

STATE OF ALASKA
ALASKA OIL AND GAS CONSERVATION COMMISSION
AND
UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 10

UNDERGROUND INJECTION CONTROL
FOR CLASS II WELLS

COMPLIANCE ASSURANCE AGREEMENT

MCMXXCVII

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I INTRODUCTION

The Underground Injection Control (UIC) program regulates injection wells to protect underground sources of drinking water. The Alaska Oil and Gas Conservation Commission (AOGCC) and the Environmental Protection Agency (EPA) share this responsibility in Alaska in that part of the UIC program which regulates Class II injection wells. Class II wells are wells which inject fluids which are brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, and may be commingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection; for enhanced recovery of oil or natural gas; and for storage of hydrocarbons which are liquid at standard temperature and pressure.

AOGCC and EPA agree that primary authority to carry out the UIC program rests with the State. The federal role is that of oversight to assure program performance and achievement of UIC program goals.

As the federal agency implementing the Safe Drinking Water Act (SDWA), EPA is responsible to ensure that the UIC program is conducted according to national standards as set by Congress. This Agreement describes the duties of AOGCC and EPA to assure compliance with UIC requirements.

All other classes of underground injection wells in the state of Alaska are regulated by EPA and the Alaska Department of Environmental Conservation.

Purpose of Compliance Assurance Agreement (CAA)

The purpose of this CAA is to ensure that the State and EPA UIC Class II well program in Alaska is administered according to national goals, and to clearly establish the respective roles of EPA and the state of Alaska in maintaining an effective compliance and enforcement program. This CAA outlines and defines procedures that will be followed by the AOGCC and the EPA to assure program effectiveness in compliance with federal and state statutes covering the protection of groundwater quality. Also, if not otherwise specified herein, national policy will apply.

Perspective on Alaska

Alaska produced 681,309,821 barrels of oil and $1,383 \times 10^9$ cubic feet of gas in 1986. During 1986, 608,225,599 barrels of water and $1,067 \times 10^9$ cubic feet of gas were injected into producing formations for enhanced oil recovery. In December 1986, there were 371 Class II injection wells designed for enhanced recovery, and nine Class II disposal wells in Alaska. 19,452,696 barrels of Class II waste fluids were injected into disposal wells in 1986.

Since discovery of commercial quantities of oil in south central Alaska in 1957, and at Prudhoe Bay on the North Slope in 1967, production has rapidly increased. In April, 1987 Alaska at 1,990 MB/D ranked second behind Texas (2,141 MB/D) in U.S. oil production. In terms of world production Alaska, in April, 1987, produced more barrels of oil per day than Canada (1,447 MB/D), Iraq (1,900 MB/D) or Venezuela (1,575 MB/D).

In 1986, oil and gas were produced from the Cook Inlet Basin in southern Alaska and from the North Slope. The state contains other prospective basins; but to date no commercial discoveries in these basins have been made. Approximately 663,738,428 barrels of oil and $1,097 \times 10^9$ cubic feet of gas were produced from the North Slope in 1986 from six fields. 17,571,393 barrels of oil and 286×10^9 cubic feet of gas were produced from eleven fields in the Cook Inlet Basin.

History of Alaska Programs

The AOGCC obtained primacy over Alaska's Class II injection wells on June 19, 1986. This delegation of primary enforcement responsibility by the EPA occurred several years after the UIC programs were first initiated.

In 1974 Congress passed the Safe Drinking Water Act (SDWA) which provided for control of underground injection of fluids. Congress intended that the UIC programs should be administered in the various states by existing state agencies.

In 1980 the state of Alaska, specifically the AOGCC, was approached by EPA who requested that AOGCC take over primacy for UIC Class II programs in Alaska. However, the State did not take primacy over Class II wells at that time; consequently, the EPA instituted its program which became effective June 25, 1984.

Also in 1984, the Alaska State Legislature revised the statute of the AOGCC effective June 7, 1980. AS 31.05.030 is titled "Powers and Duties of the Commission". A new sub-section "(h)" was added which stated:

"The Commission may take all actions necessary to allow the state to acquire primary enforcement responsibility under 42 USC 300h-4 (Safe Drinking Water Act of 1974, as amended 42 USC 300f-300j) for the control of underground injection related to the recovery and production of oil and natural gas."

This new sub-section enabled the AOGCC to seek primary enforcement responsibility over Class II wells.

In order to obtain primacy -- that is, primary enforcement responsibility over Class II injection wells -- the AOGCC had to revise its regulations. This arduous task was undertaken in 1984.

On August 7, 1985 a public hearing to discuss the draft regulations was held in Anchorage. On April 2, 1986 the revised regulations became effective.

On October 15, 1985 the AOGCC submitted to the EPA a final application under section 1425 for primary responsibility over Class II injection wells. On November 20, 1985 (50 FR 47761), EPA published notice of receipt of the application, requested public comments, and held a public hearing on the UIC program submitted by the AOGCC. A public hearing was held on December 19, 1985 in Anchorage. Primary enforcement responsibility -- primacy -- over all Class II wells on non-Indian lands in the state of Alaska was granted to the AOGCC on May 20, 1986 to be effective June 19, 1986.

II OVERSIGHT RESPONSIBILITY OF EPA

Following delegation of the UIC program to a state, the EPA remains responsible and accountable to the President, Congress, and the public for progress toward national UIC goals. Therefore, EPA's role becomes one of oversight and assistance.

The goals of EPA's oversight strategy are as follows:

1. to ensure and document that the state is implementing the UIC program in accordance with the requirements of the SDWA;
2. to collect information that will allow EPA to assess nationally the effectiveness of the UIC program;
3. to ensure proper grants management; and
4. to provide effective and efficient assistance (technical, financial, and legal) to the state.

For oversight to be most effective, it is important that EPA and the State have a mutual understanding of the oversight process and criteria for evaluation.

State Reporting Requirements

1. Grant Reports - EPA will consider information submitted in required reports when evaluating the state program. The State will submit a Financial Status Report and a Report on Federally-Owned Property (inventory on property and its condition) at the end of each grant period [40 CFR 30.505(b) and (d)].
2. Quarterly UIC Reports - The annual report forms (EPA Forms 7520-1, 2A, 2B, 3, and 4) will be submitted quarterly to the Regional EPA Program Manager. They will be submitted within 45 days after the end of the quarter. The initial report (last quarter for Federal Fiscal Year 1986) began on July 1, 1986. Beginning October 1 of each Federal Fiscal year, quarterly reports will provide cumulative data from October 1 through September 30. The fourth quarter report will be a part of the annual report for the past Federal Fiscal Year (October 1 through September 30) and will be submitted to EPA by November 15. The annual report consists of the following:
 - fourth quarterly report
 - narrative of program implementation
 - any suggested changes to the program description
 - updated inventory, and
 - completed EPA Form 7520-5 (Summary of UIC Grant Utilization)

3. Significant Noncompliance Reports - These reports are to be prepared quarterly for all violations that are included in the definition of "significant noncompliance" (SNC), and "non-significant noncompliance" (NSNC), resulting from failure of Mechanical Integrity - Part 1 or operating at excessive injection pressures as specified in the UIC Compliance Strategy.

If an owner/operator remains in SNC for two or more consecutive reporting quarters without having been placed on an enforceable compliance schedule or had a formal administrative or judicial enforcement action initiated, the Commission will report the name of the owner/operator on the "exceptions list" as specified in the Office of Water's A Guide to the Office of Water Accountability System and Mid-Year Evaluation.

In areas where there are USDW all NSNC violations will be brought into compliance in accordance with the requirements for SNC's. NSNC's in areas where there are no USDW (e.g., exempted aquifers) will be brought into compliance within two years. Quarterly reports will document the percentage of NSNC's brought into compliance.

4. The State contact will be one of the Commissioners of the AOGCC at (907) 279-1433.

Monitoring of State Activities

The EPA Program Manager will maintain frequent contacts with State UIC staff. The Program Manager may perform all of the following activities, but will at a minimum perform one file review each year.

1. File Reviews - The Program Manager will review the permitting, compliance, and enforcement performance. These reviews will be done in advance of the midyear and/or annual evaluation conferences.
2. "Real Time" Reviews - If necessary, the Program Manager may review enforcement actions.
3. Quarterly Meetings - These meetings may be held, as necessary, to determine the State's compliance with program requirements.
4. Inspection Audits - The Program Manager and/or an EPA inspector may evaluate the State's compliance activity by accompanying State inspectors as they do their field work.

5. Attend Public Meetings - After notifying the State, EPA may attend public hearings or meetings to observe the State's public participation practices.
6. Direct EPA enforcement will be of prime importance when:
 - AOGCC requests EPA action;
 - State enforcement is not timely and appropriate;
 - cases involving national precedents for legal or program issues; and
 - violations of an EPA order or consent decree.
7. In deciding to take direct enforcement, EPA will consider the following factors:
 - Cases specifically designated as nationally significant (e.g., significant noncompliance, explicit national or regional priorities)
 - Significant environmental or public health damage or risk involved
 - Significant economic benefit gained by violator
 - Interstate issues (multiple states or regions)
 - Repeat patterns of violations and violators.
8. EPA will consult with AOGCC before taking enforcement action. After EPA written notifications to the State of a violation appearing on the "exceptions list", EPA may begin formal enforcement action after 30 days unless the State has commenced action. In emergencies, EPA will provide verbal notification when there is not enough time for written notifications.
9. The EPA contact will be the Chief of the UIC and Program Support Section, EPA Region 10 at (206) 442-1225.

Evaluation Conferences

EPA may conduct a midyear and end-of-year evaluation conference with the State at its offices. For the most part, an annual evaluation is expected to suffice.

The goals of the midyear and end-of-year evaluation are:

1. to determine the State's performance against commitments during the current budget period;

2. to identify any changes which should be made to the State's work plan for the remainder of the budget period or for the next fiscal year; and
3. to provide feedback to EPA on EPA's effectiveness in overseeing and assisting the State.

A midyear evaluation conference may be conducted in about April of each year (or the middle of the budget period). Following the midyear conference, the EPA representative(s) will conduct an "exit conference" with the State Commissioners.

Following the "exit conference", EPA will draft an evaluation report which summarizes EPA's evaluation of the State's performance. This report will be sent to the State in draft form within three weeks of the "exit conference". The State will review the draft report and transmit comments to EPA within three weeks of receipt. EPA will finalize the report and forward it to the State within two weeks of receipt of the State's comments.

An end-of-year evaluation conference may be conducted, depending on resources, during the month following the close of the fiscal year (or budget period). An "exit conference" will be held with State agency officials. Following the "exit conference", EPA will draft an end-of-year evaluation report which will summarize EPA's evaluation of the State's performance during the budget period. EPA will send this report to the State in draft form within three weeks of the "exit conference". The State will review the draft report and transmit comments to EPA within three weeks of receipt. EPA will finalize the report and forward it to the State within two weeks of receipt of the comments.

The format for the evaluation report(s) will, at a minimum, include:

- Background and administrative elements
- Review of regulatory actions including permitting, inspections, public involvement, and enforcement
- Discussion by program element and grant utilization
- Summary of strengths, concerns, and follow-up issues

III EPA ACTIVITY SCHEDULES

1. Schedule of Oversight Activities for Alaska UIC Class II Well Program

<u>Activity</u>	<u>Estimated Date of Activity</u>
Send agenda for end-of-year evaluation conference(s) to AOGCC.	October
Hold end-of-year evaluation conference with AOGCC in AOGCC's Anchorage office.	November
Conduct midyear field office audit.	April
Send agenda to AOGCC for midyear evaluation conference.	March
Hold midyear evaluation conference with AOGCC.	April
Prepare and finalize midyear evaluation report.	June
Determine with AOGCC date(s) and place(s) for end-of-year field office audit.	August
Attend public hearings, as appropriate.	When held
Assure that AOGCC completes the number of well file reviews, MITs, and field inspections committed to in the grant work plan.	Ongoing

2. Schedule for Grant Administration

<u>Activity</u>	<u>Estimated Date of Activity</u>
Review of Financial Status Report.	January
Provide guidance to State on program priorities to initiate subsequent year grant work plan development.	February
Begin discussion of subsequent year grant work plan.	May
Draft of grant work plan received by EPA UIC Section.	June
Review work plan, relay comments to State, and hold final negotiations.	June
Receive and initiate processing of final grant application.	June/July
Keep State apprised of fund allocations.	Ongoing

3. Timing of Assistance to AOGCC

<u>Activity</u>	<u>Time Frame</u>
Review new aquifer exemption requests.	Within 14 days of receipt by EPA.
Notify AOGCC of training opportunities and national meetings.	Ongoing
Respond to citizen complaints that may be received by EPA.	As Needed
Provide program guidance and assist State with program revisions.	As Needed
Determine need for coordination between AOGCC and other State agencies.	As Needed
Assist AOGCC with implementation of quality assurance procedures.	As Needed

IV AOGCC MANAGEMENT PROCEDURES

The State, through the AOGCC, is responsible for the day-to-day direction and operation of the UIC Class II well program in Alaska. AOGCC operational procedures and guidelines may be found in the Memorandum of Agreement between the EPA and AOGCC which is attached to this Agreement as Appendix II for ready reference. Additional details on procedures may be found in the AOGCC application for primacy accepted by EPA on May 20, 1986, on file with EPA, and in the Anchorage offices of AOGCC in AAC Title 20, Chapter 25, and in AS Title 31, Chapter 05, Alaska Oil and Gas Conservation Act.

Compliance Assurance Inspections

Inspections by AOGCC will be conducted to: a) document compliance; b) verify self-monitoring data; c) locate violators; d) locate active and abandoned injection wells; and e) verify proper well plugging and abandonment.

AOGCC inspections will be conducted in such a manner to insure evidence is admissible in any administrative or judicial enforcement action.

AOGCC will witness most of the initial mechanical integrity tests (MITs) and at least 25 percent of all subsequent MITs of Class II wells.

AOGCC will witness the plugging and abandonment of all Class II injection wells in accordance with 20 AAC 25.105.

If a well is determined to be in significant noncompliance, the AOGCC will take whatever action is necessary to prevent contamination of a USDW, and will inspect the well and witness the MIT after it is brought back to compliance.

Enforcement Policy

Timely and appropriate enforcement actions by AOGCC will consist of the following:

Within 90 days after an SNC is identified, the AOGCC will take action as listed below to return the owner/operator to compliance.

1. Bring the owner and/or operator back into actual (physical) compliance through formal or informal enforcement action; or
2. Place the owner and/or operator on an enforceable compliance schedule to achieve future compliance; or
3. Initiate formal administrative or judicial enforcement action.

AOGCC will send copies of all formal enforcement actions, as they are taken, to EPA, Region 10 office. AOGCC will also send quarterly summary reports of enforcement actions to EPA, Region 10.

If enforcement actions are not taken within 90 days of identification of a significant noncompliance violation, EPA may take direct enforcement action. EPA will notify AOGCC in writing at least 30 days in advance of any EPA enforcement actions.

EPA will first consult with appropriate AOGCC staff before taking any enforcement action. In emergencies, verbal notification is adequate when there is not enough time for written notification.

Formal Enforcement Actions

Available formal enforcement actions include conservation, administrative and court orders, and civil and criminal penalties.

Conservation and administrative orders: AS 31.05.030 allows AOGCC to issue regulatory orders and sets requirements for the procedures and contents. The order shall set forth the nature and time of the violation and the sequence of events required to achieve compliance.

Court actions: AS 31.05.150(d) authorizes AOGCC, with assistance of the State Attorney General, to bring court actions to enforce the provisions of the UIC program.

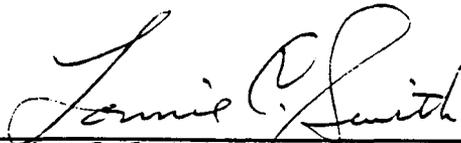
Civil and criminal penalties: AS 31.05.150(a) and (b) authorize AOGCC to assess appropriate civil penalties of up to \$1,000 per day and criminal penalties of \$5,000 per offense and/or imprisonment for violating provisions of the UIC program.

V DISCLAIMER

Nothing in this Agreement shall be construed to limit or modify the authorizations granted either EPA or AOGCC by law. Nothing in this Agreement constitutes or creates a valid defense to regulated parties in violation of environmental statutes, regulations or permits.

VI SIGNATURES OF AGREEMENT

This Compliance Assurance Agreement is between the U.S. Environmental Protection Agency, Region 10 (EPA), and the Alaska Oil and Gas Conservation Commission (AOGCC). It will remain in effect until terminated or amended upon agreement by both parties.



Lonnie C Smith, Acting Chairman
Alaska Oil and Gas
Conservation Commission



Robbie G Russell, Regional
Administrator
U.S. Environmental Protection
Agency

10-14-87

Date

11-2-87

Date

Guidance

Under the SNC definition, it will be a decision of the Commission as to whether or not the noncompliance could result in endangerment. In making that decision, the Commission shall be guided by the following:

In order that a decision is effectively supported and able to be documented, the Commission shall take into consideration the following criteria when determining whether or not an MI test failure or the operation of an injection well above the permitted injection pressure represents an endangerment of a USDW. The criteria may be considered singly or in combination, as appropriate.

1. The presence/absence and location of a USDW.
2. How many levels of protection are there? How many have been breached? (This relates solely to well construction.)
3. The quality of the injected fluid and the USDW.
4. Operational and geological experience in the adjacent area.
5. Well logs or additional logs.
6. Thickness of intervening layers.
7. Extent of MIT failure.
8. Location of the MIT failure.
9. Injection pressure and rate (volume) and formation pressure.
10. The type of well -- Salt Water Disposal or Enhanced Recovery?
11. Hydrogeological conditions.
12. Cementing records -- bond logs.

While the responsibility for demonstrating that the noncompliance does not have a potential to endanger a USDW rests with the owner/operator, the Commission may utilize information available from public records or from information submitted by the injection well owner/operator to make a decision.

Non-Significant Noncompliance (NSNC) means injection wells that fail the mechanical integrity test or are injecting at excessive pressure but are not considered to be SNC because of the above listed criteria (e.g., exempted aquifers would document the absence of a USDW).

TIMEFRAME FOR SIGNIFICANT NONCOMPLIANCE REPORTS

ALASKA UIC PROGRAM

