign only if:

- (1) the authorization is made in writing by a person described in paragraph a. above;
- (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
- (3) the written authorization is submitted to the Director.

c. If an authorization under paragraph b. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this section must be submitted to the Director prior to or together with any reports, information or applications to be signed by an authorized representative.

d. Any person signing a document under paragraph a. or b. of this section shall make the following certification:

"I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

10. Confidentiality of Information.

a. In accordance with 40 CFR Parts 2 (Public Information), and § 144.5, any information submitted to the Director pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 and § 144.5 (Public Information).

b. Claims of confidentiality for the following information will be denied:

- (1) The name and address of any permit applicant or permittee.
- (2) Information which deals with the existence, absence, or level of contaminants in drinking water.

11. Reapplication.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a complete application for a new permit at least 180 days before this permit expires.

12. State Laws.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.

PART II

A. General

Copies of all reports and notifications required by this permit shall be signed and certified in accordance with the requirements of Section D(9) of Part I of this permit and shall be submitted to the Director at the following address:

Drinking Water/Ground Water
Protection Branch, UIC Section (3WM43)
U.S. Environmental Protection Agency
Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

B. Record Retention

1. The permittee shall retain records of all monitoring and other information required by this permit including the following, if applicable:

a. All data required to complete the permit application form for this permit and any supplemental information submitted under 40 CFR § 144.31 for a period of at least five years from the date the application was signed. This period may be extended by request of the Director at any time;

b. Calibrations and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 5 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time;

c. The nature and composition of all injected fluids until 3 years after the completion of any plugging and abandonment procedures specified by this permit and 40 CFR § 146.10;

d. The permittee shall continue to retain the records after the above specified retention periods unless he delivers the records to the Director or obtains written approval from the Director to discard the records; and

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e. Records of monitoring information shall include:

- (1) The date, exact place, and the time of sampling or measurements;
- (2) The individual(s) who performed the sampling or measurements;
- (3) A precise description of both sampling methodology and the handling (custody) of samples;
- (4) The date(s) analyses were performed;
- (5) The individual(s) who performed the analyses;
- (6) The analytical techniques or methods used; and
- (7) The results of such analyses.

C. Monitoring Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the fluid to be analyzed and the procedure for analysis of the sample shall be in accordance with test procedures approved under 40 CFR § 136.3 unless otherwise approved by the Director. The permittee shall identify the types of tests and methods used to generate the monitoring data.

2. Observation and recording of injection pressure, flow rate and cumulative volume shall be made at intervals no greater than 30 days, beginning on the date on which the well commences operation.

3. The nature of the injected fluid shall at minimum be monitored for the parameters listed below, once at the initiation of the injection operation and every two years thereafter.

- | | |
|------------------------|--------------------------|
| - pH | - Manganese |
| - Specific Gravity | - Total Dissolved Solids |
| - Specific Conductance | - Barium |
| - Sodium | - Hydrogen Sulfide |
| - Chloride | - Alkalinity |
| - Iron | - Dissolved Oxygen |
| - Magnesium | - Hardness |