

We believe that you, as a member of the regulated community, will be more likely to comply with the UIC program requirements if you know what the specific requirements are and understand the objectives of the regulations. Therefore, you are encouraged to contact this office if you have any questions about the program. Please call on the following individuals for information or assistance:

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Technical Assistance: Stephen Platt (215) 597-2783
 Mr. A. K. Charles, Mark Nelson (215) 597-2783
 President: Mary Anne Daly (215) 597-8992
 Greengold, Inc.
 41625 Griswold Road
 Elyria, OH 44036

Sincerely,

Re: Compliance Review of Underground Injection Control (UIC) Facilities

George W. Hoessel, Chief
 PA Implementation Section

Dear Mr. Charles:

The Region III UIC program staff has completed a comprehensive examination of the compliance status of your existing injection operations. This review focused primarily on the June 25, 1985 and January 31, 1986 monitoring and reporting requirements. The specific elements of the review are addressed in the attachments under the following categories:

Attachment A (Areas of Compliance) - The effective date of the Pennsylvania UIC program was June 25, 1984, with the first major compliance requirements from owner/operators of existing facilities occurring one year later on June 25, 1985. The compliance of permitted facilities is required with the issuance of the permit. Attachment A describes those areas of the UIC program where compliance has been achieved. It also provides information on how to satisfy the regulatory notifications to EPA regarding violation occurrences, scheduling of mechanical integrity tests, and permanent abandonment of injection wells.

Attachment B (Additional Information Requested) - Those areas where your submittal(s) was insufficient to determine compliance status have been summarized in this attachment. You are requested to provide the missing data by June 30, 1986. Failure to respond to this request will be considered a violation of the UIC regulations subject to possible enforcement action.

CONCURRENCES

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| DATE | | | | | | |

Handwritten: M.A. Daly
 5/23/86

ATTACHMENT A (AREAS OF COMPLIANCE)

Company Name: Greengold, Inc. Facility Name: Venango Exploration

We believe that you, as a member of the regulated community, will be more likely to comply with the UIC program requirements if you know what the specific requirements are and understand the objectives of the regulations. Therefore, you are encouraged to contact this office if you have any questions about the program. Please call on the following individuals for information or assistance:

- Technical Assistance: Stephen Platt (215) 597-2783
- Mark Nelson (215) 597-9017
- Administrative Assistance: Mary Anne Daly (215) 597-8992.

Sincerely,

GHH

George H. Hoessel, Chief
PA Implementation Section

Status - You have complied with the above requirement by identifying the nature of the injection fluid (natural gas) used at your enhanced recovery facility on your annual monitoring report. Please keep in mind that you should notify this office as soon as possible of any changes to the injection

Enclosures

- cc: Mr. Daniel M. Graham
Emerald Resources, Inc.
127 W. Central Avenue
Titusville, PA 16354

Requirement - The existing minimum requirements specify that mechanical integrity must be tested once every five years during the life of the injection well. There are two aspects to the mechanical integrity test. First, a well must be free of significant leaks in the tubing, casing and pack and second, it must not allow significant movement between the casing and the well bore. If the well passes the MIT, the owner/operator must report the test results to EPA along with the annual monitoring report. The report must include a description of the test, the methods used, and the test results with supporting documentation such as strip chart recordings, logging results or a tabular representation of water-in-annulus test results. For those wells that fail to demonstrate mechanical integrity, the owner/operator must notify EPA by phone within 24 hours of the noncompliance instance and in writing within 5 days. The written notice must contain a description of the noncompliance and its cause, the period of non-compliance (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 recurrence of the noncompliance.

Daly; Desk #102, PB

Status - According to our records, the 4 wells at your enhanced recovery facility demonstrated mechanical integrity on December 19, 1984.

CONCURRENCES

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ATTACHMENT A (AREAS OF COMPLIANCE)

Company Name: Greengold, Inc.
ID# PAS2R925AVEN

Facility Name: Venango Exploration
Number of Wells 4

1. Injection Fluid Analysis

- ° Requirement - Owner/operators of enhanced recovery injection wells are required to monitor the nature of the injection fluids with sufficient frequency to yield data representative of their characteristics. For the EPA administered program in Pennsylvania, the monitoring frequency is at least once within the first year of the program's authorization and thereafter when changes are made to the fluid. The regulatory definition of fluid is any material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.
- ° Status - You have complied with the above requirement by identifying the nature of the injection fluid (natural gas) used at your enhanced recovery facility on your annual monitoring report. Please keep in mind that you should notify this office as soon as possible of any changes to the injection fluid.

2. Mechanical Integrity Test

- ° Requirement - The existing minimum requirements specify that mechanical integrity must be tested once every five years during the life of the injection well. There are two aspects to the mechanical integrity test. First, a well must be free of significant leaks in the tubing, casing and packer, and second, it must not allow significant movement of fluids between the outermost casing and the well bore. If the well passes the MIT, the owner/operator must report the test results to EPA along with the annual monitoring report. The report must include a description of the test, the methods used, and the test results with supporting documentation such as strip chart recordings, logging results or a tabular representation of water-in-annulus test results. For those wells that fail to demonstrate mechanical integrity, the owner/operator must notify EPA by phone within 24 hours of the noncompliance instance and in writing within 5 days. The written notice must contain a description of the noncompliance and its cause, the period of non-compliance (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 recurrence of the noncompliance.
- ° Status - According to our records, the 4 wells at your enhanced recovery facility demonstrated mechanical integrity on December 19, 1984.

ATTACHMENT A (AREAS OF COMPLIANCE)

Company Name: Greengold, Inc.
ID # PAS2R925AVEN

Facility Name: Venango Exploration
Number of Wells: 4

3. Financial Responsibility

- ° Requirement - Each owner or operator of a Class II well, whether authorized by permit or by rule, is required to maintain the financial resources to close, plug, and abandon the well(s) and submit evidence, acceptable to EPA, of such financial responsibility. For wells authorized by rule, this evidence was due no later than June 25, 1985.
- ° Status - Your demonstration of financial responsibility is acceptable to the Director in accordance with the UIC program regulations. EPA may require updates of the projected plugging and abandonment costs and the accompanying financial responsibility demonstrations whenever it believes these demonstrations are no longer adequate or appropriate.

4. Plugging and Abandonment Plan

- ° Requirement - Each owner or operator of a Class II well, whether by permit or by rule, is required to plug all injection wells, prior to abandonment, in accordance with an EPA-approved plan to prevent migration of fluids either into or between underground sources of drinking water. For wells authorized by rule, this plan was due no later than June 25, 1985.
- ° Status - Your Plugging and Abandonment Plan dated September 27, 1985 and the revised well schematic submitted with your January 28, 1986 letter are approved. You are reminded that EPA must be notified of the proposed abandonment of a well at least 45 days prior to the event to allow our field inspector the opportunity to observe the plugging activities. Within 60 days after the plugging of a well, you must complete and forward to EPA:
 1. A written statement documenting that the well was plugged in accordance with the original plan, or
 2. Where the actual plugging differed from the plan, an updated version of the Plugging and Abandonment Plan (EPA Form 7520-14) specifying the procedures used.

ATTACHMENT B (ADDITIONAL INFORMATION REQUESTED)

Company Name: Greengold, Inc.
ID# PAS2R925AVEN

Facility Name: Venango Exploration
Number of Wells: 4

1. Injection Pressure Limitation

- ° Requirement - As of November 2, 1985, all rule authorized fields in Pennsylvania were required to operate according to the specific maximum injection pressure (Pmax) calculated for the facility based on the formation fracture gradients established in the August 26, 1985 Federal Register (Vol. 50, No. 165).
- ° Information Needed - Although you have provided a Pmax figure with your report submittal, the actual calculation (including fracture gradient, specific gravity and shallowest well depth) used to determine the maximum injection pressure is needed to establish your compliance with the 40 CFR Part 144.28(f) operating requirements.

2. Annual Monitoring Report

- ° Requirement - Owner/operators of enhanced recovery injection wells are required to conduct a self monitoring program which includes monthly recordings of the injection pressure, flow rate and cumulative volume on a individual well basis. An annual report must be submitted to EPA by January 31 of each year summarizing the monitoring results of the previous year.
- ° Information Needed - It appears that you have entered the calculated maximum injection pressure on your annual reporting forms instead of your actual operating maximum injection pressure. Also, you need to certify to the accuracy and completeness of the information provided by signing and dating the annual reporting forms. The reporting forms are returned to resolve these deficiencies.

GH

George H. Hoessel, Chief
PA Implementation Section