UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

FEB 16 2012

Ref: 8ENF

CERTIFIED MAIL: 7009 3410 0000 2596 8785
RETURN RECEIPT REQUESTED

William E. Zimsky, Esq.
Abadie Schill
1099 Main Street, Suite 315
Durango, CO 81301

Re: Maralex Disposal, LLC
Docket No. SDWA-08-2011-0079
Complainant's Pre-Hearing
Exchange

Dear Bill,

Enclosed is our complete Pre-Hearing Exchange. It was filed with the Court yesterday afternoon, February 15, 2012.

If you have any questions or comments, please call me at 303-312-6893 or email eppers.jim@epa.gov.

Sincerely,

James H. Eppers
Enforcement Attorney
Legal Enforcement Program

Enclosure

cc: Sarah Roberts, 8UFO (w/o enclosure)

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 8

IN THE MATTER OF:

Maralex Disposal, LLC

Respondent.

COMPLAINANT'S PRE-HEARING EXCHANGE

Docket No. SDWA-08-2011-0079

Complainant, the United States Environmental Protection Agency (EPA) files this Pre-Hearing Exchange pursuant to the Order issued by the Regional Presiding Officer Elyana Sutin, on December 28, 2011.

PRELIMINARY STATEMENT

Complainant commenced this administrative proceeding pursuant to section 1423 of the Public Health Service Act, commonly known as the Safe Drinking Water Act (the Act). 42 U.S.C. § 300h-2. The Environmental Protection Agency (EPA) regulations authorized by the Act are set out in part 144 of title 40 of the Code of Federal Regulations (C.F.R.), and violations of the permits or EPA regulations constitute violations of the Act. The Proposed Penalty Complaint and Notice of Opportunity for Hearing (Complaint) was issued on September 27, 2011, and alleges three counts against Maralex Disposal, LLC., (Respondent), a Colorado corporation doing business in La Plata County, Colorado. The counts relate to the Ferguson #1 well, a Class II injection well, in the Ignacio Blanco oilfield in township 33 north, section 32, range 9 west, in La Plata County, Colorado within the exterior boundary of the Southern Ute Indian

Reservation. The Respondent owned and/or operated the Ferguson #1 well at all times relevant to the Complaint. Respondent is authorized to operate the Ferguson #1 well by EPA permit # CO21011-06908 and is required to comply with all conditions in the permit at all times. Complainant has alleged violations of the permit and Safe Drinking Water Act regulations.

WITNESSES

The following are the witnesses whom Complainant intends to call to testify, together with a brief summary of the qualifications and expected testimony of each proposed witness.

1. Ms. Sarah Roberts
   Environmental Scientist
   U.S. EPA – Region 8
   1595 Wynkoop St
   Denver, CO 80202

Sarah Roberts is an Enforcement Officer in the Office of Enforcement, Compliance, and Environmental Justice, EPA-Region 8. She has worked at EPA – Region 8 since January 17, 2009. From January 17, 2009 through the present, Ms. Roberts has worked for EPA Region 8's Safe Drinking Water Act, Underground Injection Control (UIC) program. She is a technical lead on enforcement cases like this one, and in so doing, assists in writing Administrative Orders, calculating civil penalties, and assists in the negotiations toward settlement of those cases. She is the technical lead for the UIC deep well program, coordinates UIC activities with associated state groundwater programs, and conducts inspections for the UIC program.

Ms. Roberts is a fact witness and will lay the foundation for the use of Complainant's Exhibits. She will testify concerning: (1) the chronology of this case; (2) the inspection of Respondent's facility on April 13, 2011; (3) how Respondent violated statutory and/or regulatory requirements; and (4) how Complainant took into account the facts of this case and the penalty assessment criteria in Section 1423(c)(2)(B) of the Safe Drinking Water Act, 42 U.S.C. § 300h-2(c)(2)(B), to calculate the penalty.

2. Mr. Nathan Wiser
   Environmental Scientist
   U.S. EPA – Region 8
   1595 Wynkoop St
   Denver, CO 80202

Mr. Wiser will be a fact witness and an expert witness at the hearing. Mr. Wiser is a 21 year veteran in the UIC program. For nine years, he served in EPA's Region 5 office as a Class I and Class II well permit writer, state oversight specialist, and coordinator of all Class I hazardous waste injection wells. From 1999 to 2011, Mr. Wiser has served in EPA's Region 8 office as the team leader for compliance and enforcement activities for the Region's direct implementation of Class I, II, and III injection wells. He will testify about his role communicating with Respondent and in his capacity as lead inspector for two inspections of Respondent's well on May 5, 2011, and May 26, 2011. For the last year Mr. Wiser has been working for EPA's Office of Research and Development on its national study of hydraulic fracturing practices.

As an expert witness, Mr. Wiser will testify regarding the UIC program's history, the general construction and citing requirements of Class II injection wells, how Class II wells are linked to oil and gas production activities in general, the importance of the UIC program as it relates to preventing contamination of drinking water supplies in aquifers, and how Respondent's violations compromise such preventive protections. He will also explain field operations and monitoring activities and how these actions form a critical component of the UIC program. He is qualified to testify about Class II injection wells owing to his direct involvement writing many permits and enforcement actions for Class II wells in six different States, and also from his capacity overseeing seven different State UIC programs that regulate Class II injection wells. Mr. Wiser has been an instructor at national UIC trainings, has presented talks on UIC topics at Ground Water Protection Council meetings and at an international UIC symposium. Mr. Wiser has served on national UIC committees, including chairing the national UIC technical workgroup. When in Region 5 and in Region 8, the EPA has formally designated Mr. Wiser as a Regional UIC expert, given his educational and programmatic background.

3. Complainant reserves the right to add additional witnesses, as allowed by the Regional Presiding Officer, if further information comes to light or as necessary for rebuttal or impeachment purposes.

ORDER OF COMPLAINANT'S WITNESSES

In order for Complainant to present its case in an efficient and easy to follow manner, as allowed by Regional Presiding Officer, Complainant intends on presenting its two witnesses as follows:

1. Nathan Wiser, as an expert, will testify regarding the Safe Drinking Water Act UIC Program and protection of underground sources of drinking water (USDWs) generally and specifically concerning the Class II Program.

2. Sarah Roberts will testify regarding the chronology of the case and Respondent's SDWA violations, and the inspection of Respondent's facility on April 13, 2011.

3. Nathan Wiser will testify factually concerning his contacts with Respondent and inspecting Respondent's well. He will then testify as to the significance of the Respondent's violations in relation to the potential endangerment of USDWs.

4. Sarah Roberts will testify as to how Complainant took into account the facts of this case and the penalty assessment criteria in Section 1423(c)(2)(B) of the Safe Drinking Water Act 42 U.S.C. § 300h-2(c)(2)(B), to calculate the penalty proposed in the complaint.

PLACE FOR PREHEARING CONFERENCE AND HEARING

Complainant prefers that the Prehearing Conference be held in Denver, Colorado, or by telephone and that the Hearing be held in Denver. Alternatively, the hearing could be held in Durango, Colorado.

EXHIBITS

In addition to the Complaint and Respondent's answer (copies of which have previously been filed with the Court), incorporated herein by reference, Complainant intends to offer the following documents into evidence as exhibits. Complainant reserves the right to identify additional exhibits, as allowed by the Regional Presiding Officer, if further information comes to light or as necessary for rebuttal or impeachment purposes.

1. Complainant's Exhibit 1. February 14, 2012 document that provides a timeline of events, site background, violation summary, penalty summary, and history of the violator
2. Complainant's Exhibit 2. UIC Class II Permit CO21011-06908
3. Complainant's Exhibit 3. UIC Program Judicial and Administrative Order Settlement Penalty Policy September 1993 (Memorandum dated September 27, 1993)
4. Complainant's Exhibit 4. EPA General Enforcement Policy #GM - 21
5. Complainant's Exhibit 5. EPA General Enforcement Policy #GM - 22
6. Complainant's Exhibit 6. Resume for Ms. Sarah Roberts
7. Complainant's Exhibit 7. Resume for Mr. Nathan Wiser
8. Complainant's Exhibit 8. May 5, 2010 Inspection Report for Well: CO21011-06908
9. Complainant's Exhibit 9. May 26, 2010 Inspection Report for Well: CO21011-06908
10. Complainant's Exhibit 10. June 7, 2010 Notice of Violation: Failure to Maintain Zero Annulus Pressure
11. Complainant's Exhibit 11. July 8, 2010 Maralex Response Letter to June 7, 2010 Notice of Violation
12. Complainant's Exhibit 12. February 18, 2011 Annual Disposal/Injection Well Monitoring Report for 2010 : CO21011-06908
13. Complainant's Exhibit 13. April 13, 2011 Inspection Report for Well: CO21011-06908
14. Complainant's Exhibit 14. March 23, 2011 – April 4, 2011 – Email exchanges between Victoria Schmitt and Sarah Roberts regarding the Ferguson #1 well CO21011-06908

15. Complainant's Exhibit 15. April 19, 2011 – Notice of Violations: Inaccurate Reporting, Failure to Monitor, Loss of Mechanical Integrity
16. Complainant's Exhibit 16. May 3, 2011 – Conversation Record documenting phone call between EPA and Maralex regarding the status of the well
17. Complainant's Exhibit 17. May 24, 2011 – Well Rework Record and Mechanical Integrity Test Results
18. Complainant's Exhibit 18. November 15, 2011 – Notice of Violation: Failure to Maintain Zero Annulus Pressure

Respectfully submitted,

FEB 15 2012

Date

James H. Eppers
Senior Enforcement Attorney
U.S. EPA – Region 8
1595 Wynkoop Street
Denver, CO 80202
Ph: (303) 312-6893
Fax: (303) 312-6953

Factual Information Relevant to the Assessment of a Penalty

In the Matter of Maralex Disposal, LLC ("Maralex" or "Respondent")
Docket Number: SDWA-08-2011-0079
Complainant's Exhibit 1
February 14, 2012

Timeline of Events Leading to Proposed Penalty Complaint and Notice of Opportunity for Hearing

- May 5, 2010 – Well was inspected by Nathan Wiser and Trish Pfeiffer. Annulus pressure observed. **Complainant's Exhibit # 8 is report from this inspection.**
- May 26, 2010 – Well was inspected by Nathan Wiser and Cynthia Peterson. Annulus pressure observed. See inspection report; **Complainant's Exhibit # 9 is the report from this inspection.**
- June 7, 2010 – Notice of Violation (NOV) sent addressing failure to maintain zero annulus pressure. See NOV letter. **Complainant's Exhibit # 10 is this NOV letter.**
- July 8, 2010 – Operator response to NOV outlined workover plans to fix well. Operator states in letter that EPA will be contacted when repairs are made in August. See response letter. **Complainant's Exhibit # 11 is this response letter.**
- February 18, 2011 – EPA receipt of Annual Monitoring Report for 2010 reflecting inaccurate annulus pressures. **Complainant's Exhibit # 12 is the 2010 Annual Monitoring Report.**
- March – April 2011 – La Plata County Engineer, Victoria Schmidt contacted Sarah Roberts via several telephone calls and emails with concern about the well. She stated that the well was still injecting and inquired about the status of the violation. **Complainant's Exhibit # 14 is the email exchange between Sarah Roberts and Victoria Schmidt.**
- April 2011 – San Juan Citizens Alliance contacted Sarah Roberts via telephone to express concern about this well and another well that is being permitted under the same owner (different operator).
- April 13, 2011 – Sarah Roberts and Don Breffle inspected well – observe annulus pressure. **Complainant's Exhibit # 13 is the report from this inspection.**
- April 19, 2011 – NOV sent outlining violations and requiring that the well be shut-in. **Complainant's Exhibit #15 is this NOV letter.**

Timeline of Other Events

- May 5, 2011 – Phone call between EPA and Maralex regarding the status of the well. **Complainant's Exhibit # 16 is a record of this conversation.**
- May 24, 2011 – Well reworked; mechanical integrity test passed. **Complainant's Exhibit # 17 is this Workover Report and Mechanical Integrity Test documentation.**
- November 9, 2011 – Maralex reported annulus pressure on the well via email.
- November 15, 2011 -- NOV sent in response to November 9, 2011 email requiring that the well be shut-in. **Complainant's Exhibit # 18 is this NOV letter.**
- November 29, 2011 – Well reworked; mechanical integrity test passed.

Site Background

Operator: Maralex Disposal, Inc.
Facility: Commercial Salt Water Disposal Deep Injection Well

- Name: Ferguson Injection Well #1
- EPA Permit ID: CO21011-06908
- API #: 05-067-09194
- Lat/Lon: 37.0615820, -107.8564250
- Located in Section 32 of Township 33 North, Range 9 West, in La Plata County, Colorado within the exterior boundary of the Southern Ute Indian Reservation

Violation Summary

Failure to maintain mechanical integrity

permitted zones

The mechanical integrity of permitted injection wells must be established and maintained as required by 42 U.S.C. § 300h-2 (c)(1), 40 C.F.R § 144.51(q)(1), and the UIC permit at Part II(C)(6). Mechanical integrity refers to a wells ability to contain fluid and pressure in intended locations. Maintaining mechanical integrity prevents contamination to drinking water sources and other formations through leaks in the well.

EPA observed that the Ferguson #1 well had significant annulus pressure during an inspection on May 5, 2010 and again on May 26, 2010. On June 7, 2010, EPA issued to Respondent a Notice of Violation notifying Respondent of this finding and Respondent's failure to comply with the requirement to maintain the well's mechanical integrity pursuant to 40 C.F.R §§ 144.51(q)(1), and the requirement to maintain zero annulus pressure pursuant to the permit at Part II(C)(6). EPA received a letter from Respondent on July 8, 2010, wherein Respondent stated that though they initially believed this pressure to be due to thermal issues, they had at this point believed it to be due to a leak. In the letter, the Respondent outlined a work over plan and stated that Maralex would contact EPA once dates of the work over and/or testing were known and they were expected to occur in August, 2010. For the assessment of penalty, EPA considers this point at which the Respondent believed the well to have had a leak as the starting point for the violation of failure to maintain mechanical integrity. Normally, EPA allows approximately 3 months for the operator to return a well to compliance before pursuing the violation any further. This time period also depends on communication between EPA and the operator and consideration of any extenuating circumstances. EPA expected the operator to inform EPA of actual dates of the workover and testing as was stated in this July 8, 2010 letter.

As of April 13, 2011, EPA had not received any additional information from Respondent regarding the Ferguson #1 well. On April 13, 2011, EPA conducted a site inspection and observed significant annulus pressure build up on the Ferguson #1 well and that the operator, although having identified that the well may have a leak, continued injection into the well. On April 19, 2011, EPA issued to Respondent another Notice of Violation notifying Respondent of this finding and Respondent's failure to comply with the requirement to maintain mechanical integrity according to 40 C.F.R § 144.51(q)(1) and to maintain zero annulus pressure pursuant to the permit at Part II(C)(6). Respondent sent a work over report to EPA describing a tubing leak repair and results of a follow up mechanical integrity test conducted on May 24, 2011.

Failure to monitor annulus pressure

Weekly measurements of annulus pressure is required for the Ferguson #1 well by the permit at Part II(D)(1). Respondent violated the permit and therefore the Act by failing to take weekly annulus pressure measurements of the Ferguson #1 well. Failing to take/record annulus pressure measurements may prohibit the operator from recognizing a leak in the well.

This violation was determined by EPA during the inspection conducted on April 13, 2011 (see Inspection Report, Complainant's Exhibit 13). Maralex representatives reported that annulus pressure measurements were taken every 6 to 8 months. Annulus pressure indicates a loss of mechanical integrity.

Inaccurate reporting

Inaccurate reporting is a violation of 40 C.F.R §§ 144.28(h). EPA observed and Maralex confirmed the existence of annulus pressure on the Ferguson #1 well in May of 2010 through May of 2011. On February 18, 2011, EPA received from Respondent the annual monitoring report for 2010 from Maralex which reported minimum and maximum annulus pressures of zero (0) pounds per square in gauge (psig) for every month of 2010.

Penalty Summary

For violations of the Safe Drinking Water Act (SDWA), EPA may seek to recover a penalty. The purposes of penalizing violators include:

- To deter future violations of the law by placing the violator in a worse position financially than those who have complied;
- To maintain a fair and equitable treatment of the regulated community; and
- To cause expeditious resolution of the identified problems.

In this case, because Maralex returned the Ferguson #1 well to compliance prior to the complaint being issued, the penalty was issued to achieve the first two objectives, above.

The proposed penalty includes two components, the economic benefit resulting to Maralex from the violations and the gravity of the violations which reflect their seriousness. In proposing the penalty, EPA considered, among other things, the following: there is at least one underground source of drinking water (USDW) contained in the geologic formations in the area where the Ferguson #1 well is located; wells with these types of violations pose elevated risks to USDWs; Maralex had several violations at the Ferguson #1 well in 2008 and had received Notices of Violation from EPA in 2010 and 2011 prior to the issuance of this complaint; Maralex has had continuous access to the Ferguson #1 well site to address the alleged violations; and Maralex's delayed expenditure of funds resulted in economic benefit to Maralex in two of the three alleged violations.

The EPA proposed in the complaint a penalty of $111,650.00 for Maralex based on analysis of the facts and circumstances of the case with the statutory penalty factors defined in SDWA § 1423(c)(4)(B):

1. Seriousness of violation

EPA considers there to be three levels of seriousness – most serious, serious, and least serious. Levels of seriousness of violations depend on risk to the environment and/or human health and how critical the violation is to the elements of the UIC program. Starting penalty ranges for each level of seriousness allow for consistency in penalty assessments throughout the region.

2. Economic benefit resulting from the violations
3. Respondent's history of such violations
4. Any good-faith efforts to comply with applicable requirements
5. Economic impact of the penalty on the violator
6. Such other matters as justice may require

In order to achieve consistent treatment of the regulated community in evaluating penalties in cases such as this, EPA Region 8 consulted the national UIC Program Judicial and Administrative Order Settlement Penalty Policy September 1993 (memorandum dated September 27, 1993) (Complainant's Exhibit 3) as a guide to provide a baseline from which to apply the facts of the case to the statutory penalty factors listed above. This

exercise provided an internal bottom-line dollar amount which EPA would accept in settlement of the case based on information known to EPA at the time of the issuance of the Complaint. To assist in calculating the proposed penalty, EPA used the following guidance and policies: EPA General Enforcement Policy #GM-21 (February 16, 1984) (Complainant's Exhibit 4) and EPA General Enforcement Policy #GM-22 (February 16, 1984) (Complainant's Exhibit 5).

Penalty amounts were calculated for each violation described in "Violation Summary" above. An explanation of factors considered for each violation is provided below. The ability for Maralex to pay the penalty is a factor to be considered. At the time of issuing the complaint, EPA did not have financial information on which to base a determination of ability to pay, therefore no reduction in the proposed penalty was made due to this factor.

Failure to Maintain Mechanical Integrity of the Ferguson #1 Well

1. Seriousness of violation

EPA considered this to be a "most serious" violation. A critical component of the UIC program is assuring that mechanical integrity of deep injection wells is maintained. Timely response to a loss of mechanical integrity in a well minimizes risk of movement of fluids into USDWs due to injection practices. If a loss of mechanical integrity in a well is detected, an operator is required to immediately cease injection and shut-in the well as rapidly as feasible, notify EPA of the loss of mechanical integrity, and return the well to compliance as quickly as possible. The requirement to shut the well in and repair it is critical and is done as standard procedure by operators. Maralex did not do this. Maralex not only recognized that "we may have a "pinhole leak"" causing the significant annulus pressure (over 1800 pounds per square inch when the permit requires zero (0) pounds per square inch), but it failed to timely address the issue and continued to inject into the well during this time. The continued injection is major noncompliance which requires a major penalty. Maintaining mechanical integrity of Class II Injection wells such as the Ferguson #1 well is one of the cornerstones of the UIC program.

Although EPA has indication that the well did not have mechanical integrity dating back to the May 5, 2010 inspection, for the penalty assessment, the beginning date of June 8, 2010 was used which resulted in a duration of violation of 12 months with the first 90 days forgiven (making it 9 months). That is the date that EPA received the letter from the Respondent where it was stated that the Respondent believed the well to have a leak. Before this date, EPA and the Respondent had communicated about different potential sources of the annulus pressure and potential solutions. That is why EPA considered the date of notification that the Respondent believed the source of pressure to be a leak as the starting point for the duration. The end point for the duration of violation is the date the well was reworked and passed the mechanical integrity test indicating a return to compliance.

2. Economic benefit resulting from the violations

EPA uses the computer model, "BEN", to calculate the economic benefit a violator derives from delaying or avoiding compliance with environmental statutes. EPA used the BEN computer model in this case to assist in calculating the proposed penalty. EPA considered economic benefit to be the amount of money saved by delaying the workover for the duration of the violation. A conservative and approximate average workover cost of $13,000.00 was used to estimate this economic benefit for the purpose of this penalty assessment. This resulted in an economic benefit component of $537.00.

3. History of the violator

See section below titled "History of the Violator Prior to Issuance of the Penalty Order." EPA reviewed Maralex's history, but did not adjust the penalty based on this factor.

4. Any good-faith efforts to comply with applicable requirements

EPA reduced the proposed penalty based on this factor due to Maralex's efforts to return the well to compliance prior to issuance of the complaint.

5. Economic impact on the violator

At the time of issuing the complaint, EPA did not have financial information on which to base a determination of ability to pay, therefore no reduction in the proposed penalty was made due to this factor.

6. Such other matters as justice may require

EPA made no adjustments to the proposed penalty based on this factor.

The proposed penalty for this violation is $537.00 in economic benefit and $99,140.00 in gravity totaling $99,677.00.

Failure to Monitor Annulus Pressure of the Ferguson #1 Well

1. Seriousness of violation

EPA considers this to be a "serious" violation. Monitoring and recording annulus pressure is a critical element of the UIC program. The existence of pressure on the tubing-casing annulus is an indication of loss of mechanical integrity. Routine testing of injection well mechanical integrity and monitoring of annulus pressure serves to identify problems that could lead to movement of injected fluids into USDWs. In this case, annulus pressure was known to exist and so lack information from additional monitoring did not conceal the status of the well and that is why EPA considered this to be a "serious" rather than "most serious" violation.

EPA could not determine how long this violation had been occurring and so used the Maralex representative's statement that the pressure had not been monitored for 6 to 8 months. EPA considered 7 months as the duration of this violation.

2. Economic benefit resulting from the violations

EPA used the "BEN" model and for this violation, EPA considered economic benefit to be the amount of money saved in the form of paid employee time required to monitor and record annulus pressure. This resulted in an economic benefit component of $141.00.

3. History of the violator

See section below titled "History of the Violator Prior to Issuance of the Penalty Order." EPA reviewed Maralex's history, but did not adjust the penalty based on this factor.

4. Any good-faith efforts to comply with applicable requirements

No adjustment was made based on this factor.

5. Economic impact on the violator

At the time of issuing the complaint, EPA did not have financial information on which to base a determination of ability to pay, therefore no reduction in the proposed penalty was made due to this factor.

6. Such other matters as justice may require

EPA made no adjustments to the proposed penalty based on this factor.

The proposed penalty for this violation is $141.00 in economic benefit and $7928.00 in gravity totaling $8,069.00.

Inaccurate Reporting of Annulus Pressure for the Ferguson #1 Well

1. Seriousness of violation

Although having accurate information about the well is critical to the UIC program, EPA considered this to be a "least serious" violation. This is because although the annual monitoring reports stated that the annulus pressure on this well was zero, EPA had information from inspections and communication with the operator that more accurately informed EPA of the annulus pressure.

The 12 months that were reflected in the 2010 annual monitoring report were considered for the duration of this penalty.

2. Economic benefit resulting from the violations

No economic benefit was calculated for this violation.

3. History of the violator

See section below titled "History of the Violator Prior to Issuance of the Penalty Order." EPA reviewed Maralex's history, but did not adjust the penalty based on this factor.

4. Any good-faith efforts to comply with applicable requirements

No adjustment was made based on this factor.

5. Economic impact on the violator

At the time of issuing the complaint, EPA did not have financial information on which to base a determination of ability to pay, therefore no reduction in the proposed penalty was made due to this factor.

6. Such other matters as justice may require

EPA made no adjustments to the proposed penalty based on this factor.

The proposed penalty for this violation is zero in economic benefit and $3,883.00 in gravity totaling $3,883.00.

History of the Violator Prior to Issuance of the Complaint

Date of Violation	Violation	Date Returned to Compliance
2/15/2008	Failure to Submit Annual Monitoring Report	3/24/2008
2/15/2008	Failure to Submit Annual Fluid Analysis	3/24/2008
6/30/2008	Failure to timely conduct required pressure fall-off test within 12 months of initially commencing injection	10/29/2008
9/30/2008	Failure to perform temperature log and radioactive tracer survey within 12 months after injection pressure began to exceed the 1020psig fracture pressure	11/4/2008-RATS; 4/3/2009-Temp Log

EPA

UNDERGROUND INJECTION CONTROL PROGRAM

PERMIT

PREPARED: February 2006

Permit No. CO21011-06908

Class II Commercial Salt Water Disposal Well

Dara Ferguson Injection Well No. 1
La Plata County, CO

Issued To

Maralex Disposal, LLC
775 Goddard Avenue
P.O. Box 338
Ignacio, CO 81137

Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Maralex Disposal, LLC
775 Goddard Avenue
P.O. Box 338
Ignacio, CO 81137

is authorized to construct and to operate the following Class II injection well or wells:

Dara Ferguson Injection Well No. 1
2126 ft FNL 520 ft FWL, SWNW S32, T33N, R9W
La Plata County, CO

Permit requirements herein are based on regulations found in 40 CFR Parts 124, 144, 146, and 147 which are in effect on the Effective Date of this Permit. Issuance of this Permit does not convey any property rights of any sort, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of other federal, State or local law or regulation.

This Permit is based on representations made by the applicant and on other information contained in the Administrative Record. Misrepresentation of information or failure to fully disclose all relevant information may be cause for termination, revocation and reissuance, or modification of this Permit and/or formal enforcement action. This Permit will be reviewed periodically to determine whether action under 40 CFR 144.36(a) is required.

This Permit is issued for the life of the well or wells unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for this program is delegated to an Indian Tribe or a State. Upon the effective date of delegation, all reports, notifications, questions and other compliance actions shall be directed to the Indian tribe or State Program Director or designee.

Issue Date: MAY 22 2006

Effective Date MAY 22 2006

for Stephen S. Tuber
Assistant Regional Administrator*
Office of Partnerships and Regulatory Assistance

*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

PART II. SPECIFIC PERMIT CONDITIONS

Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

(a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and

(b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:

  (i) on the injection tubing; and

  (ii) on the tubing-casing annulus (TCA); and

(c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure specified in APPENDIX C is reached at the wellhead; and

(d) a non-resettable cumulative volume recorder attached to the injection line.

4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

(a) There is no significant leak in the casing, tubing, or packer (Part I); and

(b) There is no significant fluid movement into an underground source of drinking water throught vertical channels adjacent to the injection well bore (Part II).

1. Demonstration of Mechanical Integrity (MI).

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

2. Mechanical Integrity Test Methods and Criteria

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

3. Notification Prior to Testing.

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

4. Loss of Mechanical Integrity.

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

1. Requirements Prior to Commencing Injection.

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

(a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and

(i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or

(ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

3. Injection Pressure Limitation

(a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.

(b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permitee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

5. Injection Fluid Limitation.

Injected fluids are limited to those which are brought to the surface in connection with 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, pursuant to 40 CFR 144.6(b). The Permittee shall provide an annual listing of sources of injected fluids in accordance with the reporting requirements in Part II Section D Paragraph 4 and APPENDIX D of this Permit.

(a) The well may be used to inject Class II wastes brought to the surface such as drilling fluids and spent well completion, treatment and stimulation fluids. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved.

(b) Initially, the well is permitted to accept fluid from the following sources:

Fluid sources are listed in Appendix C of the Permit No. CO21011-06908.

(c) Additional sources of fluids may be accepted, provided that they meet the requirements listed in Paragraphs 5 and 5(a) above. Within thirty (30) days after accepting fluid from a new source, the Permittee shall:

(i) notify the Director, in writing, identifying the new source by well name(s), field name(s), or facility name(s); and,

(ii) submit a fluid analysis for the additional fluids to the Director. The fluid shall be analyzed for TDS, Specific Gravity, Specific Conductivity, and pH.

6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

(a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;

(b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;

(c) the analytical techniques or methods used for analysis.

2. Monitoring Methods.

(a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

(b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.

(c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.

(d) Pressures are to be measured in pounds per square inch (psi).

(e) Fluid volumes are to be measured in standard oil field barrels (bbl).

(f) Fluid rates are to be measured in barrels per day (bbl/day).

3. Records Retention.

(a) Records of calibration and maintenance, 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 shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.

(b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

(c) The Permittee shall retain records at the location designated in APPENDIX D.

4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D. The report of all sources of the fluids injected during the year must identify each source by the generator's name and the well name and location, and the field name or facility name.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

Section E. PLUGGING AND ABANDONMENT

1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which prevents the movement of fluids into or between underground sources of drinking water. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director. The well shall be plugged in accordance with the approved plugging and abandonment plan and with 40 CFR 146.10.

3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abanonment plan.

5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

(a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or

(b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

(a) Provides written notice to the Director;

(b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and

(c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

PART III. CONDITIONS APPLICABLE TO ALL PERMITS

Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows 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 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by 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 enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

Section B. CHANGES TO PERMIT CONDITIONS

1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance 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; in some cases, modification or revocation and reissuance is mandatory.

4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging , or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

Section 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.

Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA 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 validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

Section E. GENERAL PERMIT REQUIREMENTS

1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

2. Duty to Reapply.

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

3. 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.

4. 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.

5. 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.

6. Permit Actions.

This Permit may be modified, revoked and reissued or teminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights.

This Permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information.

The Permittee shall furnish to the Director, within a time specified, 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. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

9. 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 at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

11. Reporting Requirements.

(a) Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.

(b) 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.

(c) Monitoring Reports. Monitoring results shall be reported at the intervals specified in this Permit.

(d) 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.

(e) Twenty-four hour reporting. The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:

(i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or

(ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) 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 the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

(f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website http://www.nrc.uscg.mil/index.htm.

(g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.

(h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

Section F. FINANCIAL RESPONSIBILITY

1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

2. Insolvency.

In the event of:

(a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or

(b) suspension or revocation of the authority of the trustee institution to act as trustee; or

(c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

APPENDIX A

WELL CONSTRUCTION REQUIREMENTS

Three strings of casing will be set and cemented to the surface. The surface casing will be 13 3/8 inch, 54.5 lbs/ft, J-55 set at approximately 500 ft inside a 17 ¼ inch hole.

Cement will be Class B with the additives as shown below. Intermediate casing will be 9 5/8 inch, 36 lb/ft, J-55 set at approximately 3600ft in a 12 ¼ inch hole. Cement will be Class G with the additives as shown below. The injection casing will be 7 inch, 23 lb/ft, J-55, and N-80 set at total depth (est. 9100 ft). In an 8 ¾inch hole. Cementing will be class G + additives. A temperature survey will be run in the event cement is not circulated to the surface on any string. A cement bond log will be run on the entire injection string.

Drilling fluids will be mud, water with polymers, and air as described below.

The planned logging program calls for Gamma Ray, Induction and Caliper logs from total depth to the top of the Dakota. Density and Neutron logs will be run from total depth to the Dakota. Mud logging is likely from the Dakota to total depth. Cased hole logs will include a cement bond log and a depth correlation log. No DST's or cores are planned for the proposed well.

MUD PROGRAM: (Interval, Mud Type, Mud Weight)

Surface, Spud, 8.5-9.0 ppg
Intermediate, Water w/ polymer, Sweeps to top of Fruitland then LSND, 8.3-9.3 ppg
Long String May air drill from 3700 ft to 7700 ft then mud up w/ LSND / XCO / Polymer, 8.6-8.8 ppg

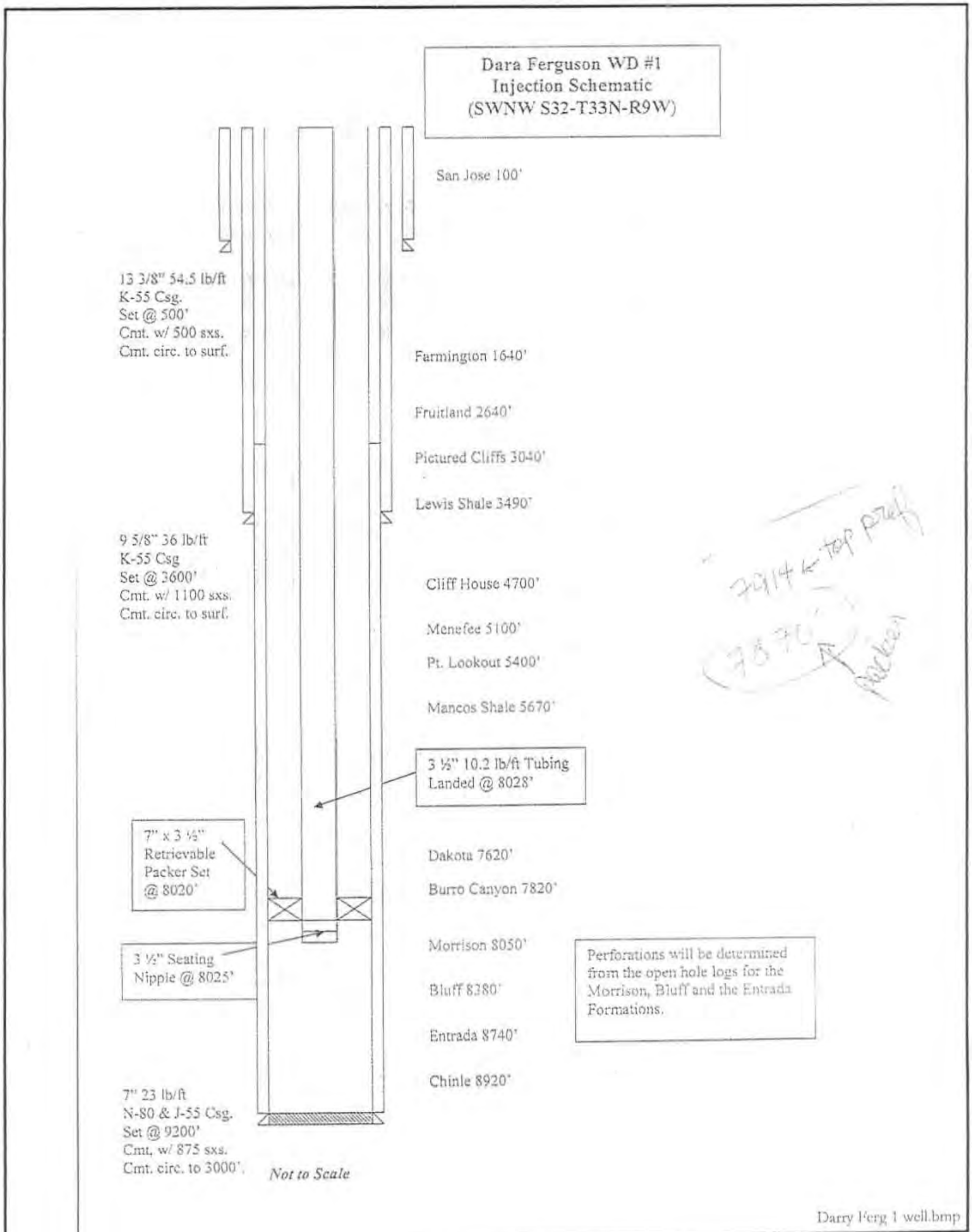
LOGGING PROGRAM

Operator will run FDC-CNL-PE-DIL-GR-Caliper from final TD to 7500 ft, w/ DIL-GR-Caliper up to the intermediate casing shoe.

Deviation surveys will be made at least every 500 ft using a single shot survey.

Detailed drilling plans are established on the APD.

The proposed annulus fluid is fresh water containing corrosion inhibitors and oxygen scavengers.


Dara Ferguson WD #1
Injection Schematic
(SWNW S32-T33N-R9W)
San Jose 100'
13 3/8" 54.5 lb/ft
K-55 Csg.
Set @ 500'
Cmt. w/ 500 sxs.
Cmt. circ. to surf.
Farmington 1640'
Fruitland 2640'
Pictured Cliffs 3040'
Lewis Shale 3490'
9 5/8" 36 lb/ft
K-55 Csg
Set @ 3600'
Cmt. w/ 1100 sxs.
Cmt. circ. to surf.
Cliff House 4700'
Menefee 5100'
Pt. Lookout 5400'
Mancos Shale 5670'
7914 ← top perf
7870
packer
3 ½" 10.2 lb/ft Tubing
Landed @ 8028'
7" x 3 ½"
Retrievable
Packer Set
@ 8020'
Dakota 7620'
Burro Canyon 7820'
3 ½" Seating
Nipple @ 8025'
Morrison 8050'
Bluff 8380'
Entrada 8740'
Chinle 8920'
Perforations will be determined from the open hole logs for the Morrison, Bluff and the Entrada Formations.
7" 23 lb/ft
N-80 & J-55 Csg.
Set @ 9200'
Cmt. w/ 875 sxs.
Cmt. circ. to 3000'.
Not to Scale
Darry Ferg 1 well.bmp

APPENDIX B

LOGGING AND TESTING REQUIREMENTS

Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

WELL NAME: Dara Ferguson Injection Well No. 1

TYPE OF LOG	DATE DUE
TEMP	Prior to injection; if CBL does not show adequate cement
Fracture Finder	Prior to injection, prior to running casing
CBL/VDL/GAMMA RAY	Prior to injection after casing set
Gamma Ray	Prior to injection, prior to running casing
Caliper	Prior to injection, prior to running casing
Porosity	Prior to injection, prior to running casing

Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

WELL NAME: Dara Ferguson Injection Well No. 1

TYPE OF TEST	DATE DUE
Injection Profile Survey	Between 3 to 6 months after commencing injection; each zone to be tested separately
Step Rate Test	Within 1 month after commencing injection
Pressure Fall-Off Test	After twelve (12) months of injection service and annually thereafter
Cement Records	Prior to injection
Permeability	Prior to injection
Pore Pressure	Prior to injection
Standard Annulus Pressure	Prior to injection
Injection Zone Water Sample	Prior to injection; swab testing on each individual formation; conductivity to be monitored for consistency prior to sample collection; salinity profile on completion fluids to be submitted.

APPENDIX C

OPERATING REQUIREMENTS

MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

WELL NAME	MAXIMUM ALLOWED INJECTION PRESSURE (psi) ZONE 1 (Upper)
Dara Ferguson Injection Well No. 1	2,520

INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

The approved injection is derived primarily from coal bed methane (CBM) production wells in the Ignacio Blanco Field, which includes [Well Name, Location, Poducing Formation, TDS (mg/L)]:

Cory Jack 33-7-11 #2, SWNE S11-T33N-R7W, Fruitland Coal, 11,894

Florida Gas Unit #1, NWNE S30-T33N-R9W, Dakota, 7,977

Heikkenen 33-7-10 #1, NENE S10-T33N-R7W, Dakota, 10,605

Jamie Lee 33-7-9 #1, SESE S9-T33N-R7W, Fruitland Coal, 8,489

Jennie Rose 33-7-3 #1, NENW S3-T33N-R7W, Fruitland Coal, 6,953

Katie Eileen 34-7-35 #2, SWSE S35-T34N-R7W, Fruitland Coal, 4,490

Katie Eileen 34-7-35 #2A, NESW S35-T34N-R7W, Fruitland Coal, 4,108

Keegan Patrick 33-7-11 #1, NWNW S11-T33N-R7W, Fruitland Coal, 7,704

Keegan Patrick 33-7-11 #2A, NWSW S11-T33N-R7W, Fruitland Coal, 7,171

Mary Catherine 33-7-3 #1, SESW S3-T33N-R7W, Fruitland Coal, 11,719

Mary Catherine 33-7-2 #2A, SWSW S3-T33N-R7W, Fruitland Coal, 10,074

Mollie Corynne 33-7-2 #1, SWNW S2-T33N-R7W, Fruitland Coal, 4,886

Mollie Corynne 33-7-2 #2A, NENE S2-T33N-R7W, Fruitland Coal, 6,049

Maralex Disposal, LLC estimates an average of 3,500 barrels per day and maximum 7,000 barrels per day will be injected. Currently, this water is transported to another location for disposal, so the ability to dispose of the waste water locally will reduce overall cost of operations.

The produced water will be trucked to the site and stored in several 1,000 barrel (or similar sized) holding tanks. The operator expects to have a storage capacity of 10,000 barrels on the site. Water will be stored at 60 to 90 degrees and treated with bacteriacide. A small gas or electric pump will be used to charge and send the water through filters prior to going to the main pumps. After the main pumps pressure the water, it will be pumped down the well to the receiving formations. All lines will be buried where possible and back-up pumps will be used where appropriate to insure reliability of the system.

WELL NAME: Dara Ferguson Injection Well No. 1

FORMATION NAME	APPROVED INJECTION INTERVAL (GL, ft) TOP	BOTTOM	FRACTURE GRADIENT (psi/ft)
Morrison Formation	8,050.00 -	8,380.00	0.740
Bluff Formation	8,380.00 -	8,700.00	0.750
Entrada Formation	8,740.00 -	8,920.00	0.750

ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

APPENDIX D

MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE WEEKLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
OBSERVE AND RECORD	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

ANNUALLY	
ANALYZE	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH

ANNUALLY	
REPORT	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and averaged annulus pressure(s) (psig)
	Each month's averaged injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis

Records of all monitoring activities must be retained and made available for inspection at the following location:

Maralex Disposal, LLC
775 Goddard Avenue
Ignacio, CO 81137

APPENDIX E

PLUGGING AND ABANDONMENT REQUIREMENTS

Operator will file and obtain approval for a detailed P&A plan for approval prior to initiating any P&A operations. Typical P&A operations may be as follows:

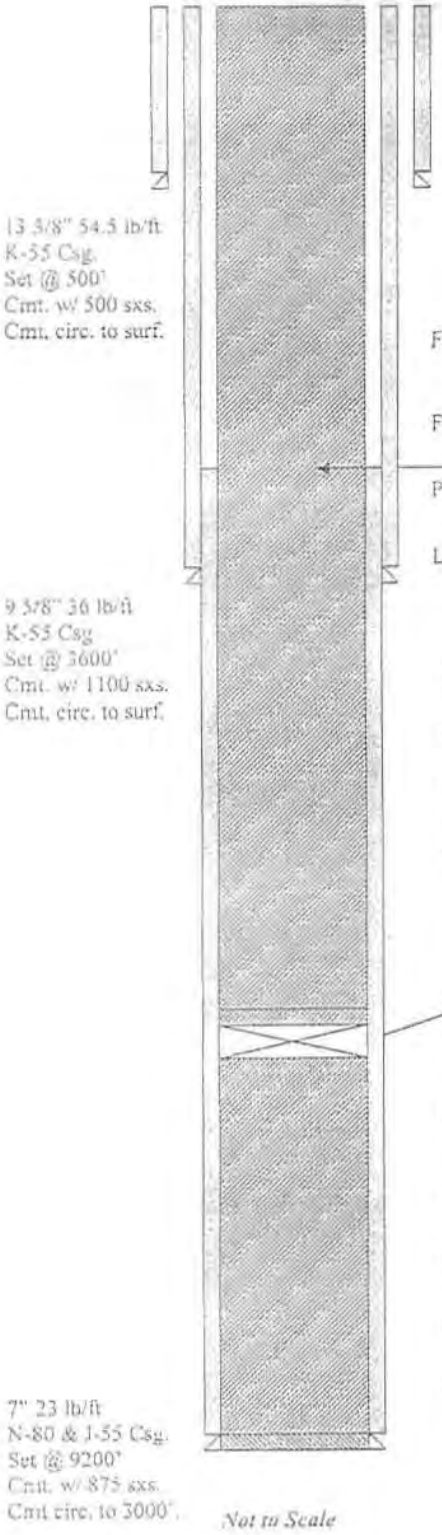
1. Set wireline cement retainer above the injection interval at approximately 7500 ft. Cement squeeze the perforations and fill casing below retainer with 300 sxs. Class G cement w. additives. Place 5 sxs. cement on top of the retainer. Pressure test the casing string and the cement plug with a retainer above the injection intervals. The top of the cement will be above the Dakota, Burro Canyon, Morrison, Bluff and the Entrada formations.

2. Stack Class G cement with additives from top of cement plug which is on top of the cement retainer at 7500 ft to surface. This will require placing 1652 cubic ft. of cement to reach the surface.

3. Remove Wellhead. Install P & A marker. Reclaim location.

Note: A plugging procedure will be submitted and approval obtained to the appropriate regulatory agencies before plugging operations are conducted. It may not be necessary to fill the entire casing string with cement if it is determined that the deeper intervals have no fresh water potential.

P + A
Schematic



San Jose 100'

13 3/8" 54.5 lb/ft
K-55 Csg.
Set @ 500'
Cmt. w/ 500 sxs.
Cmt. circ. to surf.

Farmington 1640'

Fruitland 2640'

Pictured Cliffs 3040'

Stack and fill 7" casing from 7500' to surface.

Lewis Shale 3490'

9 5/8" 36 lb/ft
K-55 Csg
Set @ 3600'
Cmt. w/ 1100 sxs.
Cmt. circ. to surf.

Cliff House 4700'

Menefee 5100'

Pt. Lookout 5400'

Mancos Shale 5670'

Set wireline cement retainer above the injection interval @ app. 7500'. Cement squeeze perforations and fill casing below the retainer with 300 sxs. Class G cement w/ additives. Place 5 sxs. cement on top of terainer. Top of cement will be above the Dakota, Burro Canyon, Morrison, Bluff and the Entrada Formations.

Dakota 7620'

Burro Canyon 7820'

Morrison 8050'

Bluff 8380'

Entrada 8740'

Chinle 8920'

7" 23 lb/ft
N-80 & J-55 Csg.
Set @ 9200'
Cmt. w/ 875 sxs.
Cmt circ. to 3000'.

Not to Scale

Darry Ferg 1 P&A.bmp

APPENDIX F

CORRECTIVE ACTION REQUIREMENTS

No corrective action is required.

Complainant's Exhibit 3

UNITED STATES ENVIRONMENTAL PROTECTION A
WASHINGTON, D.C. 20460

SEP 27 1993

MEMORANDUM

SUBJECT: Interim Final UIC Program Judicial and Administrative Order Settlement Penalty Policy -- Underground Injection Control Guidance No. 79

FROM: James R. Elder, Director
Office of Ground Water and Drinking Water

Frederick E. Stiehl
Enforcement Counsel for Water

TO: Water Management Division Directors
Regions I-X

Regional Counsels
Regions I-X

We have completed the Interim Final Underground Injection Control (UIC) Program Judicial and Administrative Order Settlement Penalty Policy (Settlement Penalty Policy). This Settlement Penalty Policy supersedes the previous UIC Program Administrative Order Settlement Penalty Policy -- Underground Injection Control Guidance No. 75, issue January 24, 1992. The Settlement Penalty Policy has been developed jointly by the Office of Ground Water and Drinking Water and the Office of Enforcement.

The Settlement Penalty Policy differs from the previous UIC Program Administrative Order Guidance in a number of ways. The new Settlement Penalty Policy can now be used to calculate judicial penalties as well as administrative penalties. Other changes include a change in the adjustment factor categories and a narrowing of the overall adjustment allowances. In addition, a summary calculation sheet has been supplied which allows multiple penalty calculations to be placed on a single summary sheet.

The Settlement Penalty Policy consists of a gravity and economic component. The economic component is designed to assess any economic benefit an operator gains from violating the Safe Drinking Water Act (SDWA). The gravity component should be assessed based on the seriousness of the violation.

The economic component is calculated using the BEN model which is the Agency's accepted economic model. The gravity component consists of four variables: Seriousness of Violation; Economic Impact (Business Size); Duration of Violations; and Number of Wells. These four variables are used in calculating the gravity component associated with each violation. The adjustment factors are used to increase or decrease the gravity component and if applicable ability to pay and litigation considerations may be used to decrease the overall penalty calculation amount.

Use of Settlement Penalty Policy

The settlement amount derived using the Settlement Penalty Policy establishes the bottom line figure below which a case should not be compromised. The settlement amount derived using the Settlement Penalty Policy should not be confused with the appropriate penalty amount included in a proposed administrative order (PAO). The penalty amount in the PAO should be the highest amount, up to the statutory cap, that the Region is able to defend before a Presiding Officer. The cover letter transmitting the PAO to the respondent may include a settlement penalty amount which is lower than that in the PAO to encourage an expeditious conclusion of the case. In place of an actual penalty amount in the cover letter the Regions may also use a statement to indicate that a reduced penalty will be considered if the case is concluded expeditiously. In no case, however, may the penalty amount in the proposed or final order be below the settlement amount derived using the Settlement Penalty Policy. Of course, the Settlement Penalty Policy does not preclude a settlement from being calculated and assessed for the statutory maximum, without a reduction for expeditious compliance, at any time it is deemed necessary by the enforcement case team.

Regional comments on the Settlement Penalty Policy will be accepted through November 30, 1993. Please direct any questions or comments to Peter Bahor (202-260-7280) or Alan Morrissey (202-260-2855).

Attachment

cc: Bob Blanco
Ramona Trovato
Francoise Brasier
Dave Hindin
Alan Morrissey
Don Olson
Jonathan Libber

UIC Program Judicial and Administrative

Order Settlement Penalty Policy

September 1993

Note: This policy supersedes the UIC Program Administrative Order Settlement Policy issued on January 24, 1992.

Contents

I. Introduction

Background

Part C of the Safe Drinking Water Act (SDWA) establishes guidelines for protecting underground sources of drinking water through control of underground injection wells. In the 1986 SDWA amendments, Congress authorized the EPA to issue administrative orders as an enforcement tool to promote compliance with the Act and its associated regulations. The revised Act authorized administrative penalties of up to $125,000. The amendments also provided revised authority for EPA to bring about civil judicial actions as an enforcement and compliance tool; the maximum judicial penalty was set at $25,000 per day per violation with no ceiling.

The SDWA provides EPA with three avenues for seeking penalties for violations of applicable Underground Injection Control (UIC) requirements; administrative actions, civil judicial actions, and criminal judicial actions. Guidance for choosing among the different enforcement avenues can be found in the document, "Choosing Between Criminal, Civil and Administrative Action for UIC Violations." This guidance was released on December 22, 1986, with a memo from Office of Drinking Water Director Michael Cook called, "Transmittal of PWS and UIC Administrative Order Issuance Guidance -- ACTION MEMORANDUM."

This document sets forth the policy of the U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water (OGWDW) and the Office of Enforcement (OE), for establishing appropriate civil judicial and administrative **settlement** penalties in the UIC Program. This applies to all UIC actions initiated after the effective date of this policy and to pending enforcement cases in which the government has not yet transmitted an approved oral or written penalty demand to the alleged violator. This policy provides, based on the circumstances of the case, the lowest penalty figure which the Federal Government is generally willing to accept in settlement; however, there may be circumstances so egregious that the Federal Government should not even consider acceptance of such a figure and should instead seek the statutory maximum. This policy implements EPA's Policy on Civil Penalties (#GM-21) and Specific Approaches to Penalty Assessments (#GM-22).

An appropriate penalty is one that accomplishes three objectives. First, it should deter violations of the law by placing the violator in a worse position financially than those who have complied in a timely fashion. Secondly, there must be fair and equitable treatment of the regulated community. Therefore, the penalty should be consistent with the Agency's penalty policy and promote a more consistent approach to the assessment of civil judicial penalties, while allowing for factors unique to the UIC Program. Thirdly, the penalty should result in expeditious resolution of the identified problem(s). Such resolution can be achieved through an incentive, such as mitigating the penalty for supplemental environmental projects, or a disincentive, such as increasing the penalty figure for recalcitrance or for degree of willfulness if settlement negotiations are drawn out.

This policy is purely for the use of U.S. EPA enforcement personnel in settling cases. EPA reserves the right to change this policy at any time, without prior notice, or to act at variance to this policy. This policy does not create any rights, implied or otherwise, in any third parties. This policy supersedes the UIC Program Administrative Order Settlement Policy issued on January 24, 1992.

Pleading -- Other Types of Penalties

This policy only establishes how the Agency calculates the minimum penalty for which it would be willing to settle a case. The development of the penalty amount to plead in an administrative or judicial complaint is developed independent of this policy, except to the extent the Agency may not seek a settlement penalty in excess of the statutory maximum penalty it is seeking in the complaint. Further, at trial (or in an administrative hearing) the Agency will seek a penalty based on the statutory maximum and the penalty factors which the court is instructed to consider. Of course, the Agency will not use the settlement Penalty Policy in arguing for a penalty at trial or in an administrative penalty hearing. In pleading for penalties in judicial or administrative complaints, please refer to guidance by OE regarding the distinctions among pleading, negotiating, and litigating civil penalties for enforcement cases.[1] Although the guidance was written for cases brought under the Clean Water Act, it is also useful in Safe Drinking Water Act actions.

Documentation

Each component of the settlement penalty calculation (economic benefit, gravity and any adjustments) must be clearly documented with supporting materials and written explanations in the case file and provided to Headquarters for review and approval as required. Special care should be made to fully explain in the case file any adjustments for litigation considerations or ability to pay. Any subsequent recalculations of the penalty based on new information should also be included in the file.

Documentation and explanations of a particular settlement calculation constitute confidential information that is outside the scope of discovery and FOIA requests, which is protected by various privileges, including the attorney-client and attorney work-product. While individual settlement penalty calculations are confidential documents, this penalty policy is a public document and may be released to anyone upon request. Further, as part of settlement negotiations between the parties, EPA may release parts of the case specific settlement calculations. The release of such information may only be used for settlement negotiations in the case at hand and, of course, may not be admitted into evidence in a trial or hearing.

Outline of the UIC Settlement Policy

This policy incorporates, directly or indirectly, each of the statutory concepts listed under Section 1423(c)(4)(B) of the Safe Drinking Water Act, which outlines the factors the Administrator must take into account when determining a civil penalty.

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[1] See *Guidance on the Distinctions Among Pleading, Negotiating, and Litigating Civil Penalties for Enforcement Cases under the Clean Water Act*, OECM/OW, January 19, 1989.

The remainder of this document provides step-by-step guidance for calculating settlement amounts. A separate calculation should be performed for each violation.. The first step is to calculate the statutory maximum. In administrative actions, the maximum for Class II wells is $5,000 per day per violation and for other Classes of wells the maximum is $10,000 per day per violation. For all well Classes in administrative actions, there is a ceiling of $125,000 per violation. The maximum for civil judicial penalties is $25,000 per day per violation with no ceiling. The statutory maximum serves as a limit which the settlement amount cannot exceed; the case team can always choose to assess the statutory maximum penalty if the circumstances of the case warrant such action. The next step is to calculate the economic benefit of the violation, a process described in Section II. The third step, covered in Section III, is calculation of the gravity component. The final step, described in Section IV, is applying adjustment factors to the combined economic benefit and gravity components.

The appendices provide material to support the settlement penalty calculation process. Appendix A provides a list of common UIC program violations by level of seriousness; this list is a guideline for categorizing violations when calculating the gravity component. Appendix B provides an example worksheet to use for calculating settlement amounts with this policy. A separate worksheet calculation should be carried out for each violation. Appendix C is a Summary Worksheet for recording information on multiple violations. Appendix D is a Glossary of Terms.

II. Economic Benefit Component

Agency civil penalty policy mandates recapturing the economic benefit accrued to the violator as a result of noncompliance. EPA policy states that "penalties generally should, at a minimum, remove any significant economic benefits resulting from failure to comply with the law." (GM-21). These benefits accrued to a violator as a result of noncompliance are referred to as the Economic Benefit Component. This component serves as the base settlement amount to which the Gravity Component is added. The calculation of economic benefit must be in writing and retained in the case file. It is enforcement privileged material and may only be disclosed upon decision of the case team.

EPA has a standard policy and methodology for calculating economic benefit. This methodology, based on calculation of avoided and delayed costs of noncompliance, is described in detail in the "BEN User's Manual" (revised 1993).[2] Case teams should calculate economic benefit of noncompliance using the BEN model.

The BEN model methodology incorporates three types of costs: initial capital investments, either one-time or recurring; one-time nondepreciable expenditures, either tax deductible or not; and avoided annual expenses. The following paragraphs give examples of each of these costs relevant to the UIC program. For detailed guidance, refer to the "BEN User's Manual," beginning on page III-7.

Initial Capital Investments

Delayed capital investments are either one-time or recurring depreciable expenditures which have been deferred by the violator's failure to comply promptly with regulatory requirements. The violator eventually will have to spend the money in order to achieve compliance, but has accrued economic benefit by using the money for other purposes during the noncompliance period. Depreciable capital expenditures are typically for physical plant or heavy equipment with a limited useful life. Examples of violations which result in savings from delayed capital investments are:

- Delay in installing monitoring equipment
- Delay in properly constructing a well

Capital investments can be either one time or recurring. An example of a recurring capital investment would be a monitoring system, with a predetermined useful life, that must always be replaced at the end of the predetermined period.

If the violator does not just delay capital investments but rather fails to make them altogether, the initial capital investments become avoided rather than delayed costs. The initial investments should then be treated in the economic benefit calculation as avoided costs.

Delayed One-Time Nondepreciable Costs

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[2] Ben is a computer model used across EPA programs to calculate the economic benefit of noncompliance in settlement calculation amounts. Detailed information about BEN and copies of the "User's Manual" and the "User's Guide" can be obtained from the EPA's Office of Enforcement Policy.

Delayed one-time costs are nondepreciable expenditures which have been deferred by the violator's failure to comply promptly with regulatory requirements. The violator eventually will have to spend the money in order to achieve compliance, but has accrued economic benefit by using the money for other purposes during the noncompliance period. With the exception of land, most one-time nondepreciable costs are tax deductible. Examples of violations which result in savings from delayed one-time, nondepreciable costs are:

- Delay in contracting for brine removal
- Delay in setting up a record-keeping system
- Delay in purchase of land required for compliance
- Delay in repairing a well lacking mechanical integrity
- Delay of plugging and abandonment in accordance with an approved plan
- Initial training of employees (regularly occurring training must be classified as an annual cost, not a one-time cost)

Many of the costs associated with violation of UIC program regulations are one-time nondepreciable expenditures.

If the violator does not just delay one-time nondepreciable expenditures but rather fails to make them altogether, the expenditures become avoided rather than delayed costs. The one-time nondepreciable expenditures should then be treated in the economic benefit calculation as avoided costs.

Annual Expenses

Annual expenses are recurring expenditures that the violator completely avoided through noncompliance. These costs will never be incurred. Annual expenses are the equivalent of operating and maintenance (O&M) costs. Examples of violations which result in savings from avoided annual expenses are:

- Failure to monitor
- Failure to retain records
- Failure to carry out regular training of employees
- Failure to pay costs of alternative disposal when UIC disposal is into an unauthorized well
- Failure to perform required operation and maintenance activities

The case team will often find that the most appropriate avoided annual expense is the cost of alternative (proper) disposal. This is treated as an annual expense or operating cost since it is a necessary cost of a legal operation if the underground injection well may not lawfully be used for injection. To use BEN to calculate alternative cost of disposal, the case team should input this alternative cost as an annual expense in the appropriate year.

Wrongful Profits

Finally, BEN can be used to calculate the present value of wrongful profits. This method of calculating economic benefit may be used if calculation of an economic benefit from delayed and avoided costs is not possible; estimates of wrongful profits are typically very imprecise and this is not the preferred alternative. To determine wrongful profits in each year, the case team calculates either revenue from sales less cost of goods sold or calculates revenue from sales times profit margin. All three of these figures (sales revenue, cost of goods sold, and profit margin) are difficult to determine, making this calculation of economic benefit a last resort. The wrongful profit from each year is then entered into BEN as an annual expense, and BEN will calculate the present value of these wrongful profits. Case enforcement staff should consult with Headquarters for advice on how to perform this analysis.

III. Gravity Component

Introduction

This section of the policy describes the methodology for calculating the gravity component of administrative and civil judicial settlements for violations of applicable UIC requirements. A separate gravity component should be calculated for each violation. Case teams will first calculate an unadjusted gravity component and will then apply the Gravity Component Adjustment Factor to determine the final gravity component.

Calculating the Unadjusted Gravity Component

The unadjusted gravity component incorporates the following variables:

(A) Seriousness of violation

(B) Economic impact on the violator

(C) Duration of violation

(D) Number of wells in violation

The formula incorporating these factors is included on Chart 1 on page 8, the "Unadjusted Gravity Component Calculation Formula." Each of the four component variables is described in more detail below.

A. Seriousness of Violation

The seriousness of violation is the basic factor from which the gravity component is calculated. The seriousness of violation incorporates both the potential or actual harm resulting from the violation and the extent of deviation from UIC program requirements. Violations are placed in one of three levels. Level III infractions are the least serious; they are typically reporting violations that do not threaten the integrity of the program and pose little or no direct threat to the environment. Level II violations may be either reporting or other types of infractions; they are more serious than Level III violations but do not seriously threaten the environment and would not be classified as Significant Noncompliance.[3] Level I violations are the most serious violations; these are violations that threaten human health or the environment and/or that violate crucial provisions of the UIC program. They would be classified as Significant Noncompliance. Appendix A contains lists of common UIC program violations broken down into the three levels. The lists in Appendix A are *intended to serve as guides*

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[3] Guidance for determining whether violations represent Significant Noncompliance can be found in: (1) "UIC Program Definition of Significant Noncompliance," December 4, 1986; (2) UIC Guidance Number 58, September 9, 1987; (3) "UIC Program SNC Definition," September 16, 1987; and (4) "Clarification of Procedures for Determining Significant Noncompliance: Addendum to UIC Program Guidance #58," February 16, 1990.

only since specific circumstances may dictate that a violation listed in one category may be more or less serious in the particular case under review.

B. Economic Impact on the Violator

Economic impact on the violator is an administrative penalty statutory consideration, from the Safe Drinking Water Act, in UIC penalty cases. To account for different impacts on violators of varying financial capability, the UIC settlement policy incorporates this provision for all types of cases to distinguish between different sized businesses and municipalities. Firms are placed in one of three categories based on their net sales. Net sales is the first line on any corporate tax form and equals gross sales less returns, allowances, and discounts. Case teams should attempt to get reliable information as to violator business size (e.g., from Dun & Bradstreet reports, tax forms, or audited financial statements); in the absence of specific information, case teams should use their judgment based on available information and conservative estimates.

Municipalities are placed in one of three categories based on their population size. Population and per capita income statistics are readily available from sources including the community itself, state data or census books, and the Census Bureau within the U.S. Department of Commerce. Case teams should note that the policy assumes smaller communities are less able to afford penalties than larger communities and therefore are given an adjustment for economic impact. However, small urban or suburban communities often should be treated differently from small rural communities. Small urban or suburban communities may be very wealthy and able to afford a penalty as easily as some larger communities. (The case team may wish to refer to Census Bureau information to determine whether the municipality in question is part of a Metropolitan Statistical Area, the Census Bureau's term for a metropolitan region.) Small rural communities, on the other hand, are typically less financially capable than larger communities.

The economic impact on the violator factor accounts for varying financial capability among firms and municipalities of different sizes. It is intended to relegate the Ability to Pay factor (see p. 11) to a secondary consideration, invoked only when violators conclusively prove that they are unable to pay the calculated penalty and are otherwise able to come into compliance.

In cases where small firms are very profitable or where small communities are very wealthy and where the proposed penalty (without the Economic Impact on the Violator adjustment) will not adversely affect the violator, this provision may be discounted. The case team has the discretion to use a value of "1" under this factor regardless of the violator's business or population size.

C. Duration of Violation

This penalty policy accounts for ongoing violations by escalating the calculated penalty as the length of violation increases. The duration of violation is defined as the time from the first day of noncompliance until the compliance date (the day the violator brings the well into compliance). For the purpose of calculating the length of ongoing violations, a month is defined as 30 days and a partial month beyond the last full month is counted as an additional month (e.g., a 32-day violation is a two-month violation).

D. Number of Wells in Violation

This factor accounts for the fact that a number of wells owned by a single operator may be in violation of the identical UIC requirement; this provision is only to be used when multiple wells are in violation of the *identical requirement*. In these instances, the case team may either calculate a separate penalty for each well or use this multi-well provision to calculate a single penalty. For identical violations at 25 or fewer wells, this factor is equal to the number of wells; only when there are a large number of wells in violation does this factor have an effect.

Chart 1
Unadjusted Gravity Component
Calculation Formula: (A X B) X (C + D)

Input Factors

A. Seriousness of Violation

Violation Category	Multiplier All Classes
Level III	$100-400
Level II	401-1,000
Level I	1,001-25,000

B. Economic Impact on the Violator

Business Size	Municipality Population	Multiplier
Less than $1 Million	Less than 2,500	0.3
$1 Million - $10 Million	2,501 - 50,000	0.7
Greater than $10 Million	Greater than 50,000	1.0

C. Duration of Violation

Length of Violation	Factor
1 day	0
2 days - 1 month	0 - 2
2 - 3 months	2 - 5
4 - 7 months	4 -10
8 - 12 months	8 -15
13 - 18 months	13 - 25
19 - 36 months	19 -40
37 - 60 months	37- 75
60+ months	60 - 125+

D. Number of Wells in Violation

Number	Factor
1-25	Actual number of wells
26 - 50	26 - 50
51 - 100	36 - 100
100+	50 - 100+

Adjustment Factor for the Gravity Component

The gravity component adjustment factor permits increases or decreases in the gravity component to account for a violator's compliance history; level of cooperation/noncooperation; and the willfulness or negligence associated with the violation.

When considering an appropriate figure for gravity component adjustment factor, the case team should consider the following specific factors:

- Number of previous violations
- Similarity of any previous violations
- Violator's response to previous violations and enforcement actions
- The rapidity with which this violation was corrected or damage was mitigated prior to the enforcement action
- The level of effort put forth by the violator to correct the violation and respond to the enforcement action[4]
- Whether the violator delayed release of information or employed other delaying tactics
- Degree of control the violator exercised over the violation
- Foreseeability of events leading to the violation
- Level of precautions that were taken to avoid the violation

Based on these and other appropriate factors, the case team may decide on a gravity component adjustment factor ranging from minus 30 to plus 150 percent. Case teams may not consider a *reduction* of the gravity component based on a history of compliance. The unadjusted gravity component is then multiplied by this factor and the resulting figure is added to the unadjusted gravity component to determine the final (adjusted) gravity component.

[4] Good faith does not occur after an enforcement action is commenced.

IV. Determining the Final Settlement Amount

The preliminary settlement amount is the sum of the Gravity and Economic Benefit Components. However, two factors may be used to adjust the preliminary settlement amount: ability to pay and litigation considerations. Both of these factors are external to benefit derived through noncompliance and to the seriousness of the violation and both factors may be used only to adjust proposed settlement amounts downward. Any adjustment must be fully documented and retained in the case file. Such information is typically audited by the General Accounting Office and EPA's Inspector General. This chapter describes the use of the ability to pay and litigation considerations adjustment factors. In addition, this chapter discusses the use of Supplemental Environmental Projects to reduce penalty amounts.

Ability to Pay

The Agency will not generally request penalty settlements that are clearly beyond the means of the violator. The case team typically should seek to settle for as high an amount as the case team believes the violator can afford without seriously jeopardizing the violator's ability to continue operations and to bring the well into compliance. Therefore, EPA may consider the ability to pay a penalty when arriving at a specific final penalty assessment. However, the more serious the violation the greater risk EPA should accept that imposition of a penalty will result in closure of a violator's business. According to the Agency's penalty framework, GM-22, "EPA reserves the option, in appropriate circumstances, of seeking a penalty that might put a company out of business" (p. 23). Also, where the case team believes the violator will not be able to bring the well operation into compliance no matter what the penalty assessment, the penalty should not be adjusted downward based on ability to pay.

The burden to demonstrate inability to pay, as with the burden of demonstrating the presence of any mitigating circumstances, rests on the violator. In addition, if the violator fails to provide sufficient information to support a claim of inability to pay a penalty, then the case development team should disregard this factor in adjusting the penalty. At a minimum, the violator must provide three years of Federal tax returns. Where possible, the case team should also have the violator provide a certified financial statement prepared by a Certified Public Accountant. The Agency has developed a computer model called "ABEL" which helps determine the ability of a violator to afford a penalty. If the Region is still unable to judge the validity of the claim, evaluation by an outside expert consultant may be necessary.

When it is determined that a violator cannot afford the penalty prescribed by this policy, the following options may be considered:

- An installment payment schedule with appropriate interest accruing to delayed payments. The first payment must be received within 60 days of final settlement.
- A penalty reduction.
- A suit against the individual violator(s) if the company has no assets.

A reduction in the penalty amount is a less desirable alternative than a delayed payment schedule, although installments beyond three years are strongly discouraged.

Litigation Considerations

Many enforcement cases may have weaknesses or equitable problems that could be expected to persuade a court to assess a penalty less than the statutory maximum amount. The simple existence of weaknesses in a case, however, should not automatically result in a litigation consideration reduction of the preliminary penalty amount (economic benefit + gravity). The government should evaluate every penalty with a view toward the potential for protracted litigation and attempt to ascertain the maximum civil penalty the court (or administrative law judge) is likely to award if the case proceeds to trial (or administrative hearing). The basic rule for litigation considerations is that the government may reduce the amount of the civil penalty it will accept at settlement to reflect these considerations (i.e., weaknesses or equitable issues) where the facts demonstrate a substantial likelihood that the government will not achieve a higher penalty at trial.

Since the settlement penalty is meant to represent a reasonable compromise of EPA's claim for the statutory maximum, before making a settlement offer EPA must determine the statutory maximum penalty and estimate how large a penalty the government might obtain if the case were to proceed to trial. Given the limited number of judicial opinions on the issue of penalties in UIC cases, Agency legal staff must use their best professional judgment in assessing what penalty a court might assess in the case at hand. Any adjustments for litigation considerations must be taken on a factual basis specific to the case.

While there is no universal list of litigation considerations, there is a list of factors that should be considered in evaluating whether the preliminary settlement penalty exceeds the penalty the Agency would likely obtain at trial. Potential litigation considerations could include:

1. Known problems with the government's evidence proving liability or supporting a civil penalty;

2. The credibility, reliability, and availability of witnesses;[5]

3. The informed, expressed opinion of the judge assigned to the case (or person appointed by the judge to mediate the dispute), after evaluating the merits of the case.[6]

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[5] The credibility and reliability of witnesses relates to their demeanor, reputation, truthfulness, and impeachability. For instance, if a government witness has made statements significantly contradictory to the position he is to support at trial, his credibility may be impeached by the respondent or defendant. The availability of a witness will affect the settlement bottom-line if the witness cannot be produced at trial; it does not relate to the inconvenience or expense of producing the witness at trial.

[6] This factor, except as provided below with respect to the record of the judge or other trier of fact, may not be applied in anticipation, or at the stage of initial referral, and should not be distorted by taking at face value what a judge attempting to encourage a settlement might say. This factor does not apply to cases referred under the pre-referral negotiation guidance, since such PRN settlements occur before the assignment of a judge.

4. The record of the judge assigned to the case in any very similar case or other environmental enforcement penalty case. (In contrast, the reputation of the judge, or the judge's general demeanor, without a specific penalty or legal statement on a similar case, is rarely sufficient as a litigation consideration.)

5. Assurances by Federal, State or local regulators that the respondent or defendant credibly may argue led it to believe it was complying with the federal law under which EPA is seeking penalties.

6. The payment by the defendant of civil penalties for the same violations in a case brought by another plaintiff.[7]

7. The development of new, relevant case law.[8]

8. A blend of troublesome facts and weak legal positions such that the Agency faces a significant risk of obtaining a negative precedent at trial of national significance.

In evaluating the list of possible litigation considerations set forth in 1. - 8. above, the Region should evaluate each consideration for the impact it is likely to have on the Agency's ability to obtain a trial penalty in excess of the preliminary settlement amount. Before a complaint is filed, the application of litigation considerations is often premature, since the Agency generally does not have enough information to fully evaluate litigation risk. Reductions for litigation considerations are more likely to be appropriate after the Agency obtains an informed view, through discovery and settlement activities, of the weaknesses in its case and how the specific court views penalties in the case.

The Agency recognizes that this quantitative evaluation of litigation considerations often reflects subjective legal opinions. Thus, a Regional office may reduce the preliminary penalty amount by up to one-third the gravity amount for litigation considerations without Headquarters approval. Of course, this reduction must be clearly explained in the settlement case file.

In evaluating possible litigation considerations, Agency staff should recognize that litigation considerations do not include:

a. The Region's desire to minimize the resource investment in the case.

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[7] If the defendant has previously paid civil penalties for the same violations to another plaintiff, this factor may be used to reduce the amount of the settlement penalty by no more than the amount previously paid for the same violations. Because a violator is generally liable to more than one plaintiff, the prior payment of a civil penalty should not generally result in a dollar-for-dollar reduction of the Agency penalty settlement amount. If the previous case included other violations, only a portion of the penalty already paid should be considered in reducing the penalty in the case at hand.

[8] Between the time the Region initiates or refers a case, new case law relating to liability or penalty assessment may affect the strength of the Agency's legal arguments. In that circumstance, the Region may apply litigation considerations to adjust its initial penalty settlement figure. Of course, new positive case law can be used to bolster the preliminary settlement amount.

b. A generalized goal (in opposition to established Agency policies) to avoid litigation or to avoid potential precedential areas of the law.[9]

c. A duplicative statement of elements included or assumed elsewhere in the Penalty Policy, such as inability to pay, "good faith" or a "lack of willfulness" by a respondent or defendant.

d. Off-the-record statements by the court, before it has had a chance to evaluate the specific merits of the case, that large penalties are not appropriate, are generally, by themselves, not a reason to reduce the preliminary settlement penalty amount.

The case team should select a value for litigation considerations between zero and 100 percent, where 100 percent represents the belief that EPA has a strong case and the Presiding Officer or judge is unlikely to reduce the award based on the factors outlined in this section. A zero percent rating would indicate that the case team believes a Presiding Officer or judge would grant no award. Justification for choosing any value other than 100 percent must be documented and included in the case file. The value should then be included in the Settlement Policy Calculation Worksheet (Appendix B) under Step 4, letter (J).

Supplemental Environmental Projects

Supplemental Environmental Projects (SEPs) are pollution prevention, recycling, or other projects which are not required to bring a violator into compliance but which will result in significant environmental benefit if undertaken. If carried out correctly, these projects can lead to reduction of minimum settlement amounts. EPA's Office of Enforcement has issued a national policy on the use of supplemental environmental projects in EPA settlements, "Policy on the Use of Supplemental Environmental Projects in EPA Settlements," February 12, 1991.

Case teams considering the use of SEPs to mitigate settlement amounts should follow the 1991 Policy and any subsequent revisions. The SEP Policy describes the circumstances under which SEPs can be considered in settlement calculations and how they should be treated when calculating settlement amounts. Note that any administrative order or civil judicial action that has the settlement amount reduced by inclusion of an SEP which involves substitute performance or has a "horizontal" nexus, as that term is defined in EPA policy, must be approved by the Office of Enforcement. Supplemental environmental projects can be used to reduce the cash payment but not to a value below the Economic Benefit component. Also, the reduction can not reduce the total value of the violator's settlement (cash

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[9] There are times when the Agency and the Department should fully litigate a civil or criminal case as it may create a beneficial precedent for the Federal government. An example is U.S. v. Midway Heights County Water District (695 F. Supp. 1072, 1076, E.D. Cal. 1988), in which the court found that 1) the definition of human consumption extends beyond just ingestion and is broader than merely whether the service population drinks the water, and 2) the presence of organisms that were accepted indicators of the potential for the spread of serious disease presented an imminent (and substantial) endangerment, regardless of whether actual illnesses had been reported.

payment plus the after-tax net present value of the SEP as calculated by BEN) to a value below the Final Settlement Amount calculated using this policy.

Appendix A

Level I, Level II, and Level III Violations

Level I Violations[1]: Potential for Significant Environmental Contamination

Violation	SDWA or Regulatory Citation
Failure to demonstrate mechanical integrity resulting in potential or actual contamination of a USDW	144.52(a)(8), 146.8, 144.51(p), 144.28(g), and 144.12(a)
Unauthorized injection	144.11, 144.13, 144.14(b), 144.21(a), 144.23(a), and 144.27
Failure to operate properly (e.g., overpressure)	144.28(f), 144.51(e), 144.52(a), and Part 146
Failure to prevent movement into a USDW of fluids that may cause a violation of an MCL	144.12(a) and 1431
Failure to comply with a compliance schedule in a permit	144.53 and 144.51(l)(5)
Failure to comply with an Administrative Order	1423(c)
Falsifying information[2]	144.51(o), 1445(c), and 1431
Failure to construct well properly (casing and cementing)	144.28(e), Part 146, and relevant parts of 147
Failure to plug and abandon in accordance with an approved plan	144.23(b), 144.28(c), 144.51(o), 144.52(a)(6), and 146.10
Unauthorized plugging of a well in an unauthorized manner	144.28(c), 146.10 and 144.51(o)

[1]This list of violations is intended only as guidance. Unique circumstances of individual cases may lead case teams to classify violations not listed here as Level I violations or to classify a violation listed here at a different level.

[2]A unique violation that, although not directly linked to environmental harm, is considered a serious, Level I violation. Case teams should consider criminal prosecution for this violation.

Level II Violations[3]: Critical Program Elements

Violation	SDWA or Regulatory Citation
Failure to show evidence of or to maintain financial responsibility	144.28(d), 144.52(a)(7) and 144.60-144.70
Failure to monitor	144.28(g), Part 146 and 144.51(a) and (j)
Substantial failure to comply with operating requirements	144.28(f), 144.51(a) and (e), and Part 146
Failure to conduct an MIT upon lawful request of the Agency or within legal deadlines and thereby demonstrate Mechanical Integrity	144.28(g)
Failure to submit a plugging and abandonment plan	144.23(b)(2) and 144.28(c)
Failure to allow inspection and entry	144.51(i)
Failure to apply for a permit	144.25, and 144.31
Failure to submit an annual report	144.28(h)
Failure to transfer a permit properly	144.38
Failure to submit 24-Hour report and/or written follow-up	144.28(b) and 144.51(l)(6)
Failure to submit information	144.27

[3]This list of violations is intended only as guidance. Unique circumstances of individual cases may lead case teams to classify violations not listed here as Level II violations or to classify a violation listed here at a different level.

Level III Violations[4]: Other Violations

Violation	SDWA or Regulatory Citation
Failure to retain records	144.28(i) and 144.51(j)(2)
Failure to make required notification	144.23(b)(3), 144.28(j)(1)&(2), 144.28(l), 144.28(g) 144.51(l)&(n), and 144.14(c)(1)
Failure to submit a report, to submit a complete report, to submit a timely report, to submit an accurate report	144.28(h) and 144.28(k)
Failure to submit inventory information in a timely fashion	144.26(d)
Failure to submit information	144.14(c), 144.26, and 146.52

[4]This list of violations is intended only as guidance. Unique circumstances of individual cases may lead case teams to classify violations not listed here as Level III violations or to classify a violation listed here at a different level.

Appendix B

UIC Program Judicial and Administrative Order Settlement
Penalty Policy Calculation Worksheets

UIC Program Judicial and Administrative Order Settlement Penalty Policy
Individual Violation Settlement Calculation Worksheet

Preliminary Information

Name of Person Filling out Form: _____

Date: _____

Operator/Facility Name: _____

Class of Well: _____

Violation: _____

Step 1: Calculate Statutory Maximum (Judicial and Administrative)

(a) Length of violation (in days): _____

(b) Maximum administrative penalty per day: $5,000 (Class II wells) or $10,000 (Class I, III-V)

(c) Number of wells in violation: _____

Judicial Statutory Maximum: (a) * (25,000) * (c) =

_____ * 25,000 * _____ = $_____

Administrative Statutory Maximum: (a) * (b) * (c) =

_____ * _____ * _____ = $_____

Step 2: Calculate Economic Benefit Component

Determine present value of avoided and delayed costs, using BEN model (attach all BEN printouts).

_____

Step 3: Calculate Gravity Component

Refer to Chart 1, Unadjusted Gravity Component Calculation Formula (p. 10 in Policy) to determine appropriate value for each of the four factors (A) through (D).

(A) Seriousness of violation ($100-25,000): $_____

(B) Economic impact on the violator (0.3, 0.7, or 1.0): _____

(C) Duration of violation (0-125+): _____

(D) Number of wells in violation (1-125+): _____

(E) Unadjusted Gravity Component: (A) * (B) * [(C) + (D)] =

_____ * _____ * (_____ + _____) = _____

(F) Gravity Component Adjustment Factor (-30 to +150%): _____%

Gravity Component: (E) + {[(F)/100]*(E)} =

_____ + [(_____/100) * _____] = _____

Step 4: Apply Adjustment Factors to Sum of All Economic Benefit and Gravity Components

(G) Calculate Preliminary Settlement Amount:
Economic Benefit Components + Gravity Components: _____

(H) Maximum Ability to Pay: _____

(I) Adjustment for Ability to Pay: If (H)<(G), then (G)-(H), else zero = _____

(J) Litigation Considerations (0 to 100%): _____%
(0 = very weak case, 100 = good case)

Final Settlement Amount: [(G) - (I)] * [(J)/100]: (_____ - _____) * (_____/100)=

_____

Adjustment Factor for the Gravity Component Calculation Worksheet

Violator or Case Name: _____

Case Team Member Name/Date: _____

Factor	Comment	Adjustment
History of Violation (+ only)		
• Number of previous violations	_____	(+)_____
• Similarity of previous violations	_____	(+)_____
• Response to previous violations and enforcement actions	_____	(+)_____
Degree of Cooperation/Noncooperation		
• Rapidity of violation correction and/or damage mitigation prior to enforcement action	_____	(+/-)_____
• Effort put forth by violator to correct violation in response to enforcement action	_____	(+)_____
• Use of delaying tactics	_____	(+)_____
Willfulness/Negligence		
• Control over violation	_____	(+/-)_____
• Foreseeability of events leading to violation	_____	(+/-)_____
• Precautions taken to avoid violation	_____	(+/-)_____
	TOTAL:	_____ (-30 to +150%)

UIC Settlement Penalty Policy Calculations

Duration:

Start date of violation: _____

End date of violation: _____

Duration of violation: _____

Economic Impact:

Gross sales value: _____

Source of information: _____

_____

Economic impact on the violator (0.3, 0.7, 1.0): _____

Other Calculations:

Appendix C

Summary Worksheet

Summary Worksheet for Multiple UIC Violations

Administrative statutory maximum: _____
($5,000 or $10,000 per day or $125,000 total)

Civil statutory maximum: _____
($25,000 per day)

Total economic benefit component: _____

Total adjusted gravity component: _____

Total final settlement amount: _____

SUMMARY OF COMPONENTS BY INDIVIDUAL VIOLATION			
Violation	**Economic Benefit**	**Adjusted Gravity**	**Final Settlement**
Totals:			

Appendix D

Glossary of Terms

Glossary of Terms

Adjusted Gravity Component The end product of applying the Adjustment Factors to the **Unadjusted Gravity Component.**

Adjustment Factors (Preliminary Settlement) These factors are Ability to **Pay** and Litigation Considerations. The case team has the ability to adjust the **Preliminary Settlement Amount** up or down based on details of the specific violation in the two Adjustment Factor categories.

Annual Expenses Pollution control costs, typically operation and maintenance costs, that the violator completely avoided by delaying compliance or by ignoring the regulatory requirement. Annual expenses are one input used in the EPA's BEN computer model and are a portion of the **Economic Benefit Component.**

Current Dollars The benefit, in current dollars (i.e., dollars at the time the penalty is paid), of violations that have taken place in the past. **Annual Expenses, Delayed One-Time Nondepreciable Costs,** and **Initial Capital Investments** must be escalated to Current Dollars. This calculation is performed by the BEN computer model.

Delayed One-Time Nondepreciable Costs These are nondepreciable expenses that have been delayed by the violator's failure to comply promptly with regulatory requirements. Many of the delayed costs associated with UIC violations will fall into this category which includes land purchase and well repairs. Most of these costs are tax-deductible, although land is not.

Economic Benefit Component The sum of the present, tax-adjusted values of **Initial Capital Investments, Delayed One-Time Nondepreciable Costs,** and **Annual Expenses.** It is calculated using EPA's BEN computer model.

Final Settlement Amount The **Preliminary Settlement Amount** after adjustment according to the **Adjustment Factors (Preliminary Settlement).**

Gravity Component Adjustment Factor The elements incorporated in this factor include the degree of willfulness, good faith efforts to comply, history of violation, and other elements not incorporated into the **Unadjusted Gravity Component.** The case team has the ability to adjust the **Unadjusted Gravity Component** up or down within a fixed range based on details of the specific violation.

Independently Assessable Violations These are dissimilar violations. A separate **Adjusted Gravity Component** and **Economic Benefit Component** must be calculated for each of these violations.

Complainant's Exhibit 4

POLICY ON CIVIL PENALTIES

EPA GENERAL ENFORCEMENT POLICY #GM - 21

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

EFFECTIVE DATE: FEB 16 1984

Introduction

This document, Policy on Civil Penalties, establishes a single set of goals for penalty assessment in EPA administrative and judicial enforcement actions. These goals - deterrence, fair and equitable treatment of the regulated community, and swift resolution of environmental problems - are presented here in general terms. An outline of the general process for the assessment of penalties is contained in Attachment A.

A companion document, A Framework for Statute-Specific Approaches to Penalty Assessments, will also be issued today. This document provides guidance to the user of the policy on how to write penalty assessment guidance specific to the user's particular program. The first part of the Framework provides general guidance on developing program-specific guidance; the second part contains a detailed appendix which explains the basis for that guidance. Thus, the user need only refer to the appendix when he wants an explanation of the guidance in the first part of the Framework.

In order to achieve the above Agency policy goals, all administratively imposed penalties and settlements of civil penalty actions should, where possible, be consistent with the guidance contained in the Framework document. Deviations from the Framework's methodology, where merited, are authorized as long as the reasons for the deviations are documented. Documentation for deviations from the Framework in program-specific guidance should be located in that guidance. Documentation for deviations from the program-specific guidance in calculating individual penalties should be contained in both the case files and in any memoranda that accompany the settlements.

The Agency will make every effort to urge administrative law judges to impose penalties consistent with this policy and any medium-specific implementing guidance. For cases that go to court, the Agency will request the statutory maximum penalty in the filed complaint. And, as proceedings warrant, EPA will continue to pursue a penalty no less than that supported by the applicable program policy. Of course, all penalties must be consistent with applicable statutory provisions, based upon the number and duration of the violations at issue.

Applicability

This policy statement does not attempt to address the specific mechanisms for achieving the goals set out for penalty assessment. Nor does it prescribe a negotiation strategy to achieve the penalty target figures. Similarly, it does not address differences between statutes or between priorities of different programs. Accordingly, it cannot be used, by itself, as a basis for determining an appropriate penalty in a specific

action. Each EPA program office, in a joint effort with the Office of Enforcement and Compliance Monitoring, will revise existing policies, or write new policies as needed. These policies will guide the assessment of penalties under each statute in a manner consistent with this document and, to the extent reasonable, the accompanying Framework.

Until new program-specific policies are issued, the current penalty policies will remain in effect. Once new program-specific policies are issued, the Agency should calculate penalties as follows:

- For cases that are substantially settled, apply the old policy.
- For cases that will require further substantial negotiation, apply the new policy if that will not be too disruptive.

Because of the unique issues associated with civil penalties in certain types of cases, this policy does not apply to the following areas:

- CERCLA §107. This is an area in which Congress has directed a particular kind of response explicitly oriented toward recovering the cost of Government cleanup activity and natural resource damage.
- Clean Water Act §311(f) and (g). This also is cost recovery in nature. As in CERCLA §107 actions, the penalty assessment approach is inappropriate.
- Clean Air Act §120. Congress has set out in considerable detail the level of recovery under this section. It has been implemented with regulations which, as required by law, prescribe a non-exclusive remedy which focuses on recovery of the economic benefit of noncompliance. It should be noted, however, that this general penalty policy builds upon, and is consistent with the approach Congress took in that section.

Much of the rationale supporting this policy generally applies to non-profit institutions, including government entities. In applying this policy to such entities, EPA must exercise judgment case-by-case in deciding, for example, how to apply the economic benefit and ability to pay sanctions, if at all. Further guidance on the issue of seeking penalties against non-profit entities will be forthcoming.

Deterrence

The first goal of penalty assessment is to deter people from violating the law. Specifically, the penalty should persuade the violator to take precautions against falling into noncompliance again (specific deterrence) and dissuade others from violating the law (general deterrence). Successful deterrence is important because it provides the best protection for the environment. In addition, it reduces the resources necessary to administer the laws by addressing noncompliance before it occurs.

If a penalty is to achieve deterrence, both the violator and the general public must be convinced that the penalty places the violator in a worse position than those who have complied in a timely fashion. Neither the violator nor the general public is likely to believe this if the violator is able to retain an overall advantage from noncompliance. Moreover, allowing a violator to benefit from noncompliance punishes those who have complied by placing them at a competitive disadvantage. This creates a disincentive for compliance. For these reasons, it is Agency policy that penalties generally should, at a minimum, remove any significant economic benefits resulting from failure to comply with the law. This amount will be referred to as the "benefit component" of the penalty.

Where the penalty fails to remove the significant economic benefit, as defined by the program-specific guidance, the case development team must explain in the case file why it fails to do so. The case development team must then include this explanation in the memorandum accompanying each settlement for the signature of the Assistant Administrator of Enforcement and Compliance Monitoring, or the appropriate Regional official.

The removal of the economic benefit of noncompliance only places the violator in the same position as he would have been if compliance had been achieved on time. Both deterrence and fundamental fairness require that the penalty include an additional amount to ensure that the violator is economically worse off than if it had obeyed the law. This additional amount should reflect the seriousness of the violation. In doing so, the penalty will be perceived as fair. In addition the penalty's size will tend to deter other potential violators.

In some classes of cases, the normal gravity calculation may be insufficient to effect general deterrence. This could happen if, for example, there was extensive noncompliance with certain regulatory programs in specific areas of the United States. This would demonstrate that the normal penalty assessments had not been achieving general deterrence. In such cases, the case development team should consider increasing the gravity component sufficient to

achieve general deterrence. These extra assessments should balance the other goals of this policy, particularly equitable treatment of the regulated community.

This approach is consistent with the civil penalty provisions in the environmental laws. Almost all of them require consideration of the seriousness of the violation. This additional amount which reflects the seriousness of the violation is referred to as the "gravity component". The combination of the benefit and gravity components yields the "preliminary deterrence figure."

As explained later in this policy, the case development team will adjust this figure as appropriate. Nevertheless, EPA typically should seek to recover, at a minimum, a penalty which includes the benefit component plus some non-trivial gravity component. This is important because otherwise, regulated parties would have a general economic incentive to delay compliance until the Agency commenced an enforcement action. Once the Agency brought the action, the violator could then settle for a penalty less than their economic benefit of noncompliance. This incentive would directly undermine the goal of deterrence.

Fair and Equitable Treatment of the Regulated Community

The second goal of penalty assessment is the fair and equitable treatment of the regulated community. Fair and equitable treatment requires that the Agency's penalties must display both consistency and flexibility. The consistent application of a penalty policy is important because otherwise the resulting penalties might be seen as being arbitrarily assessed. Thus violators would be more inclined to litigate over those penalties. This would consume Agency resources and make swift resolution of environmental problems less likely.

But any system for calculating penalties must have enough flexibility to make adjustments to reflect legitimate differences between similar violations. Otherwise the policy might be viewed as unfair. Again, the result would be to undermine the goals of the Agency to achieve swift and equitable resolutions of environmental problems.

Methods for quantifying the benefit and gravity components are explained in the Framework guidance. These methods significantly further the goal of equitable treatment of violators. To begin with, the benefit component promotes equity by removing the unfair economic advantage which a violator may have gained over complying parties. Furthermore, because the benefit and gravity components are generated systematically, they

will exhibit relative consistency from case to case. Because the methodologies account for a wide range of relevant factors, the penalties generated will be responsive to legitimate differences between cases.

However, not all the possibly relevant differences between cases are accounted for in generating the preliminary deterrence amount. Accordingly, all preliminary deterrence amounts should be increased or mitigated for the following factors to account for differences between cases:

- Degree of willfulness and/or negligence
- History of noncompliance.
- Ability to pay.
- Degree of cooperation/noncooperation.
- Other unique factors specific to the violator or the case.

Mitigation based on these factors is appropriate to the extent the violator clearly demonstrates that it is entitled to mitigation.

The preliminary deterrence amount adjusted prior to the start of settlement negotiations yields the "initial penalty target figure". In administrative actions, this figure generally is the penalty assessed in the complaint. In judicial actions, EPA will use this figure as the first settlement goal. This settlement goal is an internal target and should not be revealed to the violator unless the case development team feels that it is appropriate. The initial penalty target may be further adjusted as negotiations proceed and additional information becomes available or as the original information is reassessed.

Swift Resolution of Environmental Problems

The third goal of penalty assessment is swift resolution of environmental problems. The Agency's primary mission is to protect the environment. As long as an environmental violation continues, precious natural resources, and possibly public health, are at risk. For this reason, swift correction of identified environmental problems must be an important goal of any enforcement action. In addition, swift compliance conserves Agency personnel and resources.

The Agency will pursue two basic approaches to promoting quick settlements which include swift resolution of environmental problems without undermining deterrence. Those two approaches are as follows:

1. Provide incentives to settle and institute prompt remedial action.

EPA policy will be to provide specific incentives to settle, including the following:

- The Agency will consider reducing the gravity component of the penalty for settlements in which the violator already has instituted expeditious remedies to the identified violations prior to the commencement of litigation.[1]/ This would be considered in the adjustment factor called degree of cooperation/noncooperation discussed above.

- The Agency will consider accepting additional environmental cleanup, and mitigating the penalty figures accordingly. But normally, the Agency will only accept this arrangement if agreed to in pre-litigation settlement.

Other incentives can be used, as long as they do not result in allowing the violator to retain a significant economic benefit.

2. Provide disincentives to delaying compliance.

The preliminary deterrence amount is based in part upon the expected duration of the violation. If that projected period of time is extended during the course of settlement negotiations due to the defendant's actions, the case development team should adjust that figure upward. The case development team should consider making this fact known to the violator early in the negotiation process. This will provide a strong disincentive to delay compliance.

1/ For the purposes of this document, litigation is deemed to begin:

- for administrative actions - when the respondent files a response to an administrative complaint or when the time to file expires or

- for judicial actions - when an Assistant United States Attorney files a complaint in court.

Intent of Policy and Information Requests for Penalty Calculations

The policies and procedures set out in this document and in the Framework for Statute-Specific Approaches to Penalty Assessment are intended solely for the guidance of government personnel. They are not intended and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the United States. The Agency reserves the right to act at variance with these policies and procedures and to change them at any time without public notice. In addition, any penalty calculations under this policy made in anticipation of litigation are exempt from disclosure under the Freedom of Information Act. Nevertheless as a matter of public interest, the Agency may elect to release this information in some cases.

Courtney M. Price
Assistant Administrator for
Enforcement and Compliance Monitoring

Attachment

ATTACHMENT A

Outline of Civil Penalty Assessment

I. Calculate Preliminary Deterrence Amount

A. Economic benefit component and

B. Gravity component

(This yields the preliminary deterrence amount.)

II. Apply Adjustment Factors

A. Degree of cooperation/noncooperation (indicated through pre-settlement action.)

B. Degree of willfulness and/or negligence.

C. History of noncompliance.

D. Ability to pay (optional at this stage.)

E. Other unique factors (including strength of case, competing public policy concerns.)

(This yields the initial penalty target figure.)

III. Adjustments to Initial Penalty Target Figure After Negotiations Have Begun

A. Ability to pay (to the extent not considered in calculating initial penalty target.)

B. Reassess adjustments used in calculating initial penalty target. (Agency may want to reexamine evidence used as a basis for the penalty in the light of new information.)

C. Reassess preliminary deterrence amount to reflect continued periods of noncompliance not reflected in the original calculation.

D. Alternative payments agreed upon prior to the commencement of litigation.

(This yields the adjusted penalty target figure.)

Complainant's Exhibit 5

A FRAMEWORK FOR STATUTE-SPECIFIC APPROACHES TO PENALTY ASSESSMENTS: IMPLEMENTING EPA'S POLICY ON CIVIL PENALTIES

EPA GENERAL ENFORCEMENT POLICY #GM - 22

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

EFFECTIVE DATE: FEB 16 1984

Contents Page

Appendix (Con't)

Introduction

This document, A Framework for Statute-Specific Approaches to Penalty Assessment, provides guidance to the user of the Policy on Civil Penalties on how to develop a medium-specific penalty policy. Such policies will apply to administratively imposed penalties and settlements of both administrative and judicial penalty actions.

In the Policy on Civil Penalties, the Environmental Protection Agency establishes a single set of goals for penalty assessment. Those goals - deterrence, fair and equitable treatment of the regulated community, and swift resolution of environmental problems - will be substantially impaired unless they are pursued in a consistent fashion. Even different terminology could cause confusion that would detract from the achievement of these goals. At the same time, too much rigidity will stifle negotiation and make settlement impossible.

The purpose of this document is to promote the goals of the Policy on Civil Penalties by providing a framework for medium-specific penalty policies. The Framework is detailed enough to allow individual programs to develop policies that will consistently further the Agency's goals and be easy to administer. In addition, it is general enough to allow each program to tailor the policy to the relevant statutory provisions and the particular priorities of each program.

While this document contains detailed guidance, it is not cast in absolute terms. Nevertheless, the policy does not encourage deviation from this guidance in either the development of medium-specific policies or in developing actual penalty figures. Where there are deviations in developing medium-specific policies, the reasons for those changes must be recorded in the actual policy. Where there are deviations from medium-specific policies in calculating a penalty figure, the case development team must detail the reasons for those changes in the case file. In addition, the rationale behind the deviations must be incorporated in the memorandum accompanying the settlement package to Headquarters or the appropriate Regional official.

This document is divided into two sections. The first one gives brief instructions to the user on how to write a medium-specific policy. The second section is an appendix that gives detailed guidance on implementing each section of the instructions and explains how the instructions are intended to further the goals of the policy.

Writing a Program Specific Policy

Summarized below are those elements that should be present in a program-specific penalty policy. For a detailed discussion of each of these ideas, the corresponding portions of the appendix should be consulted.

I. Developing a Penalty Figure

The development of a penalty figure is a two step process. First the case development team must calculate a preliminary deterrence figure. This figure is composed of the economic benefit component (where applicable) and the gravity component. The second step is to adjust the preliminary deterrence figure through a number of factors. The resulting penalty figure is the initial penalty target figure. In judicial actions, the initial penalty target figure is the penalty amount which the government normally sets as a goal at the outset of settlement negotiations. It is essentially an internal settlement goal and should not be revealed to the violator unless the case development team feels it is appropriate. In administrative actions, this figure generally is the penalty assessed in the complaint. While in judicial actions, the government's complaint will request the maximum penalty authorized by law.

This initial penalty target figure may be further adjusted in the course of negotiations. Each policy should ensure that the penalty assessed or requested is within any applicable statutory constraints, based upon the number and duration of violations at issue.

II. Calculating a Preliminary Deterrence Amount

Each program-specific policy must contain a section on calculating the preliminary deterrence figure. That section should contain materials on each of the following areas:

- Benefit Component. This section should explain:

  a. the relevent measure of economic benefit for various types of violations,
  b. the information needed,
  c. where to get assistance in computing this figure and
  d. how to use available computer systems to compare a case with similar previous violations.

- Gravity Component. This section should first rank different types of violations according to the seriousness of the act. In creating that ranking, the following factors should be considered:

  a. actual or possible harm,
  b. importance to the regulatory scheme and
  c. availability of data from other sources.

In evaluating actual or possible harm, your scheme should consider the following facts:

- amount of pollutant,
- toxicity of pollutant,
- sensitivity of the environment,
- length of time of a violation and
- size of the violator.

The policy then should assign appropriate dollar amounts or ranges of amounts to the different ranked violations to constitute the "gravity component". This amount, added to the amount reflecting economic benefit, constitutes the preliminary deterrence figure.

III. Adjusting the Preliminary Deterrence Amount to Derive the Initial Penalty Target Figure (Prenegotiation Adjustment)

Each program-specific penalty policy should give detailed guidance on applying the appropriate adjustments to the preliminary deterrence figure. This is to ensure that penalties also further Agency goals besides deterrence (i.e. equity and swift correction of environmental problems). Those guidelines should be consistent with the approach described in the appendix. The factors may be separated according to whether they can be considered before or after negotiation has begun or both.

Adjustments (increases or decreases, as appropriate) that can be made to the preliminary deterrence penalty to develop an initial penaly target to use at the outset of negotiation include:

- Degree of willfulness and/or negligence
- Cooperation/noncooperation through pre-settlement action.
- History of noncompliance.

- Ability to pay.
- Other unique factors (including strength of case, competing public policy considerations).

The policy may permit consideration of the violator's ability to pay as an adjustment factor before negotiations begin. It may also postpone consideration of that factor until after negotiations have begun. This would allow the violator to produce evidence substantiating its inability to pay.

The policy should prescribe appropriate amounts, or ranges of amounts, by which the preliminary deterrence penalty should be adjusted. Adjustments will depend on the extent to which certain factors are pertinent. In order to preserve the penalty's deterrent effect, the policy should also ensure that, except for the specific exceptions described in this document, the adjusted penalty will: 1) always remove any significant economic benefit of noncompliance and 2) contain some non-trivial amount as a gravity component.

IV. Adjusting the Initial Penalty Target During Negotiations

Each program-specific policy should call for periodic reassessment of these adjustments during the course of negotiations. This would occur as additional relevant information becomes available and the old evidence is re-evaluated in the light of new evidence. Once negotiations have begun, the policy also should permit adjustment of the penalty target to reflect "alternative payments" the violator agrees to make in settlement of the case. Adjustments for alternative payments and pre-settlement corrective action are generally permissible only before litigation has begun.

Again, the policy should be structured to ensure that any settlement made after negotiations have begun reflects the economic benefit of noncompliance up to the date of compliance plus some non-trivial gravity component. This means that if lengthy settlement negotiations cause the violation to continue longer than initially anticipated, the penalty target figure should be increased. The increase would be based upon the extent that the violations continue to produce ongoing environmental risk and increasing economic benefit.

Use of the Policy In Litigation

Each program-specific policy should contain a section on the use of the policy in litigation. Requests for penalties

should account for all the factors identified in the relevant statute and still allow for compromises in settlement without exceeding the parameters outlined in this document. (For each program, all the statutory factors are contained in the Framework either explicitly or as part of broader factors.) For administrative proceedings, the policy should explain how to formulate a penalty figure, consistent with the policy. The case development team will put this figure in the administrative complaint.

In judicial actions, the EPA will use the initial penalty target figure as its first settlement goal. This settlement goal is an internal target and should not be revealed to the violator unless the case development team feels it is appropriate. In judicial litigation, the government should request the maximum penalty authorized by law in its complaint. The policy should also explain how it and any applicable precedents should be used in responding to any explicit requests from a court for a minimum assesment which the Agency would deem appropriate.

Use of the Policy as a Feedback Device

Each program-specific policy should first explain in detail what information needs to be put into the case file and into the relevant computer tracking system. Furthermore, each policy should cover how to use that system to examine penalty assessments in other cases. This would thereby assist the Agency in making judgments about the size of adjustments to the penalty for the case at hand. Each policy should also explain how to present penalty calculations in litigation reports.

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Attachment

APPENDIX

Introduction

This appendix contains three sections. The first two sections set out guidelines for achieving the goals of the Policy on Civil Penalties. The first section focuses on achieving deterrence by assuring that the penalty first removes any economic benefit from noncompliance. Then it adds an amount to the penalty which reflects the seriousness of the violation. The second section provides adjustment factors so that both a fair and equitable penalty will result and that there will be a swift resolution of the environmental problem. The third section of the framework presents some practical advice on the use of the penalty figures generated by the policy.

The Preliminary Deterrence Amount

The Policy on Civil Penalties establishes deterrence as an important goal of penalty assessment. More specifically, it specifies that any penalty should, at a minimum, remove any significant benefits resulting from noncompliance. In addition, it should include an amount beyond removal of economic benefit to reflect the seriousness of the violation. That portion of the penalty which removes the economic benefit of noncompliance is referred to as the "benefit component;" that part of the penalty which reflects the seriousness of the violation is referred to as the "gravity component." When combined, these two components yield the "preliminary deterrence amount."

This section of the document provides guidelines for calculating the benefit component and the gravity component. It will also present and discuss a simplified version of the economic benefit calculation for use in developing quick penalty determinations. This section will also discuss the limited circumstances which justify settling for less than the benefit component. The uses of the preliminary deterrence amount will be explained in subsequent portions of this document.

I. The Benefit Component

In order to ensure that penalties remove any significant economic benefit of noncompliance, it is necessary to have reliable methods to calculate that benefit. The existence of reliable methods also strengthens the Agency's position in both litigation and negotiation. This section sets out guidelines for computing the benefit component. It first addresses costs which are delayed by noncompliance. Then it addresses costs which are avoided completely by noncompliance. It also identifies issues

to be considered when computing the benefit component for those violations where the benefit of noncompliance results from factors other than cost savings. This section concludes with a discussion of the proper use of the benefit component in developing penalty figures and in settlement negotiations.

A. Benefit from delayed costs

In many instances, the economic advantage to be derived from noncompliance is the ability to delay making the expenditures necessary to achieve compliance. For example, a facility which fails to construct required settling ponds will eventually have to spend the money needed to build those ponds in order to achieve compliance. But, by deferring these one-time nonrecurring costs until EPA or a State takes an enforcement action, that facility has achieved an economic benefit. Among the types of violations which result in savings from deferred cost are the following:

- Failure to install equipment needed to meet discharge or emission control standards.
- Failure to effect process changes needed to eliminate pollutants from products or waste streams.
- Testing violations, where the testing still must be done to demonstrate achieved compliance.
- Improper disposal, where proper disposal is still required to achieve compliance.
- Improper storage where proper storage is still required to achieve compliance.
- Failure to obtain necessary permits for discharge, where such permits would probably be granted. (While the avoided cost for many programs would be negligible, there are programs where the the permit process can be expensive).

The Agency has a substantial amount of experience under the air and water programs in calculating the economic benefit that results from delaying costs necessary to achieve compliance. This experience indicates that it is possible to estimate the benefit of delayed compliance through the use of a simple formula. Specifically, the economic benefit of delayed compliance may be estimated at: 5% per year of the delayed one-time capital cost for the period from the date the violation began until the date

compliance was or is expected to be achieved. This will be referred to as the "rule of thumb for delayed compliance" method. Each program may adopt its own "rule of thumb" if appropriate. The applicable medium-specific guidance should state what that method is.

The rule of thumb method can usually be used in making decisions on whether to develop a case or in setting a penalty target for settlement negotiations. In using this rule of thumb method in settlement negotiations, the Agency may want to make the violator fully aware that it is using an estimate and not a more precise penalty determination procedure. The decision whether to reveal this information is up to the negotiators.

The "rule of thumb" method only provides a first-cut estimate of the benefit of delayed compliance. For this reason, its use is probably inappropriate in situations where a detailed analysis of the economic effect of noncompliance is needed to support or defend the Agency's position. Accordingly, this "rule of thumb" method generally should not be used in any of the following circumstances:

- A hearing is likely on the amount of the penalty.
- The defendant wishes to negotiate over the amount of the economic benefit on the basis of factors unique to the financial condition of the company.
- The case development team has reason to believe it will produce a substantially inaccurate estimate; for example, where the defendant is in a highly unusual financial position, or where noncompliance has or will continue for an unusually long period.

There usually are avoided costs associated with this type of situation. Therefore, the "rule of thumb for avoided costs" should also be applied. (See pages 9-10). For most cases, both figures are needed to yield the major portion of the economic benefit component.

When the rule of thumb method is not applicable, the economic benefit of delayed compliance should be computed using the Methodology for Computing the Economic Benefit of Noncompliance. This document, which is under development, provides a method for computing the economic benefit of noncompliance based on a detailed economic analysis. The method will largely be a refined version of the method used in the previous Civil Penalty Policy issued July 8, 1980, for the Clean Water Act and Title I of the Clean Air Act. It will also be consistent with the regulations

implementing Section 120 of the Clean Air Act. A computer program will be available to the Regions to perform the analysis, together with instructions for its use. Until the Methodology is issued, the economic model contained in the July 8, 1980, Civil Penalty Policy should be used. It should be noted that the Agency recently modified this guidance to reflect changes in the tax law.

B. Benefit from avoided costs

Many kinds of violations enable a violator to permanently avoid certain costs associated with compliance.

- Cost savings for operation and maintenance of equipment that the violator failed to install.
- Failure to properly operate and maintain existing control equipment.
- Failure to employ sufficient number of adequately trained staff.
- Failure to establish or follow precautionary methods required by regulations or permits.
- Improper storage, where commercial storage is reasonably available.
- Improper disposal, where redisposal or cleanup is not possible.
- Process, operational, or maintenance savings from removing pollution equipment.
- Failure to conduct necessary testing.

As with the benefit from delayed costs, the benefit component for avoided costs may be estimated by another "rule of thumb" method. Since these costs will never be incurred, the estimate is the expenses avoided until the date compliance is achieved less any tax savings. The use of this "rule of thumb" method is subject to the same limitations as those discussed in the preceding section.

Where the "rule of thumb for avoided costs" method cannot be used, the benefit from avoided costs must be computed using the Methodology for Computing the Economic Benefit of Noncompliance. Again, until the Metholology is issued, the method contained in the July 8, 1980, Civil Penalty Policy should be used as modified to reflect recent changes in the tax law.

C. Benefit from competitive advantage

For most violations, removing the savings which accrue from noncompliance will usually be sufficient to remove the competitive advantage the violator clearly has gained from noncompliance. But there are some situations in which noncompliance allows the violator to provide goods or services which are not available elsewhere or are more attractive to the consumer. Examples of such violations include:

- Selling banned products.
- Selling products for banned uses.
- Selling products without required labelling or warnings.
- Removing or altering pollution control equipment for a fee, (e.g., tampering with automobile emission controls.)
- Selling products without required regulatory clearance, (e.g., pesticide registration or premanufacture notice under TSCA.)

To adequately remove the economic incentive for such violations, it is helpful to estimate the net profits made from the improper transactions (i.e. those transactions which would not have occurred if the party had complied). The case development team is responsible for identifying violations in which this element of economic benefit clearly is present and significant. This calculation may be substantially different depending on the type of violation. Consequently the program-specific policies should contain guidance on identifying these types of violations and estimating these profits. In formulating that guidance, the following principles should be followed:

- The amount of the profit should be based on the best information available concerning the number of transactions resulting from noncompliance.
- Where available, information about the average profit per transaction may be used. In some cases, this may be available from the rulemaking record of the provision violated.
- The benefit derived should be adjusted to reflect the present value of net profits derived in the past.

It is recognized that the methods developed for estimating the profit from those transactions will sometimes rely substantially on expertise rather than verifiable data. Nevertheless, the programs should make all reasonable efforts to ensure that the estimates developed are defensible. The programs are encouraged to work with the Office of Policy, Planning and Evaluation to ensure that the methods developed are consistent with the forthcoming Methodology for Computing the Economic Benefit of Noncompliance and with methods developed by other programs. The programs should also ensure that sufficient contract funds are available to obtain expert advice in this area as needed to support penalty development, negotiation and trial of these kinds of cases.

D. Settling cases for an amount less than the economic benefit

As noted above, settling for an amount which does not remove the economic benefit of noncompliance can encourage people to wait until EPA or the State begins an enforcement action before complying. For this reason, it is general Agency policy not to settle for less than this amount. There are three general areas where settling for less than economic benefit may be appropriate. But in any individual case where the Agency decides to settle for less than enconomic benefit, the case development team must detail those reasons in the case file and in any memoranda accompanying the settlement.

1. Benefit component involves insignificant amount

It is clear that assessing the benefit component and negotiating over it will often represent a substantial commitment of resources. Such a commitment of resources may not be warranted in cases where the magnitude of the benefit component is not likely to be significant, (e.g. not likely to have a substantial impact on the violator's competitive positions). For this reason, the case development team has the discretion not to seek the benefit component where it appears that the amount of that component is likely to be less than $10,000. (A program may determine that other cut-off points are more reasonable based on the likelihood that retaining the benefit could encourage noncomplying behavior.) In exercising that discretion, the case development team should consider the following factors:

- Impact on violator: The likelihood that assessing the benefit component as part of the penalty will have a noticeable effect on the violator's competitive position or overall profits. If no such effect appears likely, the benefit component should probably not be pursued.

- The size of the gravity component: If the gravity component is relatively small, it may not provide a sufficient deterrent, by

itself, to achieve the goals of this policy.

- The certainty of the size of the benefit component: If the economic benefit is quite well defined, it is not likely to require as much effort to seek to include it in the penalty assessment. Such circumstances also increase the likelihood that the economic benefit was a substantial motivation for the noncompliance. This would make the inclusion of the benefit component more necessary to achieve specific deterrence.

It may be appropriate not to seek the benefit component in an entire class of violation. In that situation, the rationale behind that approach should be clearly stated in the appropriate medium-specific policy. For example, the most appropriate way to handle a small non-recurring operation and maintenance violation may be a small penalty. Obviously it makes little sense to assess in detail the economic benefit for each individual violation because the benefit is likely to be so small. The medium-specific policy would state this as the rationale.

2. Compelling public concerns

The Agency recognizes that there may be some instances where there are compelling public concerns that would not be served by taking a case to trial. In such instances, it may become necessary to consider settling a case for less than the benefit component. This may be done only if it is absolutely necessary to preserve the countervailing public interests. Such settlements might be appropriate where the following circumstances occur:

- There is a very substantial risk of creating precedent which will have a significant adverse effect upon the Agency's ability to enforce the law or clean up pollution if the case is taken to trial.

- Settlement will avoid or terminate an imminent risk to human health or the environment. This is an adequate justification only if injunctive relief is unavailable for some reason, and if settlement on remedial responsibilities could not be reached independent of any settlement of civil penalty liability.

- Removal of the economic benefit would result in plant closings, bankruptcy, or other extreme financial burden, and there is an important public interest in allowing the firm to continue in business.

Alternative payment plans should be fully explored before resorting to this option. Otherwise, the Agency will give the perception that shirking one's environmental responsibilities is a way to keep a failing enterprise afloat. This exemption does not apply to situations where the plant was likely to close anyway, or where there is a likelihood of continued harmful noncompliance.

3. Litigation practicalities

The Agency realizes that in certain cases, it is highly unlikely the EPA will be able to recover the economic benefit in litigation. This may be due to applicable precedent, competing public interest considerations, or the specific facts, equities, or evidentiary issues pertaining to a particular case. In such a situation it is unrealistic to expect EPA to obtain a penalty in litigation which would remove the economic benefit. The case development team then may pursue a lower penalty amount.

II. The Gravity Component

As noted above, the Policy on Civil Penalties specifies that a penalty, to achieve deterrence, should not only remove any economic benefit of noncompliance, but also include an amount reflecting the seriousness of the violation. This latter amount is referred to as the "gravity component." The purpose of this section of the document is to establish an approach to quantifying the gravity component. This approach can encompass the differences between programs and still provide the basis for a sound consistent treatment of this issue.

A. Quantifying the gravity of a violation.

Assigning a dollar figure to represent the gravity of a violation is an essentially subjective process. Nevertheless, the relative seriousness of different violations can be fairly accurately determined in most cases. This can be accomplished by reference to the goals of the specific regulatory scheme and the facts of each particular violation. Thus, linking the dollar amount of the gravity component to these objective factors is a useful way of insuring that violations of approximately equal seriousness are treated the same way.

Such a linkage promotes consistency. This consistency strengthens the Agency's position both in negotiation and before a trier of fact. This approach consequently also encourages swift resolution of environmental problems.

Each program must develop a system for quantifying the gravity of violations of the laws and regulations it administers.

This development must occur within the context of the penalty amounts authorized by law for that program. That system must be based, whenever possible, on objective indicators of the seriousness of the violation. Examples of such indicators are given below. The seriousness of the violation should be based primarily on: 1) the risk of harm inherent in the violation at the time it was committed and 2) the actual harm that resulted from the violation. In some cases, the seriousness of the risk of harm will exceed that of the actual harm. Thus, each system should provide enough flexibility to allow EPA to consider both factors in assessing penalties.

Each system must also be designed to minimize the possibility that two persons applying the system to the same set of facts would come up with substantially different numbers. Thus, to the extent the system depends on categorizing events, those categories must be clearly defined. That way there is little possibility for argument over the category in which a violation belongs. In addition, the categorization of the events relevant to the penalty decision should be noted in the penalty development portion of the case file.

B. Gravity Factors

In quantifying the gravity of a violation, a program-specific policy should rank different types of violations according to the seriousness of the act. The following is a suggested approach to ranking the seriousness of violations. In this approach to ranking, the following factors should be considered:

- Actual or possible harm: This factor focuses on whether (and to what extent) the activity of the defendant actually resulted or was likely to result in an unpermitted discharge or exposure.

- Importance to the regulatory scheme: This factor focuses on the importance of the requirement to achieving the goal of the statute or regulation. For example, if labelling is the only method used to prevent dangerous exposure to a chemical, then failure to label should result in a relatively high penalty. By contrast, a warning sign that was visibly posted but was smaller than the required size would not normally be considered as serious.

- Availability of data from other sources: The violation of any recordkeeping or reporting requirement is a very serious

matter. But if the involved requirement is the only source of information, the violation is far more serious. By contrast, if the Agency has another readily available and cheap source for the necessary information, a smaller penalty may be appropriate. (E.g. a customer of the violator purchased all the violator's illegally produced substance. Even though the violator does not have the required records, the customer does.)

- Size of violator: In some cases, the gravity component should be increased where it is clear that the resultant penalty will otherwise have little impact on the violator in light of the risk of harm posed by the violation. This factor is only relevant to the extent it is not taken into account by other factors.

The assessment of the first gravity factor listed above, risk or harm arising from a violation, is a complex matter. For purposes of ranking violations according to seriousness, it is possible to distinguish violations within a category on the basis of certain considerations, including the following:

- Amount of pollutant: Adjustments for the concentration of the pollutant may be appropriate, depending on the regulatory scheme and the characteristics of the pollutant. Such adjustments need not be linear, especially if the pollutant can be harmful at low concentrations.

- Toxicity of the pollutant: Violations involving highly toxic pollutants are more serious and should result in relatively larger penalties.

- Sensitivity of the environment: This factor focuses on the location where the violation was committed. For example, improper discharge into waters near a drinking water intake or a recreational beach is usually more serious than discharge into waters not near any such use.

- The length of time a violation continues: In most circumstances, the longer a violation continues uncorrected, the greater is the risk of harm.

Although each program-specific policy should address each of the factors listed above, or determine why it is not relevant, the factors listed above are not meant to be exhaustive. The programs should make every effort to identify all factors relevant to assessing the seriousness of any violation. The programs should then systematically prescribe a dollar amount to yield a gravity component for the penalty. The program-specific policies may prescribe a dollar range for a certain category of violation rather than a precise dollar amount within that range based on the specific facts of an individual case.

The process by which the gravity component was computed must be memorialized in the case file. Combining the benefit component with the gravity component yields the preliminary deterrence amount.

In some classes of cases, the normal gravity calculation may be insufficient to effect general deterrence. This could happen if there was extensive noncompliance with certain regulatory programs in specific areas of the United States. This would demonstrate that the normal penalty assessments had not been achieving general deterrence. The medium specific policies should address this issue. One possible approach would be to direct the case development team to consider increasing the gravity component within a certain range to achieve general deterrence. These extra assessments should be consistent with the other goals of this policy.

Initial and Adjusted Penalty Target Figure

The second goal of the Policy on Civil Penalties is the equitable treatment of the regulated community. One important mechanism for promoting equitable treatment is to include the benefit component discussed above in a civil penalty assessment. This approach would prevent violators from benefitting economically from their noncompliance relative to parties which have complied with environmental requirements.

In addition, in order to promote equity, the system for penalty assessment must have enough flexibility to account for the unique facts of each case. Yet it still must produce enough consistent results to treat similarly-situated violators similarly. This is accomplished by identifying many of the legitimate differences between cases and providing guidelines for how to adjust the preliminary deterrence amount when those facts occur. The application of these adjustments to the preliminary deterrence amount prior to the commencement of negotiation yields the initial penalty target figure. During the course of negotiation, the case development team may further adjust this figure to yield the adjusted penalty target figure.

Nevertheless, it should be noted that equitable treatment is a two-edged sword. While it means that a particular violator will receive no higher penalty than a similarly situated violator, it also means that the penalty will be no lower.

I. Flexibility-Adjustment Factors

The purpose of this section of the document is to establish additional adjustment factors to promote flexibility and to identify management techniques that will promote consistency. This section sets out guidelines for adjusting penalties to account for some factors that frequently distinguish different cases. Those factors are: degree of willfulness and/or negligence, degree of cooperation/noncooperation, history of noncompliance, ability to pay, and other unique factors. Unless otherwise specified, these adjustment factors will apply only to the gravity component and not to the economic benefit component. Violators bear the burden of justifying mitigation adjustments they propose based on these factors.

Within each factor there are three suggested ranges of adjustment. The actual ranges for each medium-specific policy will be determined by those developing the policy. The actual ranges may differ from these suggested ranges based upon program specific needs. The first, typically a 0-20% adjustment of the gravity component, is within the absolute discretion of the case development team. 1/ The second, typically a 21-30% adjustment, is only appropriate in unusual circumstances. The third range, typically beyond 30% adjustment, is only appropriate in extraordinary circumstances. Adjustments in the latter two ranges, unusual and extraordinary circumstances, will be subject to scrutiny in any performance audit. The case development team may wish to reevaluate these adjustment factors as the negotiations progress. This allows the team to reconsider evidence used as a basis for the penalty in light of new information.

Where the Region develops the penalty figure, the application of adjustment factors will be part of the planned Regional audits. Headquarters will be responsible for proper application of these factors in nationally-managed cases. A detailed discussion of these factors follows.

A. Degree of Willfulness and/or Negligence

Although most of the statutes which EPA administers are strict liability statutes, this does not render the violator's

1/ Absolute discretion means that the case development team may make penalty development decisions independent of EPA Headquarters. Nevertheless it is understood that in all judicial matters, the Department of Justice can still review these determinations if they so desire. Of course the authority to exercise the Agency's concurrence in final settlements is covered by the applicable delegations.

willfulness and/or negligence irrelevant. Knowing or willful violations can give rise to criminal liability, and the lack of any culpability may, depending upon the particular program, indicate that no penalty action is appropriate. Between these two extremes, the willfulness and/or negligence of the violator should be reflected in the amount of the penalty.

In assessing the degree of willfulness and/or negligence, all of the following points should be considered in most cases:

- How much control the violator had over the events constituting the violation.
- The forseeability of the events constituting the violation.
- Whether the violator took reasonable precautions against the events constituting the violation.
- Whether the violator knew or should have known of the hazards associated with the conduct.
- The level of sophistication within the industry in dealing with compliance issues and/or the accessibility of appropriate control technology (if this information is readily available). This should be balanced against the technology forcing nature of the statute, where applicable.
- Whether the violator in fact knew of the legal requirement which was violated.

It should be noted that this last point, lack of knowledge of the legal requirement, should never be used as a basis to reduce the penalty. To do so would encourage ignorance of the law. Rather, knowledge of the law should serve only to enhance the penalty.

The amount of control which the violator had over how quickly the violation was remedied is also relevent in certain circumstances. Specifically, if correction of the environmental problem was delayed by factors which the violator can clearly show were not reasonably foreseeable and out of its control, the penalty may be reduced.

The suggested approach for this factor is for the case development team to have absolute discretion to adjust the penalty up or down by 20% of the gravity component. Adjustments in the ± 21-30% range should only be made in unusual circumstances.

Adjustments for this factor beyond ± 30% should be made only in extraordinary circumstances. Adjustments in the unusual or extraordinary circumstance range will be subject to scrutiny in any audit of performance.

B. Degree of Cooperation/Noncooperation

The degree of cooperation or noncooperation of the violator in remedying the violation is an appropriate factor to consider in adjusting the penalty. Such adjustments are mandated by both the goals of equitable treatment and swift resolution of environmental problems. There are three areas where this factor is relevant.

1. Prompt reporting of noncompliance

Cooperation can be manifested by the violator promptly reporting its noncompliance. Assuming such self-reporting is not required by law, such behavior should result in the mitigation of any penalty.

The suggested ranges of adjustment are as follows. The case development team has absolute discretion on any adjustments up to ± 10% of the gravity component for cooperation/noncooperation. Adjustments can be made up to ± 20% of the gravity component, but only in unusual circumstances. In extraordinary circumstances, such as self reporting of a TSCA premanufacture notice violation, the case development team may adjust the penalty beyond the ± 20% factor. Adjustments in the unusual or extraordinary circumstances ranges will be subject to scrutiny in any performance audit.

2. Prompt correction of environmental problems

The Agency should provide incentives for the violator to commit to correcting the problem promptly. This correction must take place before litigation is begun, except in extraordinary circumstances.[2/] But since these incentives must be consistent with deterrence, they must be used judiciously.

2/ For the purposes of this document, litigation is deemed to begin:

- for administrative actions - when the respondent files a response to an administrative complaint or when the time to file expires or
- for judicial actions - when an Assistant United States Attorney files a complaint in court.

The circumstances under which the penalty is reduced depend on the type of violation involved and the source's response to the problem. A straightforward reduction in the amount of the gravity component of the penalty is most appropriate in those cases where either: 1) the environmental problem is actually corrected prior to initiating litigation, or 2) ideally, immediately upon discovery of the violation. Under this approach, the reduction typically should be a substantial portion of the unadjusted gravity component.

In general, the earlier the violator instituted corrective action after discovery of the violation and the more complete the corrective action instituted, the larger the penalty reduction EPA will consider. At the discretion of the case development team, the unadjusted gravity component may be reduced up to 50%. This would depend on how long the environmental problem continued before correction and the amount of any environmental damage. Adjustments greater than 50% are permitted, but will be the subject of close scrutiny in auditing performance.

It should be noted that in some instances, the violator will take all necessary steps toward correcting the problem but may refuse to reach any agreement on penalties. Similarly, a violator may take some steps to ameliorate the problem, but choose to litigate over what constitutes compliance. In such cases, the gravity component of the penalty may be reduced up to 25% at the discretion of the case development team. This smaller adjustment still recognizes the efforts made to correct the environmental problem, but the benefit to the source is not as great as if a complete settlement is reached. Adjustments greater than 25% are permitted, but will be the subject of close scrutiny in auditing performance.

In all instances, the facts and rationale justifying the penalty reduction must be recorded in the case file and included in any memoranda accompanying settlement.

3. Delaying compliance

Swift resolution of environmental problems will be encouraged if the violator clearly sees that it will be financially disadvantageous for the violator to litigate without remedying noncompliance. The settlement terms described in the preceding section are only available to parties who take steps to correct a problem prior to initiation of litigation. To some extent, this is an incentive to comply as soon as possible. Nevertheless, once litigation has commenced, it should be clear that the defendant litigates at its own risk.

In addition, the methods for computing the benefit component and the gravity component are both structured so that the penalty target increases the longer the violation remains uncorrected. The larger penalty for longer noncompliance is systematically linked to the benefits accruing to the violator and to the continuing risk to human health and the environment. This occurs even after litigation has commenced. This linkage will put the Agency in a strong position to convince the trier of fact to impose such larger penalties. For these reasons, the Policy on Civil Penalties provides substantial disincentives to litigating without complying.

C. History of noncompliance

Where a party has violated a similar environmental requirement before, this is usually clear evidence that the party was not deterred by the Agency's previous enforcement response. Unless the previous violation was caused by factors entirely out of the control of the violator, this is an indication that the penalty should be adjusted upwards.

In deciding how large these adjustments should be, the case development team should consider the following points:

- How similar the previous violation was.
- How recent the previous violation was.
- The number of previous violations.
- Violator's response to previous violation(s) in regard to correction of the previous problem.

Detailed criteria for what constitutes a "similar violation" should be contained in each program-specific policy. Nevertheless a violation should generally be considered "similar" if the Agency's previous enforcement response should have alerted the party to a particular type of compliance problem. Some facts that indicate a "similar violation" was committed are as follows:

- The same permit was violated.
- The same substance was involved.
- The same process points were the source of the violation.
- The same statutory or regulatory provision was violated.

- A similar act or omission (e.g. the failure to properly store chemicals) was the basis of the violation.

For purposes of this section, a "prior violation" includes any act or omission for which a formal enforcement response has occurred (e.g. notice of violation, warning letter, complaint, consent decree, consent agreement, or final order). It also includes any act or omission for which the violator has previously been given written notification, however informal, that the Agency believes a violation exists.

In the case of large corporations with many divisions or wholly-owned subsidiaries, it is sometimes difficult to determine whether a previous instance of noncompliance should trigger the adjustments described in this section. New ownership often raises similar problems. In making this determination, the case development team should ascertain who in the organization had control and oversight responsibility for the conduct resulting in the violation. In some situations the same persons or the same organizational unit had or reasonably should have had control or oversight responsibility for violative conduct. In those cases, the violation will be considered part of the compliance history of that regulated party.

In general, the case development team should begin with the assumption that if the same corporation was involved, the adjustments for history of noncompliance should apply. In addition, the case development team should be wary of a party changing operators or shifting responsibility for compliance to different groups as a way of avoiding increased penalties. The Agency may find a consistent pattern of noncompliance by many divisions or subsidiaries of a corporation even though the facilities are at different geographic locations. This often reflects, at best, a corporate-wide indifference to environmental protection. Consequently, the adjustment for history of noncompliance should probably apply unless the violator can demonstrate that the other violating corporate facilities are independent.

The following are the Framework's suggested adjustment ranges. If the pattern is one of "dissimilar" violations, relatively few in number, the case development team has absolute discretion to raise the penalty amount by 35%. For a relatively large number of dissimilar violations, the gravity component can be increased up to 70%. If the pattern is one of "similar" violations, the case development team has absolute discretion to raise the penalty amount up to 35% for the first repeat violation, and up to 70% for further repeated similar violations. The case development team may make higher adjustments in extraordinary circumstances, but such adjustments will be subject to scrutiny in any performance audit.

D. Ability to pay

The Agency will generally not request penalties that are clearly beyond the means of the violator. Therefore EPA should consider the ability to pay a penalty in arriving at a specific final penalty assessment. At the same time, it is important that the regulated community not see the violation of environmental requirements as a way of aiding a financially troubled business. EPA reserves the option, in appropriate circumstances, of seeking a penalty that might put a company out of business.

For example, it is unlikely that EPA would reduce a penalty where a facility refuses to correct a serious violation. The same could be said for a violator with a long history of previous violations. That long history would demonstrate that less severe measures are ineffective.

The financial ability adjustment will normally require a significant amount of financial information specific to the violator. If this information is available prior to commencement of negotiations, it should be assessed as part of the initial penalty target figure. If it is not available, the case development team should assess this factor after commencement of negotiation with the source.

The burden to demonstrate inability to pay, as with the burden of demonstrating the presence of any mitigating circumstances, rests on the defendant. If the violator fails to provide sufficient information, then the case development team should disregard this factor in adjusting the penalty. The National Enforcement Investigations Center (NEIC) has developed the capability to assist the Regions in determining a firm's ability to pay. Further information on this system will be made available shortly under separate cover.

When it is determined that a violator cannot afford the penalty prescribed by this policy, the following options should be considered:

- Consider a delayed payment schedule: Such a schedule might even be contingent upon an increase in sales or some other indicator of improved business. This approach is a real burden on the Agency and should only be considered on rare occasions.

- Consider non-monetary alternatives, such as public service activities: For example, in the mobile source program, fleet operators who tampered with pollution control devices

on their vehicles agreed to display anti-tampering ads on their vehicles. Similar solutions may be possible in other industries.

- Consider straight penalty reductions as a last recourse: If this approach is necessary, the reasons for the case development team's conclusion as to the size of the necessary reduction should be made a part of the formal enforcement file and the memorandum accompanying the settlement. 3/

- Consider joinder of the violator's individual owners: This is appropriate if joinder is legally possible and justified under the circumstances.

Regardless of the Agency's determination of an appropriate penalty amount to pursue based on ability to pay considerations, the violator is still expected to comply with the law.

E. Other unique factors

Individual programs may be able to predict other factors that can be expected to affect the appropriate penalty amount. Those factors should be identified and guidelines for their use set out in the program-specific policies. Nevertheless, each policy should allow for adjustment for unanticipated factors which might affect the penalty in each case.

It is suggested that there be absolute discretion to adjust penalties up or down by 10% of the gravity component for such reasons. Adjustments beyond the absolute discretion range will be subject to scrutiny during audits. In addition, they will primarily be allowed for compelling public policy concerns or the strengths and equities of the case. The rationale for the reductic must be expressed in writing in the case file and in any memoranda accompanying the settlement. See the discussion on pages 12 and 13 for further specifics on adjustments appropriate on the basis of either compelling public policy concerns or the strengths and equities of the case.

II. Alternative Payments

In the past, the Agency has accepted various environmentally beneficial expenditures in settlement of a case and chosen not to

3/ If a firm fails to pay the agreed-to penalty in an administrative or judicial final order, then the Agency must follow the Federal Claims Collection Act procedures for obtaining th penalty amount.

pursue more severe penalties. In general, the regulated community has been very receptive to this practice. In many cases, violators have found "alternative payments" to be more attractive than a traditional penalty. Many useful projects have been accomplished with such funds. But in some instances, EPA has accepted for credit certain expenditures whose actual environmental benefit has been somewhat speculative.

The Agency believes that these alternative payment projects should be reserved as an incentive to settlement before litigation. For this reason, such arrangements will be allowed only in prelitigation agreements except in extraordinary circumstances.

In addition, the acceptance of alternative payments for environmentally beneficial expenditures is subject to certain conditions. The Agency has designed these conditions to prevent the abuse of this procedure. Most of the conditions below applied in the past, but some are new. All of these conditions must be met before alternative payments may be accepted:4/

- No credits can be given for activities that currently are or will be required under current law or are likely to be required under existing statutory authority in the forseeable future (e.g., through upcoming rulemaking).

- The majority of the project's environmental benefit should accrue to the general public rather than to the source or any particular governmental unit.

- The project cannot be something which the violator could reasonably be expected to do as part of sound business practices.

4/ In extraordinary circumstances, the Agency may choose not to pursue higher penalties for "alternative" work done prior to commencement of negotiations. For example, a firm may recall a product found to be in violation despite the fact that such recall is not required. In order for EPA to forgo seeking higher penalties, the violator must prove that it has met the other conditions herein stated. If the violator fails to prove this in a satisfactory manner, the case development team has the discretion to completely disallow the credit project. As with all alternative projects, the case development team has the discretion to still pursue some penalties in settlement.

- EPA must not lower the amount it decides to accept in penalties by more than the after-tax amount the violator spends on the project.5/

In all cases where alternative payments are allowed, the case file should contain documentation showing that each of the conditions listed above have been met in that particular case. In addition when considering penalty credits, Agency negotiators should take into account the following points:

- The project should not require a large amount of EPA oversight for its completion. In general the less oversight the proposed credit project would require from EPA to ensure proper completion, the more receptive EPA can be toward accepting the project in settlement.

- The project should receive stronger consideration if it will result in the abatement of existing pollution, ameliorate the pollution problem that is the basis of the government's claim and involve an activity that could be ordered by a judge as equitable relief.

- The project should receive stronger consideration if undertaken at the facility where the violation took place.

- The company should agree that any publicity it disseminates regarding its funding of the project must include a statement that such funding is in settlement of a lawsuit brought by EPA or the State.

5/ This limitation does not apply to public awareness activities such as those employed for fuel switching and tampering violations under the Clean Air Act. The purpose of the limitation is to preserve the deterrent value of the settlement. But these violations are often the result of public misconceptions about the economic value of these violations. Consequently, the public awareness activities can be effective in preventing others from violating the law. Thus, the high general deterrent value of public awareness activities in these circumstances obviates the need for the one-to-one requirement on penalty credits.

Each alternative payment plan must entail an identified project to be completely performed by the defendant. Under the plan, EPA must not hold any funds which are to be spent at EPA's discretion unless the relevant statute specifically provides that authority. The final order, decree or judgment should state what financial penalty the violator is actually paying and describe as precisely as possible the credit project the violator is expected to perform.

III. Promoting Consistency

Treating similar situations in a similar fashion is central to the credibility of EPA's enforcement effort and to the success of achieving the goal of equitable treatment. This document has established several mechanisms to promote such consistency. Yet it still leaves enough flexibility for settlement and for tailoring the penalty to particular circumstances. Perhaps the most important mechanisms for achieving consistency are the systematic methods for calculating the benefit component and gravity component of the penalty. Together, they add up to the preliminary deterrence amount. The document also sets out guidance on uniform approaches for applying adjustment factors to arrive at an initial penalty target prior to beginning settlement negotiations or an adjusted penalty target after negotiations have begun.

Nevertheless, if the Agency is to promote consistency, it is essential that each case file contain a complete description of how each penalty was developed. This description should cover how the preliminary deterrence amount was calculated and any adjustments made to the preliminary deterrence amount. It should also describe the facts and reasons which support such adjustments. Only through such complete documentation can enforcement attorneys program staff and their managers learn from each others' experience and promote the fairness required by the Policy on Civil Penalties.

To facilitate the use of this information, Office of Legal and Enforcement Policy will pursue integration of penalty information from judicial enforcement actions into a computer system. Both Headquarters and all Regional offices will have access to the system through terminals. This would make it possible for the Regions to compare the handling of their cases with those of other Regions. It could potentially allow the Regions, as well as Headquarters, to learn from each others' experience and to identify problem areas where policy change or further guidance is needed.

Use of Penalty Figure in Settlement Discussions

The Policy and Framework do not seek to constrain negotiation. Their goal is to set settlement target figures for the internal use of Agency negotiators. Consequently, the penalty figures under negotiation do not necessarily have to be as low as the internal target figures. Nevertheless, the final settlement figures should go no lower than the internal target figures unless either: 1) the medium-specific penalty policy so provides or 2) the reasons for the deviation are properly documented.

Annual Tests:
MIT Part I
RTS
Temp
ATI

Complainant's Exhibit 8

Inspection Report For Well: CO21011 - 06908

U.S. Environmental Protection Agency
Underground Injection Control Program, 8ENF-T
999 18th Street, Suite 300, Denver, CO 80202-2466
This form was printed on 4/29/2010

INSPECTOR(S): Lead: Wiser, Nathan — Date: 5/5/2010
Others: Pfeiffer, Patricia — Time: 430 am / (pm)

OPERATOR (only if different): Brett Francois, Tribe

REPRESENTATIVE(S): Dennis Reinert, Maralex; Victoria Schmitt (La Plata Co.)

PRE-INSPECTION REVIEW

Maralex Disposal, LLC

Well Name:	Ferguson Injection Well #1		
Well Type:	Commercial Salt Water Disposal (2D)		
Operating Status:	AC (ACTIVE) as of 7/18/2007		
Oil Field:	Igancio Blanco (LaPlata)		
Location:	SWNW S32 T33N R9W		
Indian Country:	X, Southern Ute		
Last Inspection:	7/19/2007	*Allowable Inj Pressure:*	2000 /
Last MIT:		*Annulus Pressure From Last MIT:*	

BLACK = POSSIBLE VIOLATION

INSPECTION TYPE: (Select One)
__ Construction / Workover __ Response to Complaint __ Other
__ Plugging X Routine
__ Post-Closure __ Witness MIT

OBSERVED VALUES:

Tubing Gauge:	X Yes	Pressure:	U: 1910 / L: ____ psig	Gauge Owner:	X EPA	
	No	Gauge Range:	0-3000 psig		Operator	
Annulus Gauge:	X Yes	Pressure:	1725 psig	Gauge Owner:	X EPA	
	No	Gauge Range:	0-3000 psig		Operator	
Bradenhead Gauge:	Yes	Pressure:	____ psig	Gauge Owner:	EPA	
	No	Gauge Range:	____ psig		Operator	
Pump Gauge:	X Yes	Pressure:	2000 psig	Gauge Owner:	EPA	
	No	Gauge Range:	____ psig		X Operator	

Operating Status: (Select One)
X Active __ Not Injecting __ Plugged and Abandoned
__ Being Reworked __ Production __ Under Construction

ICIS Entered
Date 6/25/10
Initials DB

See page 2 for photos, comments, and site conditions.

Inspection Report For Well: CO21011 - 06908 (PAGE 2)

PHOTOGRAPHS: X Yes No List of photos taken: #1 bradenhead
#2 + #3 well

Comments and site conditions observed during inspection:

Kill switch set at 2100 psi ; Chart shows injection below 2000 psi

Operator will bleed annulus to zero + call in morning with report. Operator will replace part to bradenhead so surface access will be available.

5-6-10 (6:15 pm): We revisited the wellsite. Temp logging taking place. The operator said he drained about 1 bbl liquid from the TCA.

GPS: GPS File ID:

Observed log copies of:

Temp Log 4-1-09 to 4-3-09

RTS 11-4-08

Observed EPA letter authorizing injection: 7-18-2007 = date of EPA ATI letter

Signature of EPA Inspector(s):

Data Entry Compliance Staff Hard Copy Filing

NOTICE OF INSPECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII, 999 18TH STREET - SUITE 500
DENVER, COLORADO 80202-2405

Date: 5/5/2010
Hour: 4:15 pm

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Firm Name: Maralex Disposal

Firm Address: 775 Goddard Ave., P.O. Box 338
Ignacio, Colorado 81137

REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Nathan Wiser / Patricia Pfeiffer
Inspector's Name & Title (Print)
Environmental Scientist

Inspector's Signature

EPA R8 3560-1 (8-89)

Original - Regional Office Copy
Yellow Copy - Operator Copy

Inspection Report For Well: CO21011 - 06908

Complainant's Exhibit 9

U.S. Environmental Protection Agency
Underground Injection Control Program, 8ENF-T
999 18th Street, Suite 300, Denver, CO 80202-2466
This form was printed on 5/20/2010

INSPECTOR(S): Lead: Wiser, Nathan — Date: 5/27/2010
Others: Peterson, Cynthia — Time: 1:15 am (pm)

OPERATOR (only if different): Dennis Riemers

REPRESENTATIVE(S): Bret Francois - Tribe

PRE-INSPECTION REVIEW

Maralex Disposal, LLC

ICIS Entered
Date 6/8/10
Initial

Well Name:	Ferguson Injection Well #1
Well Type:	Commercial Salt Water Disposal (2D)
Operating Status:	AC (ACTIVE) as of 7/18/2007
Oil Field:	Igancio Blanco (LaPlata)
Location:	SWNW S32 T33N R9W
Indian Country:	X, Southern Ute
Last Inspection:	5/5/2010
Last MIT:	

TAB	GREEN	BLUE	CBI
		1	

Allowable Inj Pressure: 2000
Annulus Pressure From Last MIT:

BLACK = POSSIBLE VIOLATION

INSPECTION TYPE: (Select One)

- ☐ Construction / Workover
- ☐ Plugging
- ☐ Post-Closure
- ☐ Response to Complaint
- ☒ Routine
- ☐ Witness MIT
- ☐ Other

ICIS Entered
Date 6/8/10
Initials DB

OBSERVED VALUES:

Tubing Gauge:	☒ Yes ☐ No	Pressure: U: 1950 L: ____ psig Gauge Range: 0-3000 psig		Gauge Owner:	☒ EPA ☐ Operator
Annulus Gauge:	☒ Yes ☐ No	Pressure: 1840 psig Gauge Range: 0-3000 psig		Gauge Owner:	☒ EPA ☐ Operator
Bradenhead Gauge:	☒ Yes ☐ No	Pressure: 85 psig Gauge Range: 0-200 psig		Gauge Owner:	☒ EPA ☐ Operator
Pump Gauge:	☒ Yes ☐ No	Pressure: 1975 psig Gauge Range: 3000 psig		Gauge Owner:	☐ EPA ☒ Operator

Operating Status: (Select One)

- ☒ Active
- ☐ Being Reworked
- ☐ Not Injecting
- ☐ Production
- ☐ Plugged and Abandoned
- ☐ Under Construction

See page 2 for photos, comments, and site conditions.

Inspection Report For Well: CO21011 - 06908 (PAGE 2)

PHOTOGRAPHS: [X] Yes [ ] No List of photos taken: 1) Sign, 2) annulus pressure 3) WELL PAD

Comments and site conditions observed during inspection:

EPA observed annulus valve was closed ~~on~~ When opened pipe to annulus gauge leaked. Operator said he would replace the pipe and nipple assembly that is leaking.
EPA observed pump truck suck [redacted] of 3.5 bbls liquid from barrels
Annulus bleeding produced 1.5 bbls of liquid
EPA observed pump truck suck produced liquid
EPA Observed murphy switch kill setting will be about 2,000psi

GPS: GPS File ID: _____

Signature of EPA Inspector(s): _____

[ ] Data Entry [ ] Compliance Staff [ ] Hard Copy Filing

NOTICE OF INSPECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII, 999 18TH STREET - SUITE 500
DENVER, COLORADO 80202-2405

Date: 5/26/10
Hour: 1:10 pm

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Firm Name: Maralex Disposal Inc.

Firm Address: 775 Goddard Ave PO Box 338
Ignacio CO 81137

REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Nathan Wiser Environ. Scientist
Inspector's Name & Title (Print)

Inspector's Signature

EPA R8 3560-1 (8-89)

Original - Regional Office Copy
Yellow Copy - Operator Copy

Complainant's Exhibit 10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

U2 Entered
Date 6/16/10
Initial

JUN 0 7 2010

Ref: 8ENF-UFO

CERTIFIED MAIL 7005-0390-0000-4846-7197
RETURN RECEIPT REQUESTED

	GREEN	BLUE	CBI
AS		1	

Dennis Reimers, Engineering Manager
Maralex Resources, Inc.
P.O. Box 338
Ignacio, Colorado 81137

Re: Underground Injection Control (UIC)
Notice of Violation: Failure to Maintain
Zero Annulus Pressure
Ferguson #1 SWD Commercial Well
EPA Permit No. CO21011-06908
API No. 05-067-09194
Ignacio Blanco Field
La Plata County, Colorado

Dear Mr. Reimers:

The above-referenced well was inspected by EPA personnel on May 5 and May 26, 2010. During each inspection, there was significant pressure observed at the wellhead on the annulus between the 7 inch longstring casing and the 3-1/2 inch injection tubing. The observed pressures were as follows:

Inspection Date	Injection Tubing	Tubing/Casing Annulus
May 5, 2010	1910 psi	1725 psi
May 26, 2010	1950 psi	1840 psi

From our records, the last tubing/casing annulus pressure test successfully took place prior to July 18, 2007. In a leak-free condition, if the tubing/casing annulus had been routinely bled to zero since that test, there should be no observed pressure at the wellhead on this annulus after a few such de-pressurizations, even allowing for thermal expansion of fluid in that annulus during periods of no injection.

The above-referenced UIC permit, at Part II(C)(6), requires that this well's tubing/casing annulus shall be maintained at zero psi. Failure to maintain the tubing/casing annulus at zero psi is a violation of the above-referenced permit. If this annular pressure cannot successfully be maintained at zero psi, the well may lack mechanical integrity. The above-referenced permit, at Part II(B) requires that this well maintain mechanical integrity.

Within thirty (30) days of receipt of this letter, please submit a letter describing what action you intend to take regarding these issues, including a time frame in which you anticipate the work to be completed.

Failure to comply with UIC regulations found at 40 C.F.R. Parts 144 through 148 constitute one or more violations of the Safe Drinking Water Act, 42 U.S.C. §300h. Such non-compliance may subject you to formal enforcement by EPA, as codified at 40 C.F.R. Part 22.

If you have any questions concerning this letter, you may contact Nathan Wiser at (303) 312-6211. Please direct all correspondence to the attention of Nathan Wiser at Mail Code 8ENF-UFO.

Sincerely,

Philip S. Strobel
Acting Director, Technical Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice

cc: Matthew Box, Chairman
Southern Ute Indian Tribe
P.O. Box 737
Ignacio, Colorado 81137

Tom Johnson, Program Division Head
Southern Ute Environmental Program
P.O. Box 737
Ignacio, Colorado 81137

Denise Onyskiw
Colorado Oil & Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 8020?

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: JUN - 7 2010

Dennis Reimers, Engineering Manager
Maralex Resources, Inc.
PO Box 338
Ignacio, CO 81137

K

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Sue C. Horton ☐ Agent ☐ Addre

B. Received by (Printed Name) Sue C. Horton
C. Date of Del

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☑ No

IGNACIO, CO
JUN 10 2010

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchan
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 0390 0000 4846 7197

Complainant's Exhibit 11

MARALEX
Disposal, LLC

210 Goddard Ave.
Ignacio, Colorado 81137
(970) 563-4000
FAX (970) 563-4116

TAB 2

C021011-06908

July 6, 2010

RECEIVED
JUL 08 2010
Office of Enforcement
Compliance & Environmental Justice

US EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

U2 Entered
Date 7/29/10
Initial SR

Attn: Nathan Wiser

Re: Dara Ferguson Injection Well No. 1
7" Casing Pressure Issues

Nathan,

Maralex has received your letter dated June 7th, on June 10, 2010, concerning the 7" casing pressure that has been observed on the Dara Ferguson Injection Well No. 1. As you referenced, the pressure on the 7" by 3 ½" casing by tubing was measured on both May 5th and May 26th of this year. A pressure of 1725 psi, and 1840 psi was recorded. This is consistent with what we have observed on this well since the EPA inspection of several years ago. As you witnessed, what we have observed with the annulus pressure, is that it will bleed to zero after recovering 1 ½ barrels of liquid off the casing. Initially we believed this pressure to be due to the liquid expansion due to thermal issues. Once the pressure was bled off it took months before it would rebuild. The nature of how soon this pressure builds back now implies that we may have a "pinhole" leak in the system. Since your inspection we have tested the integrity of the wellhead. The test ports on the 7" casing by 3 ½" tubing annulus allow us to test if pressure communication is occurring in the wellhead. None was found. The source of the pressure on the 7" annulus is below the wellhead and will be tested as outlined below: (A wellbore diagram is included which illustrates how the well is completed)

1. Shut down water injection and set a plug in the 3 ½" by 2.75" WX No-Go at 7835'.

2. Pressure test the 3 ½" casing string to 2500 psi. A successful pressure test will show the integrity of the 3 ½" tubing. If a pressure leak is observed we will monitor the 7" annulus pressure to determine if there is communication from the tubing to the annulus. If we do not observe a build in the casing pressure it is likely that the tubing plug did not hold, and will have to be reset and tested.

3. With the tubing plug still in place, pressure test the 7" casing to 2000 psi. This will determine the integrity of the 7" casing.

4. Remove the tubing plug from the tubing string at 7835'. Run a plug in the 3 ½" by 2.75" No-Go at 7885'.

5. Pressure test the tubing string to 2500 psi. The location of the tubing plug below the seal bore assembly and packer, allows an integrity test of both the seal bore assembly and the packer.

The repair of the wellbore will depend on where the leak is found. If a leak is in the tubing string, the bad tubing will be replaced. If the leak is in the seal bore assembly, a new assembly will be run. If the packer is leaking a new packer will be set above the existing one. The new configuration would include the tubing connection to the existing bottom packer and then setting a second packer just above the existing packer. We will submit to you details of how the repairs will be conducted for your concurrence before any of the work is done.

As I mentioned to you on the phone, the completion rig we are using on our New Mexico project will be available for this work during the first part of August, 2010. We can do most of the testing without the rig but repairing the work will most likely require a rig. We will keep you posted after actual dates of the testing and/or rig work is known.

Thanks for your review of this information.

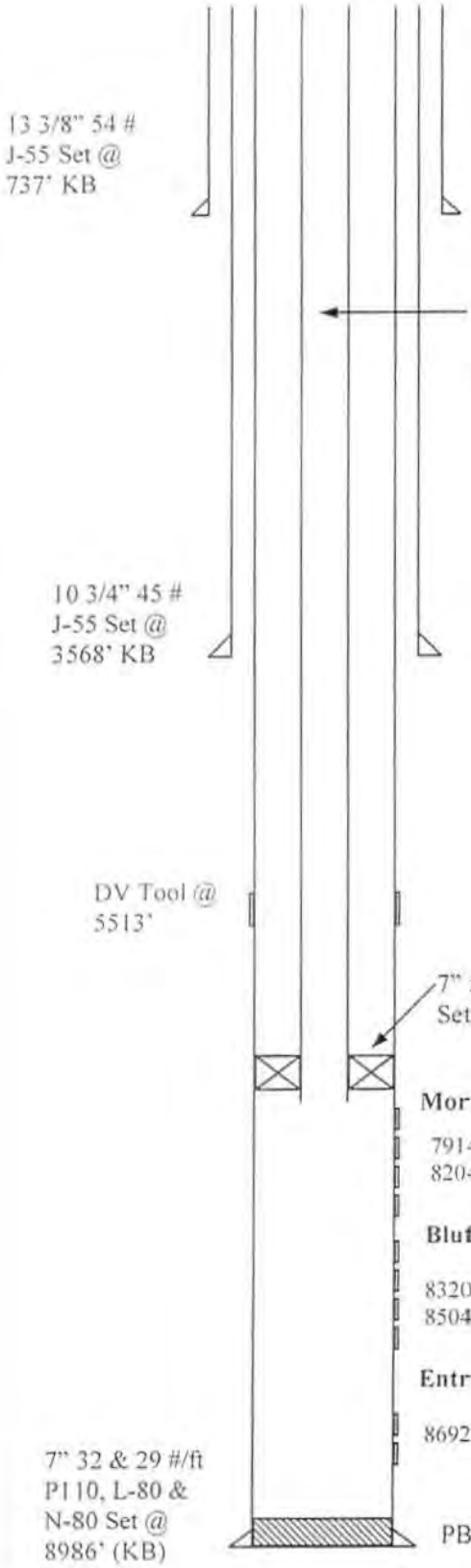
Sincerely,

Dennis R. Reimers

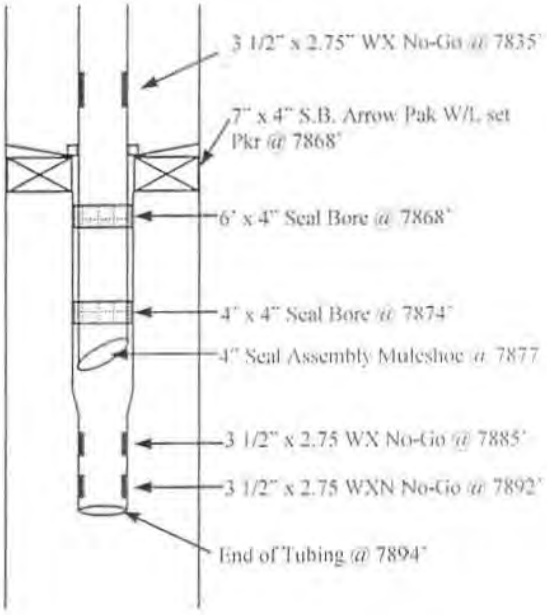
Dennis R. Reimers
Engineering Manager

Attachment

DARA FERGUSON INJ. WELL #1
2126' FNL, 520' FWL
S32 – T33N – R9W
API No. 05 – 067 –09194



Bottomhole Assembly
Expanded View
(Packer & BHA is
Nickle Coated)



Complainant's Exhibit 12

OMB No. 2040-0042 Approval Expires 1/31/05

RECEIVED
FEB 18 2011
EGEU

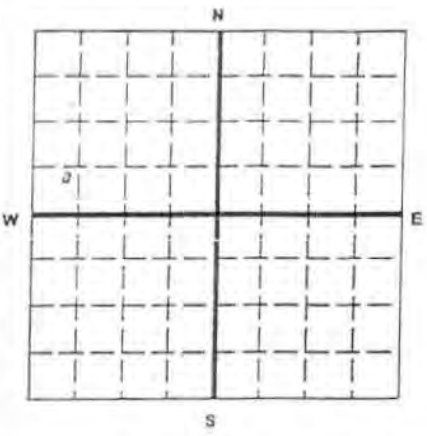
United States Environmental Protection Agency
Washington, DC 20460

EPA

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

Name and Address of Existing Permittee	Name and Address of Surface Owner
Maralex Disposal, LLC. P.O. Box 338, Ignacio, CO 81137	Darry A. Ferguson (Rhino Technologies, LLC) P.O. Box 887, Durango, CO 81302

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
Colorado	La Plata	CO21011-06908

Surface Location Description:
NE 1/4 of SW 1/4 of SW 1/4 of NW 1/4 of Section 32 Township 33N Range 9W

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location 2126 ft. frm (N/S) N Line of quarter section
and 520 ft. from (E/W) W Line of quarter section.

WELL ACTIVITY
- [X] Brine Disposal
- [ ] Enhanced Recovery
- [ ] Hydrocarbon Storage

TYPE OF PERMIT
- [X] Individual
- [ ] Area

Number of Wells ____

Lease Name Dara Ferguson Inj. Well Number 1

		INJECTION PRESSURE		TOTAL VOLUME INJECTED		TUBING – CASING ANNULUS PRESSURE (OPTIONAL MONITORING)	
MONTH	YEAR	AVERAGE PSIG	MAXIMUM PSIG	BBL	MCF	MINIMUM PSIG	MAXIMUM PSIG
Jan.	2010	1875	1885	66165	0	0	0
Feb.	2010	1990	1995	64104	0	0	0
Mar.	2010	1995	1998	74122	0	0	0
Apr.	2010	1965	1998	54177	0	0	0
May	2010	1955	1990	64396	0	0	0
Jun.	2010	1995	1995	66129	0	0	0
Jul.	2010	1990	1995	62129	0	0	0
Aug.	2010	1995	1995	67444	0	0	0
Sep.	2010	1995	1995	66327	0	0	0
Oct.	2010	1995	1995	68347	0	0	0
Nov.	2010	1995	2000	71529	0	0	0
Dec.	2010	1990	2000	64386	0	0	0

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. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)	Signature	Date Signed
Doris K. Ney, Production Tech.	Doris K Ney	2/15/2011

EPA Form 7520-11 (Rev. 8-01)

2 Entered
Date 2/24/11
Initial DB

GREEN | BLUE | CBI
TAB | | 2 |

Inspection Report For Well: CO21011 - 06908

Complainant's Exhibit 13

U.S. Environmental Protection Agency
Underground Injection Control Program, 8ENF-T
999 18th Street, Suite 300, Denver, CO 80202-2466
This form was printed on 4/20/2011

INSPECTOR(S): Lead: Roberts, Sarah — Date: 4/13/2011
Others: Breffle, Don — Time: 1:40 am / (pm)

OPERATOR (only if different): Christy Reid, Engineer Pete Tree, Bumper

REPRESENTATIVE(S): Brett Francois, tribe

PRE-INSPECTION REVIEW

Maralex Disposal, LLC

Well Name:	Ferguson Injection Well #1
Well Type:	Commercial Salt Water Disposal (2D)
Operating Status:	AC (ACTIVE) as of 7/18/2007
Oil Field:	Igancio Blanco (LaPlata)
Location:	SWNW S32 T33N R9W
Indian Country:	X, Southern Ute

Last Inspection:	5/26/2010	*Allowable Inj Pressure:*	2000 /
Last MIT:	[illegible]	*Annulus Pressure From Last MIT:*	[illegible]

BLACK = POSSIBLE VIOLATION

INSPECTION TYPE: (Select One)
- ☐ Construction / Workover
- ☐ Plugging
- ☐ Post-Closure
- ☒ Response to Complaint
- ☐ Routine
- ☐ Witness MIT
- ☐ Other

OBSERVED VALUES:

1750
0 - 3000 psig range EPA gauge

Tubing Gauge:	☒ Yes ☐ No	Pressure: U: 1750 / L:	psig	Gauge Owner:	☐ EPA ☒ Operator
		Gauge Range: chart	psig		
Annulus Gauge:	☒ Yes ☐ No	Pressure: 1670	psig	Gauge Owner:	☒ EPA ☐ Operator
		Gauge Range: 0-3000	psig		
Bradenhead Gauge:	☐ Yes ☐ No	Pressure:	psig	Gauge Owner:	☐ EPA ☐ Operator
		Gauge Range:	psig		
Pump Gauge:	☒ Yes ☐ No	Pressure: 1775	psig	Gauge Owner:	☐ EPA ☒ Operator
		Gauge Range: 0-5000	psig		

Operating Status: (Select One)
- ☒ Active
- ☐ Being Reworked
- ☐ Not Injecting
- ☐ Production
- ☐ Plugged and Abandoned
- ☐ Under Construction

GREEN | BLUE

See page 2 for photos, comments, and site conditions.

UIC Entered
Date 5/24/11
Initial JC

Inspection Report For Well: CO21011 - 06908 (PAGE 2)

PHOTOGRAPHS: ☐ Yes ☒ No List of photos taken: _____

Comments and site conditions observed during inspection:

Pete (pumper) does not have gauge on annulus
Pete stated that annulus pressure is measured every six to eight months
Statement confirmed by Christy Reid
Pumper stated chart is calibrated every other month
Pumper stated Kill pressure for pump is 2000 psi but he wasn't able to navigate the touch screen panel to access the setting

GPS: GPS File ID: _____

Signature of EPA Inspector(s): _____ _____ _____

☐ Data Entry ☐ Compliance Staff ☐ Hard Copy Filing

NOTICE OF INSPECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII, 999 18TH STREET - SUITE 500
DENVER, COLORADO 80202-2405

Date: 4/13/11
Hour: 1:20 p

Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300f et seq.).

Firm Name: Maralex Disposal, LLC

Firm Address: 775 Goddard Ave, P.O. Box 338
Ignacio, CO 81137

REASON FOR INSPECTION:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable condition of permit or rule authorization.

SECTION 1445(b) of the SAFE DRINKING WATER ACT is quoted below:

Section 1445(b)(1): Except as provided in Paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials, and a written notice to any supplier of water or other person subject to (a), or person subject (A) a national primary drinking water regulation prescribed under Section 1412(B) an applicable Underground Injection Control Program, or (C) any requirement to monitor an unregulated contaminant pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, ... facility, or other property of such supplier or other person in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of a public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

Sarah Roberts
Dan Breffle
Inspector's Name & Title (Print)

Inspector's Signature

EPA R8 3560-1 (8-89)

Original - Regional Office Copy
Yellow Copy - Operator Copy

RE: FW: Scan to Email from 6211
Victoria Schmitt to: Sarah Roberts 04/04/2011 08:52 AM

From: Victoria Schmitt <Victoria.Schmitt@co.laplata.co.us>
To: Sarah Roberts/R8/USEPA/US@EPA

Sarah,

Thank you.

Victoria

From: Roberts.Sarah@epamail.epa.gov [Roberts.Sarah@epamail.epa.gov]
Sent: Monday, April 04, 2011 8:12 AM
To: Victoria Schmitt
Subject: RE: FW: Scan to Email from 6211

Morning Victoria,

In the NOV, EPA did not conclude that mechanical integrity was lost and also did not specify that the well must be shut-in. The NOV has not been resolved yet but I'm currently working to do that.

Feel free to give me a call if that didn't answer your question completely.

- Sarah

Sarah M. Roberts
UIC Technical Enforcement Program
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop
Denver, CO 80202-1129
303-312-7056 -- direct dial
303-312-6953 -- fax

Information on the UIC program can be found at:
http://www.epa.gov/region8/water/uic/deep_injection.html or
http://www.epa.gov/safewater/uic/index.html

From: Victoria Schmitt <Victoria.Schmitt@co.laplata.co.us>
To: Sarah Roberts/R8/USEPA/US@EPA
Date: 04/02/2011 11:08 AM
Subject: RE: FW: Scan to Email from 6211

Hi Sarah,

Have you had the chance to check the file to see if the EPA has requested the Ferguson well be shut in until mechanical integrity is regained? Or is the EPA allowing the well to be operated while the issue is resolved?

Thank you.
Victoria

-----Original Message-----
From: Roberts.Sarah@epamail.epa.gov [
mailto:Roberts.Sarah@epamail.epa.gov]
Sent: Thursday, March 24, 2011 1:57 PM
To: Victoria Schmitt
Subject: RE: FW: Scan to Email from 6211

Hi Victoria - I'm checking into this - stay tuned! I'll have info to you as soon as I can.

- Sarah

Sarah M. Roberts
UIC Technical Enforcement Program
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop
Denver, CO 80202-1129
303-312-7056 -- direct dial
303-312-6953 -- fax

Information on the UIC program can be found at:
http://www.epa.gov/region8/water/uic/deep_injection.html or
http://www.epa.gov/safewater/uic/index.html

From: Victoria Schmitt <Victoria.Schmitt@co.laplata.co.us>
To: Sarah Roberts/R8/USEPA/US@EPA
Date: 03/23/2011 01:29 PM
Subject: RE: FW: Scan to Email from 6211

Hi Sarah,

I am happy to file a FOIA if needed. The only information we want however, is to know is:

1. Is the well still under an NOV for loss of mechical integrity?
2. If the well is under an NOV, is it operating or is it shut-in?

Is this something the EPA can tell us or do we need to file a FOIA?

Thank you.
Victoria

-----Original Message-----
From: Roberts.Sarah@epamail.epa.gov [
mailto:Roberts.Sarah@epamail.epa.gov]

Sent: Wednesday, March 23, 2011 1:18 PM
To: Victoria Schmitt
Subject: Re: FW: Scan to Email from 6211

Hi Victoria,

While I was not involved with this violation initially, I have looked into tracking down some of this information. For this level of detail, usually a FOIA request is required. The Freedom of Information Act (FOIA) is a federal law that gives the public the right to make requests for federal agency records. All federal agencies, including EPA, are required to make requested records available unless the records are protected from disclosure by certain FOIA exemptions. You always have the right to request this information through a FOIA and EPA will work to provide you with any documentation that is not protected.

However, please note that some information regarding enforcement cases is exempt from FOIA and not available for public release.

Specifically, The Freedom of Information Act entitles the following exemptions on documents being requested by the public that have been compiled for law enforcement purposes, the release of which

a. could reasonably be expected to interfere with law enforcement proceedings,

b. would deprive a person of a right to a fair trial or an impartial adjudication,

c. could reasonably be expected to constitute an unwarranted invasion of personal privacy,

d. could reasonably be expected to disclose the identity of a confidential source,

e. would disclose techniques, procedures, or guidelines for investigations or prosecutions, or

f. could reasonably be expected to endanger an individual's life or physical safety

http://www.epa.gov/foia/

- Sarah

Sarah M. Roberts
UIC Technical Enforcement Program
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop
Denver, CO 80202-1129
303-312-7056 -- direct dial
303-312-6953 -- fax

Information on the UIC program can be found at:
http://www.epa.gov/region8/water/uic/deep_injection.html or
http://www.epa.gov/safewater/uic/index.html

From: Victoria Schmitt <Victoria.Schmitt@co.laplata.co.us>
To: Sarah Roberts/R8/USEPA/US@EPA
Date: 03/23/2011 12:20 PM
Subject: FW: Scan to Email from 6211

Sarah,

In addition to sending follow-up correspondance provided by the EPA to the permittee between June 7 and the present date, would you also summarize the current status of the NOV? Is the injection well still under an NOV? If there are still mechanical integrity issues, is the well shut-in as they are being resolved or is it operating?

Thank you again.
Victoria

-----Original Message-----
From: Victoria Schmitt
Sent: Wednesday, March 23, 2011 11:42 AM
To: 'Roberts.Sarah@epamail.epa.gov'
Subject: RE: Scan to Email from 6211

Hi Sarah,

Thank you. Could you please send as well each of the follow-up correspondance sent by the EPA between June 7 and the present date?

Thank you again.
Victoria

-----Original Message-----
From: Roberts.Sarah@epamail.epa.gov [
mailto:Roberts.Sarah@epamail.epa.gov]
Sent: Wednesday, March 23, 2011 11:18 AM
To: Victoria Schmitt
Subject: Fw: Scan to Email from 6211

It finally came through. I guess it just took it a while to get through

- Sarah

Sarah M. Roberts
UIC Technical Enforcement Program
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop
Denver, CO 80202-1129
303-312-7056 -- direct dial
303-312-6953 -- fax

Information on the UIC program can be found at:
http://www.epa.gov/region8/water/uic/deep_injection.html or
http://www.epa.gov/safewater/uic/index.html

----- Forwarded by Sarah Roberts/R8/USEPA/US on 03/23/2011 11:16 AM -----

From: Mail R8Printer/R8/USEPA/US@EPA
To: Sarah Roberts/R8/USEPA/US@EPA
Date: 03/23/2011 11:01 AM
Subject: Scan to Email from 6211

This document was digitally sent to you using an HP Digital Sending device.(See attached file: Document.pdf)

UNITED STATES ENVIRONMENTAL PROTECTIC
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

APR 19 2011

Ref: 8ENF-UFO

CERTIFIED MAIL 7005-0390-0000-4848-8222
RETURN RECEIPT REQUESTED

Dennis Reimers, Engineering Manager
Maralex Resources, Inc.
P.O. Box 338
Ignacio, Colorado 81137

Re: Underground Injection Control UIC)
Notice of Violations:
Inaccurate Reporting, Failure to Monitor,
Loss of Mechanical Integrity
Ferguson #1 SWD Commercial Well
EPA Permit# CO21011-06908
API # 05-067-09194
Ignacio Blanco Oil Field
La Plata County, Colorado

Dear Mr. Reimers:

The Environmental Protection Agency ("EPA") sent a Notice of Violation for the above-referenced well on June 7, 2010 addressing the failure of Maralex Resource, Inc. ("Maralex") to maintain zero annulus pressure as required by the Underground Injection Control ("UIC") permit at Part II(C)(6). EPA received a response from Maralex on July 8, 2010 outlining work-over procedures that Maralex planned to conduct during the first part of August, 2010. In this response, Maralex stated that Maralex would contact EPA once the dates of the work-over and/or testing were known. To date, EPA has not received any additional information regarding this work-over procedure.

EPA received the Annual Monitoring Report submitted by Maralex on February 18, 2011. This report certifies that the maximum and minimum annulus pressures for all twelve months in 2010 were zero for the above-referenced well. This information directly conflicts with EPA observations during inspection conducted by EPA personnel on May 5, 2010 and May 26, 2010 where annulus pressures of 1725 and 1940 psig respectively were documented. Additionally, during an inspection conducted by EPA personnel on April 13, 2011, Maralex representatives stated and confirmed that annulus pressures are monitored once every six to eight months. This is a violation of the UIC permit for the above-referenced well at Part II(D)(1), which requires that annulus pressures be monitored weekly and recorded at least monthly.

The above-referenced well was inspected by EPA personnel on April 13, 2011. During this inspection, there was significant pressure observed at the wellhead on the annulus between the 7 inch long-string casing and the 3-1/2 inch injection tubing. At the time of the inspection, the well was injecting at a pressure of 1750 psig (pounds per square inch-gauge) and the annulus pressure was 1670 psig. EPA concludes that Maralex has observed substantial pressure on the tubing/casing annulus for the above-referenced well, indicating a loss of mechanical integrity as defined in Title 40 of the Code of Federal Regulations Section 146.8 (40 C.F.R. §146.8).

Pursuant to the above-referenced UIC Permit and 40 C.F.R. §144.51(q)(1), you must establish and maintain mechanical integrity. A loss of mechanical integrity is a violation of this requirement.

Pursuant to the above-referenced UIC Permit and the regulations at 40 C.F.R. 144.51(q)(2), you must **immediately cease injection into this well**. Before injection may resume, you must demonstrate that the well has mechanical integrity by passing a mechanical integrity test (MIT). You must also receive written authorization from the EPA. If you choose to plug and abandon this well, a plugging and abandonment plan must be submitted to EPA for approval prior to the plugging operation.

Failure to comply with the UIC regulations found at 40 C.F.R. Parts 144 through 148 constitutes one or more violations of the Safe Drinking Water Act, 42 U.S.C. §300h. Such non-compliance may subject you to formal enforcement by EPA, as codified at 40 C.F.R. Part 22.

If you have any questions concerning this letter, you may contact Sarah Roberts at (303) 312-7056. Please direct all correspondence to the attention of Sarah Roberts at Mail Code 8ENF-UFO. EPA will contact you with additional information regarding these above-referenced violations.

Sincerely,

Sandra A. Stavnes, Director
UIC/FIFRA/OPA Technical Enforcement Programs

cc: Matthew Box, Chairman
Southern Ute Indian Tribe
P.O. Box 737
Ignacio, Colorado 81137-0737

Tom Johnson, Division Head
Environmental Program
Southern Ute Indian Tribe
P.O. Box 737, Mail Slot 81
Ignacio, Colorado 81137-0737

Denise Onyskiw, UIC Director
CO Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

bcc: Randy Brown (8P-TA)

Printed on Recycled Paper

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: APR 20 2011

Dennis Reimers
Engineering Manager
Maralex Resources, Inc.
PO Box 338
Ignacio, CO 81137

A

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) [illegible]
C. Date of Delivery 4-25-11

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☑ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merc
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Y

2. Article Number (Transfer from service label) 7005 0390 0000 4848 8222

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

CONVERSATION RECORD	Time	Date
EPA (Sarah Roberts, Chuck Tinsley, Trish Pfieffer) contact with Maralex (Dennis Reimers)	11:00a	05/03/2011

Name of Person (s) Contacted or in Contact With
Dennis Reimers, Engineering Manager

Visit	Conference	Telephone
		X: 970-799-1638

Organization
Maralex Disposal/Resources

Subject
SWD Well CO21011-06908 - NOV sent April 19, 2011 directing well to be shut in. Temp log from test conducted 5/6/2010 with anamolies above packer

Sarah Roberts questioned Dennis Reimers about the current status of the Ferguson #1 SWD Commercial well (EPA permit #: CO21011-06908). Dennis stated that the well was shut in and the gate was locked the same day the violation letter was received. Sarah asked what the shut-in pressure on the tubing is. Dennis stated that the well drops about 200 pounds after being shut-in. Dennis said that the annulus bleeds only a couple of barrels of fluid but the pressure will rebuild completely after a couple days. Dennis stated that the same work-over procedure that Maralex submitted to EPA in July 8, 2010 will be used when Maralex is able to work over the well sometime in the next couple of weeks.

Sarah Roberts called Dennis Reimers back approximately 20 minutes later with Patricia Pfieffer and Chuck Tinsley to discuss the temperature log results from the test conducted on 5/6/2010. The reason for the call-back was because in the previous call, Dennis had indicated that Maralex would be getting a rig on the well in the next couple weeks. Additional concerns about the well have been discussed by EPA and EPA wanted to communicate these concerns in the event Maralex finds it needs to conduct additional work while the rig is on the well. Chuck described how the results of the 2010 temperature log show a temperature anomaly above the packer and the upper most perforations in the Morrison formation. Chuck described to Dennis that EPA is concerned that this may indicate fluid movement out of zone. Because a radioactive tracer survey conducted on June 7, 2010 does not show any fluid movement, Chuck suggested that the fluid movement is occurring away from the borehole. Dennis stated that he interpreted the temperature log results to indicate fluid moved through the packer into the tubing-casing annulus and that fluid movement caused the temperature anomaly. Dennis said that the annual temperature log would be conducted as planned and both parties agree that the results may indicated whether or not the anomaly is due to leaks from the packer or potential movement out of zone occurring away from the borehole.

Action Required
EPA awaits results from rework, MIT, temp log

Name of Person Documenting Conversation
Sarah Roberts

OMB No. 204[illegible] Approval Expires [illegible]

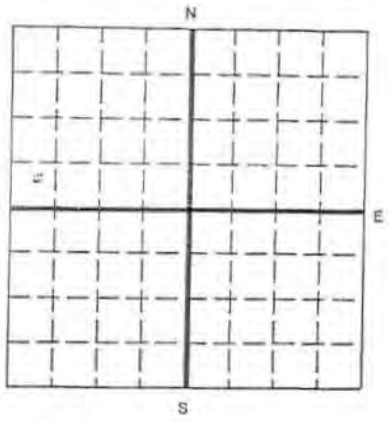
EPA

United States Environmental Protection Agency
Washington, DC 20460

WELL REWORK RECORD

Name and Address of Permittee	Name and Address of Contractor
Maralex Disposal, LLC P.O. Box 338, Ignacio, CO 81137	Triple P 1200 Mission Ave., Farmington, NM 87401

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
Colorado	La Plata	CO21011-06908

Surface Location Description

ne 1/4 of sw 1/4 of sw 1/4 of nw 1/4 of Section 32 Township 33n Range 9w

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location 2126 ft. frm (N/S) N Line of quarter section
and 520 ft. from (E/W) W Line of quarter section.

WELL ACTIVITY	Total Depth Before Rework	TYPE OF PERMIT
☑ Brine Disposal ☐ Enhanced Recovery ☐ Hydrocarbon Storage	8986'	☑ Individual ☐ Area Number of Wells 1
Lease Name: Dara Ferguson Injection	Total Depth After Rework: 8986' Date Rework Commenced: 05/11/2011 Date Rework Completed: 05/24/2011	Well Number: 1

WELL CASING RECORD -- BEFORE REWORK

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	
13-3/8"	737'	670	65/35 VPO			
10-3/4"	3568'	710	65/35 VPO			
7"	8986'	1655	50/50 VPO	7914'	8842'	

WELL CASING RECORD -- AFTER REWORK *(Indicate Additions and Changes Only)*

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

DESCRIBE REWORK OPERATIONS IN DETAIL USE ADDITIONAL SHEETS IF NECESSARY	WIRE LINE LOGS, LIST EACH TYPE	
	Log Types	Logged Intervals
Repaired leak in tubing. Performed MIT on 5/24/11. Tested casing		
pressure. Results as follows: 8:35 a.m. 1050 psi; 8:40 1049 psi; 8:45		
1049 psi; 8:50 1035 psi; 8:55 1035 psi; 9:00 1035 psi; 9:05 1035 psi		

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. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Christ Reid, Engineer	Christ Reid	05/24/2011

EPA Form 7520-12 (Rev. 12-08)

Mechanical Integrity Test
Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency
Underground Injection Control Program
999 18th Street, Suite 200 Denver, CO 80202-2466

EPA Witness: N/A Date: 5 /24 / 2011
Test conducted by: Christi Reid, Maralex Disposal
Others present: A. M. O'Hare, Maralex Disposal

Well Name: Dara Ferguson Injection Well Type: ER (SWD) Status: (AC) TA UC
Field: Ignacio Blanco/38300
Location: NE/SW/SW/NW Sec: 32 T 33 (N)/ S R 9 E (W) County: La Plata State: Colorado
Operator: Maralex Disposal, LLC
Last MIT: / / Maximum Allowable Pressure: 2000 PSIG

Is this a regularly scheduled test? [ ] Yes [X] No
Initial test for permit? [ ] Yes [X] No
Test after well rework? [X] Yes [ ] No
Well injecting during test? [ ] Yes [X] No If Yes, rate: _____ bpd

Pre-test casing/tubing annulus pressure: _____ psig

MIT DATA TABLE	Test #1	Test #2	Test #3
TUBING PRESSURE			
Initial Pressure	0 psig	psig	psig
End of test pressure	0 psig	psig	psig
(CASING) / TUBING ANNULUS PRESSURE			
0 minutes	1050 psig	psig	psig
5 minutes	1049 psig	psig	psig
10 minutes	1049 psig	psig	psig
15 minutes	1035 psig	psig	psig
20 minutes	1035 psig	psig	psig
25 minutes	1035 psig	psig	psig
30 minutes	1035 psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
RESULT	[X] Pass [ ]Fail	[ ] Pass [ ]Fail	[ ] Pass [ ]Fail

Does the annulus pressure build back up after the test ? [ ] Yes [X] No

MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: Christe Reid / ddm

OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Staff _____ Date: ___/___/___

Do you agree with the reported test results? [ ] YES [ ] NO

If not, why?

Possible violation identified? [ ] YES [ ] NO

If YES, what

If YES - followup initiated? [ ] YES

[ ] NO - why not?

[ ] Data Entry [ ] Compliance Staff [ ] 2nd Data Entry [ ] Hardcopy Filing

Complainant's Exhibit 18

UNITED STATES ENVIRONMENTAL PROTECTIO
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

NOV 15 2011

Ref: 8ENF-UFO

CERTIFIED MAIL 7009-3410-0000-2596-3735
RETURN RECEIPT REQUESTED

Christi Reid, Engineer
Maralex Resources, Inc.
P.O. Box 338
Ignacio, Colorado 81137

Re: Underground Injection Control (UIC)
Notice of Violation:
Loss of Mechanical Integrity
Dara Ferguson # 1 Well
EPA Permit# CO21011-06908
API # 05-067-09194
Ignacio Blanco Oil Field
La Plata County, CO

Dear Ms. Reid:

On November 9, 2011, the Environmental Protection Agency (EPA) learned that the Maralex Resources, Inc. injection well referenced above lost mechanical integrity on November 9, 2011. Pursuant to the above-referenced UIC Permit and Title 40 of the Code of Federal Regulations Section 144.51(q)(1) (40 C.F.R. §144.51(q)(1)), you must establish and maintain mechanical integrity. A loss of mechanical integrity is a violation of this requirement.

Pursuant to the above-referenced UIC Permit and the regulations at 40 C.F.R. §144.51(q)(2), you must immediately cease injection into this well. Before injection may resume, you must demonstrate that the well has mechanical integrity by passing a mechanical integrity test (MIT). You must also receive written authorization from the EPA.

Within thirty (30) days of receipt of this letter, please submit a letter describing what action you intend to take regarding the well, including a time frame in which you anticipate the work to be completed. It is expected that you will return this well to compliance within ninety (90) days of the loss of mechanical integrity.

If you choose to plug and abandon this well, a plugging and abandonment plan must be submitted to EPA for approval prior to the plugging operation.

Failure to comply with the UIC regulations found at 40 C.F.R. Parts 144 through 148 constitutes one or more violations of the Safe Drinking Water Act, 42 U.S.C. §300h. Such non-compliance may subject you to formal enforcement by EPA, as codified at 40 C.F.R. Part 22.

If you have any questions concerning this letter, you may contact Sarah Roberts at (303) 312-7056. Please direct all correspondence to the attention of Sarah Roberts at Mail Code 8ENF-UFO.

Sincerely,

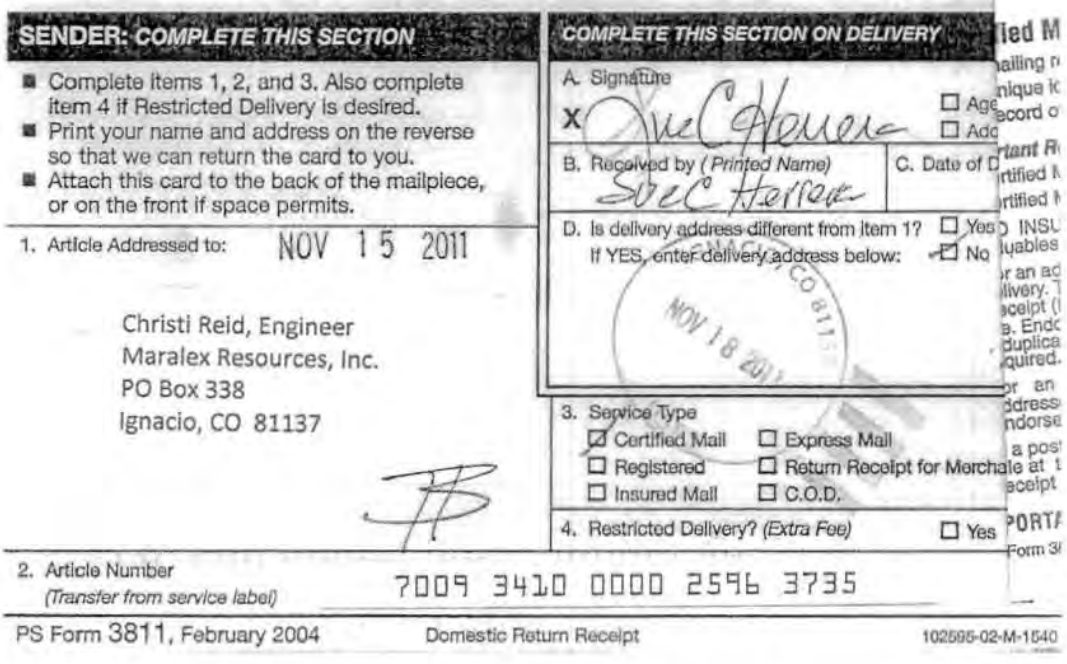
Sandra A. Stavnes, Director
UIC/FIFRA/OPA Technical Enforcement Programs

cc: Matthew Box, Chairman
Southern Ute Indian Tribe
P.O. Box 737
Ignacio, Colorado 81137-0737

Tom Johnson, Division Head, Environmental Program
Southern Ute Indian Tribe
P.O. Box 737, Mail Slot 81
Ignacio, Colorado 81137-0737

Denise Onyskiw, UIC Director
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 8020

bcc: Randy Brown (8P-TA)



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- Print your name and address on the reverse so that we can return the card to you.
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1. Article Addressed to: NOV 15 2011

Christi Reid, Engineer
Maralex Resources, Inc.
PO Box 338
Ignacio, CO 81137

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IGNACIO, CO 81137
NOV 18 2011

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Maralex Disposal, LLC
Docket No. SDWA-08-2011-0079

CERTIFICATE OF SERVICE

I hereby certify that the original and one true copy of this COMPLAINANT'S PRE-HEARING EXCHANGE were hand carried on February 15, 2012 to the Regional Hearing Clerk, EPA Region 8, 1595 Wynkoop Street, Denver, Colorado, and that a true copy was sent via Certified Mail; Return Receipt Requested to Respondent's counsel at the following address:

William E. Zimsky, Esq.
Abadie Schill
1099 Main Street, Suite 315
Durango, CO 81301

Dated: FEB 16 2012

By: _____
James H. Eppers