



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
322 70th STREET, SOUTHEAST
CHARLESTON, WEST VIRGINIA 25304
TELEPHONE: 348-3741

ARCH A. MOORE, JR.
GOVERNOR

KENNETH R. FAERBER
COMMISSIONER

MARCH 13, 1987

MR. DONALD SUPCOE
EASTERN AMERICAN ENERGY CORPORATION
POST OFFICE BOX N
GLENVILLE, WEST VIRGINIA 26351

RE: UIC PERMIT NUMBER UIC2D0871926

Dear Mr. Supcoe:

Enclosed you will find Underground Injection Control Permit Number UIC2D0871926 dated the 23rd day of October, 1986, for the above referenced facility. The permit consists of pages 1 through 10. Be advised that the duration of the permit is for a period of five (5) years from the effective date (March 13, 1987).

Also be advised that all conditions established by UIC Permit Number UIC2D0871926, either expressly or incorporated by reference, must be strictly adhered to. All monitoring forms shall be submitted to the Division of Oil and Gas in a manner and at the frequency prescribed. The monitoring forms will be compared with the scope of permitted activity to verify compliance.

The operation of this injection well facility in general, including maintenance of all related surface equipment, shall be conducted so as to preclude any unlawful discharge of waste materials into the surface or ground waters of this state.

Sincerely,

A handwritten signature in cursive script that reads "Michael W. Lewis".

Michael W. Lewis,
UIC Program Director
Division of Oil and Gas

MWL/sg

Enclosures as stated

API WELL NO. 047-087-1926
Operator's Well No. C. T. Harper # 1
UIC Permit No. UIC2D0871926

UNDERGROUND INJECTION CONTROL PERMITS
FOR BOTH
DEPARTMENT OF ENERGY, OFFICE OF OIL AND GAS
AND
DEPARTMENT OF NATURAL RESOURCES, DIVISION OF WATER RESOURCES
FOR
CLASS II INJECTION WELLS
BRINE DISPOSAL

This document consists of the Underground Injection Control Permit required by the Department of Energy, Office of Oil and Gas, and the Department of Natural Resources, Division of Water Resources.

The Underground Injection Control Permit No. UIC2D0871926 consists of the terms of Form WW-3 (see attachment A) and of the following terms and conditions:

1. The requirements of Section 13.06, and 13.12, Series IX, of the West Virginia Administrative Regulations of the State Water Resources Board are hereby incorporated by reference as terms and conditions.
2. All reports required by this permit shall be submitted to the Administrator of the Office of Oil and Gas with the exception stated in paragraph 3 below. The frequency of reporting shall be that required by the Administrator of the Office of Oil and Gas.
3. The following shall be reported immediately to the Chief of the Division of Water Resources in accordance with Section 13.06(d) and Section 13.12(1)(6), Series IX, of the West Virginia Administrative Regulations of the State Water Resources Board:
 - (a) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water;
 - (b) Any non-compliance with a permit condition or any malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water; and
 - (c) Any non-compliance which may endanger health or the environment.
4. Monitoring results shall be reported (under Section 13.12(1)(4), Series IX of the West Virginia Administrative Regulations of the State Water Resources Board) on a monthly basis. These reports shall be submitted to the Office of Oil and Gas, Department of Energy, on the appropriate forms (22B-1-14, Regulation 9.05.).
5. Authorization to inject is contingent upon submission and approval of the Office of Oil and Gas Form WR-37 for each well. Construction modifications from the proposed work plan (O & G Form WW-3) and mechanical integrity will be evaluated at this time. Operational conditions will be finalized at this time. Upon approval of Form WR-37, conditions established on this form are incorporated by reference as conditions of this permit. Form WR-37 shall be submitted within 30 days of the effective date of this UIC Permit.

6. A well head pressure gage shall be installed and maintained on the injection tubing to facilitate inspection and ensure compliance of maximum injection pressures as approved on Oil and Gas Form WR-37. A daily reading of the injection pressure shall be taken and reported on Form WR-40.
7. The Permittee shall monitor the 2 3/8"x 7" & 7"x9 5/8" annulus with pressure sensitive devices or with such a method as approved by the Division of Oil and Gas to allow early detection of any leaks from the injection zone or casing. The results of such monitoring shall be reported monthly on Form WR-40.
8. The area of review is designated as a fixed one-quarter mile radius around the injection project.
9. The applicant must satisfy the requirement of the Office of Oil and Gas regarding any corrective action needed on all known wells penetrating the injection zone within the area of review. This must be done in a manner which satisfies the requirements of Section 13.07(b), Series IX, of the West Virginia Administrative Regulations of the State Water Resources Board.
10. The Permittee must satisfy the requirement of the Office of Oil and Gas for plugging and abandonment of permitted injection wells in such a manner as to ensure that no fluid movement occurs either from the injection zone into an underground source of drinking water or from one underground source of drinking water to another (as required by Section 13.07(f) of the West Virginia Administrative Regulations of the State Water Resources Board, Series IX).
11. The Permittee must fulfill the requirements of the Office of Oil and Gas regarding maintaining financial responsibility and resources to close, plug, and abandon permitted wells.
12. The herein-described activity is to be extended, modified, added to, made, enlarged, acquired, constructed or installed, and operated, used and maintained strictly in accordance with the terms and conditions of this permit; with the plans and specifications submitted with Permit Application No. _____, dated the _____ day of _____, 19____; with the information submitted with Application for Reissuance No. UIC2D0871926 dated the 23rd day of October, 19 86; with the plan of maintenance and method of operation thereof submitted with such application(s); and with any applicable rules and regulations promulgated by the State Water Resources Board.
13. Failure to comply with the terms and conditions of this permit, with the plans and specifications submitted with Permit Application No. UIC2D0871926, dated the 23rd day of October, 1986, and with the plan of maintenance and method of operation thereof submitted with such application(s) shall constitute grounds for the revocation or suspension of this permit and for the invocation of all the enforcement procedures set forth in Article 5A, Chapter 20, of the Code of West Virginia.
14. This permit is issued in accordance with the provisions of Article 5A, Chapter 20, of the Code of West Virginia and is transferable under the terms of Section 7 of said article.

15. The operation of this injection well facility in general, including maintenance of all related surface equipment, shall be conducted so as to preclude any unlawful discharge of waste materials into the surface or ground waters of this State.

Date:

3/12/87

D. W. Johnson

Chief

Division of Water Resources

Date:

March 13, 1987

[Signature]

Director

Division of Oil and Gas

ATTACHMENT A

- 1) Application Date: 10-13 1986
- 2) Operator's Well Number Harper #1
- 3) SIC Code _____

This space is for
OFFICE USE ONLY

API Well No. 47 - 087 - 1926
 State County Permit

UIC Permit No. UIC2D0871926

DEPARTMENT OF OIL AND GAS
 OCT 27 1986

STATE OF WEST VIRGINIA
 NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
 for the
 OFFICE OF OIL AND GAS, DEPARTMENT OF MINES, AND FOR
 (CLASS II WELLS ONLY)
THE DIVISION OF WATER RESOURCES, DEPARTMENT OF NATURAL RESOURCES

4) Describe the activity for which you are seeking a permit.

- | | |
|--|---|
| <p>5) SURFACE OWNER(S) OF RECORD TO BE SERVED</p> <p>(i) Name <u>Mr. & Mrs Harry R. Lynch et ux</u>
 Address <u>901 Louden Heights Rd.</u>
 <u>Charleston, WV 25314</u></p> <p>(ii) Name _____
 Address _____</p> <p>(iii) Name _____
 Address _____</p> | <p>6) (i) COAL OPERATOR _____
 Address _____</p> <p>(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Name <u>None</u>
 Address _____</p> <p>(iii) COAL LESSEE WITH DECLARATION ON RECORD:
 Name _____
 Address _____</p> |
|--|---|

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (A) The Application for a Liquid Injection or Waste Disposal Well Work Permit on Form IV-3(B), which sets out the parties involved in the drilling or other work, and
- (B) The plat (surveyor's map) showing the well location on Form IV-6; and
- (C) The Construction and Reclamation Plan on Form IV-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.
- (D) Instructions to Surface Owners and Instructions to Coal Operator, Owner or Lessee.

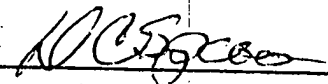
7) The date proposed for the first injection or waste disposal is 1/1 1985

Take notice that under Chapter 22 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Administrator of the Office of Oil and Gas, West Virginia Department of Mines, with respect to a well at the location described on the attached Application and depicted on attached Form IV-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Administrator.

The person signing this document shall make the following certification:*

"I certify under 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.

Eastern American Energy Corp.
Well Operator

By 
Its Designated Agent
Telephone 462-5781

*The person certifying this document shall fulfill the requirements of Chapter 20, Article 5A, Section 13.11(a) or (b) of the West Virginia Underground Injection Control (UIC) Regulations.

8) TYPE OF INJECTANT: Saltwater
Specific Gravity: 1.15

9) LIST OF ADDITIVES: NONE

10) FILTERS (IF ANY): _____

11) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: _____

12) LOCATION: Elevation: 778' Watershed: Pocatalico Quadrangle: _____
District: Harper County: Roane

13) WELL OPERATOR: Name: Eastern American Energy Corporation
Address: P.O. Box N, Glenville, WV 26351

14) DESIGNATED AGENT: Name: Donald C. Supcoe
(Use Oil and Gas Reg. 7.01) Address: P.O. Box N, Glenville, WV 26351

15) OIL & GAS INSPECTOR TO BE NOTIFIED:
Name: Homer Dougherty
Address: Linden Rt., Box 3-A Looneyville, WV 25259

16) DRILLING CONTRACTOR:
Name: Unknown
Address: _____

17) PROPOSED WELL WORK: NONE

18) IS COAL BEING MINED IN THE AREA: Yes: ___ / No: X /

19) VIRGIN RESERVOIR PRESSURE IN TARGET FORMATION: 2000 (psig) Source of Info.: _____

*** Specify ranges of values for items 20 thru 26 if applying for an "Area Permit". ***

20) GEOLOGICAL TARGET FORMATION: Name: Squaw, Weir and Berea
Depth to top: 1980 (ft.); Depth to bottom: 2400 (ft.)

21) ESTIMATED RESERVOIR FRACTURE PRESSURE (BHFP): 2400 psi
Source of Info.: Fracture ticket

22) MAXIMUM PROPOSED INJECTION OPERATION: Vol. per hour: 17 BPH
Bottom hole pressure: 2000psi

23) TOTAL DEPTH OF WELL (completed or proposed) 2400' MAXIMUM SURFACE PRESSURE: 600psi (ft.)

24) GROUND WATER DEPTHS: Bottom of fresh: 200' (ft.)
Top of salt water: _____ (ft.)

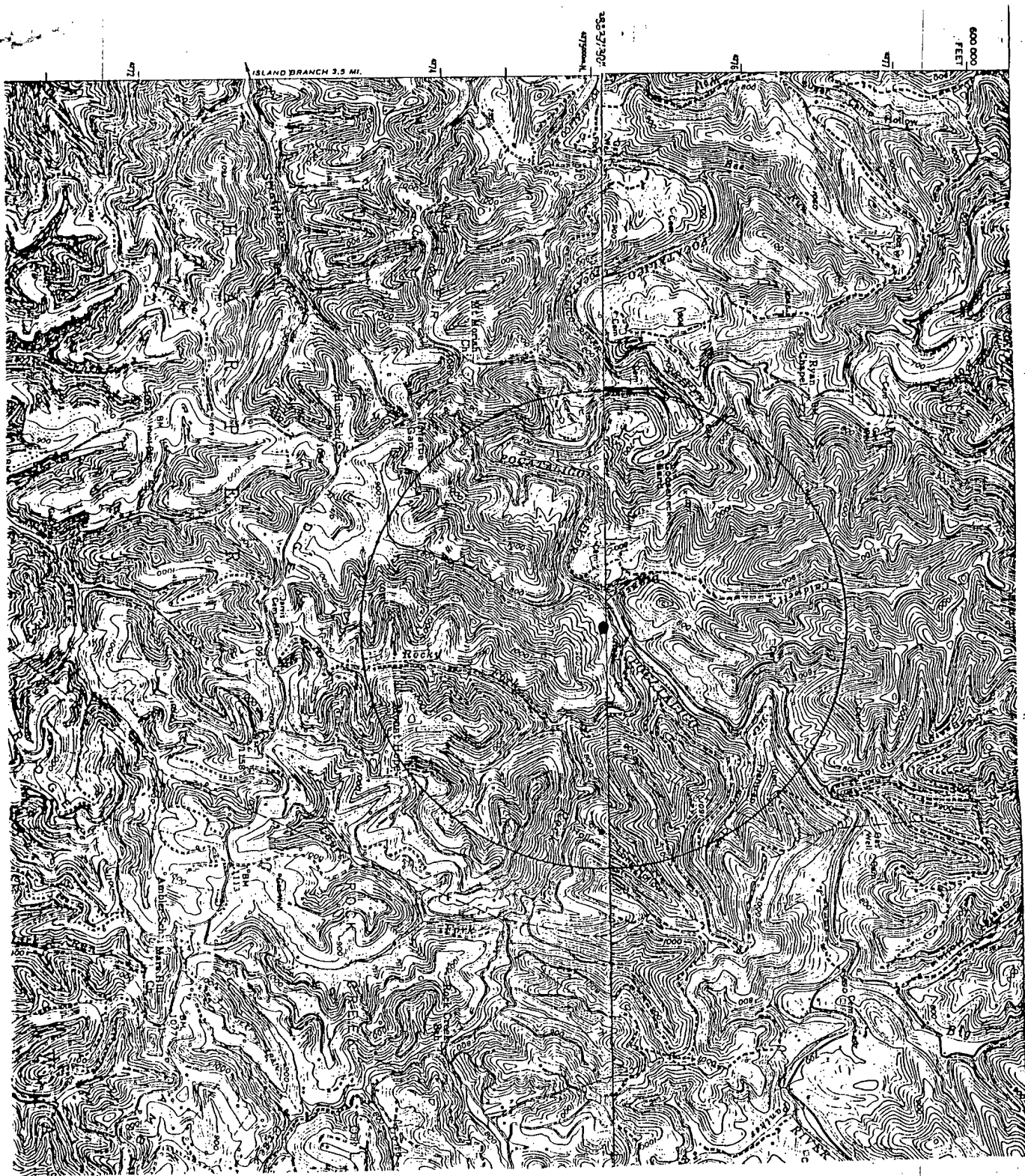
25) DEPTH TO TOP AND THICKNESS OF ALL COAL SEAMS: _____

26) CASING AND TUBING PROGRAM (see Code Section 22-4-5 thru 22-4-8a and Regulations 9.01, 15.01 thru 15.05 and 25.01 thru 25.04)

CASING OR TUBING TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic Feet)	PACKERS
	Size	Grade per ft. New Weight	Used	For drilling Left in well		
Conductor	9 5/8"	32#	204'	204'	80 sacks	Kinds Baker Retrievable,
Fresh water			Max. Depth-200			Baker Production Packer
Coal						Sizes Both - 2 3/8"x7"
Intermediate						
Production	7"	K-55 20#	1984'	1984'	150 sacks	Depths set 2000'
Tubing	2 3/8"	4 #		1809'		
Liners						Perforations:
Disposal Tubing	2 3/8"	4#		2000'		Top Bottom
						1816'-1820' 1852'-1860

APPLICANT'S OPERATING RIGHTS were acquired from

by deed / lease / other contract / dated , 19 , of record in the County Clerk's office in Book at page



Well Location Map
UIC Permit No. UIC2D0871926