

Reporting, Monitoring, Inspection & Compliance

UIC TRAINING WORKSHOP | Injection and Mining Division

Presented by

Pierre Catrou Kaycee Garrett

April 3-4, 2012

Reporting

Form UIC-10

Annual Disposal/ Injection Well Monitoring Report

» Annual Submission Required for all Unplugged Injection Wells

- Forms are sent to operators in February of the year following the reporting year (ie: Sent out in February 2012 for the 2011 reporting year)
- Forms must be filled in and submitted to IMD by May 31st

» Plugged and Abandoned or Transferred Wells

- Download the Form UIC-10A when the P&A or transfer occurs
- Complete the form for the portion of the year that the well was operated
- <u>www.dnr.louisiana.gov</u> >> Conservation >> Forms/Reports/Documents >> Injection & Mining Division >> Form UIC-10A

Form UIC-10 Instructions

» Form UIC-10

- Organization Information
- Injection Pressure, Annulus Pressure, Injection Rate, and Volume Injected each month
- Well Information
- Community or Individual Well
- » Community Saltwater Disposal Well/System Notification/Certification
 - Replaces the need to file a FORM UIC-13 annually, after the initial FORM UIC-13 is on record



ANNUAL DISPOSAL/ INJECTION WELL MONITORING REPORT

MAILING ADDRESS:

OFFICE OF CONSERVATION INJECTION & MINING DIVISION P.O. BOX 94275-CAPITOL STATION BATON ROUGE, LA 70804-9275

PHYSICAL ADDRESS:

OFFICE OF CONSERVATION INJECTION & MINING DIVISION 617 N. THIRD ST., 8TH FLOOR BATON ROUGE, LA 70802

UIC-10 FOR CALENDAR YEAR 2011

| | | | | Report run on: Feb 14, 2012 8:00 AM |
|------------------|-------------------------|------------------------------------|------------------|-------------------------------------|
| Effective Date: | 01/01/2011 - 12/31/2011 | | | Organization Id: J000 |
| Organization ID: | J000 Name: | JOE BALL, LLC | | Well Serial: 979999 |
| | Address: | 1234 CONSERVATION BLVD. | | |
| | | BATON ROUGE, LA 70810 | | |
| | | ATTN: JOE BALL | | |
| | | | | |
| Well Serial: 97 | 9999 | Well Name / Num: JOE BALL SWD / 00 | 1 Well Status: 0 | 9 Well Class/Type: II/5 |
| Field: LAFAYE | TTE | Field Id: 010 | 0 Section: 030 | Township: 01S Range: 02W |

1. MONTHLY INJECTION RECORD:

| | INJECTION PRESSURE (PSI) | | ANNULUS PRESSURE (PSI) | | INJECTION RATE (GALLONS PER MINUTE) | | VOLUME INJECTED | |
|-----|-----------------------------|---------|---------------------------|---------|--|---------|-----------------|-----|
| | AVERAGE | MAXIMUM | MINIMUM | MAXIMUM | AVERAGE | MAXIMUM | BBL | MCF |
| JAN | 96 | 105 | 0 | 0 | 19 | 21 | 20,250 | 0 |
| FEB | 90 | 100 | 0 | 0 | 20 | 22 | 18,782 | 0 |
| MAR | 100 | 110 | 0 | 0 | 19 | 21 | 20,484 | 0 |
| APR | 125 | 135 | 0 | 0 | 19 | 21 | 19,599 | 0 |
| MAY | 100 | 110 | 0 | 0 | 16 | 18 | 17,256 | 0 |
| JUN | 120 | 130 | 0 | 0 | 15 | 17 | 15,500 | 0 |
| JUL | 90 | 100 | 0 | 0 | 15 | 17 | 16,322 | 0 |
| AUG | 85 | 95 | 0 | 0 | 15 | 17 | 15,856 | 0 |
| SEP | 100 | 110 | 0 | 0 | 14 | 16 | 14,550 | 0 |
| ОСТ | 90 | 100 | 0 | 0 | 14 | 16 | 14,988 | 0 |

| NOV | 80 | 90 | 0 | 0 | 13 | 15 | 13,028 | 0 |
|--|---|------------------|--------------|-------|------------------|-------|---------|---|
| DEC | 80 | 90 | 0 | 0 | 14 | 16 | 14,813 | 0 |
| | | | | | | TOTAL | 201,428 | 0 |
| 2. WELL | 2. WELL TYPE: | | | | | | | |
| EOR | | SWD | | R SWD | OTHER (SPECIFY): | | _ | |
| 3. WELL | COMPLETION: | | | | | | | |
| A. INJECTION THROUGH: CASING TUBING W/O PACKER ITUBING W/ PACKER GIVE PACKER DEPTH: 3,750 FT. | | | | | | | | |
| B. <u>INTE</u> | B. INTERVAL: DPERFORATIONS OPEN HOLE SCREEN GIVE INTERVAL DEPTH: 5,184 FT TO 5,994 FT | | | | | | | |
| 4. TYPE | OF FLUIDS INJECT | ED DURING REPOR | RTING CYCLE: | | | | | |
| SALT WATER FRESH WATER BRACKISH WATER AIR NATURAL GAS CO2 POLYMER | | | | | | | | |
| | м | OTHER (SPECIFY): | : | | | | | |
| 5. COMMUNITY SWD INFO: (IF YES FOR A OR B, COMPLETE THE SECOND PAGE OF THIS FORM AND PROVIDE ATTACHMENTS.) | | | | | | | | |
| A. WAS THIS WELL A COMMUNITY SWD WELL DURING ALL OR PART OF THIS REPORTING CYCLE? VES NO | | | | | | | | |
| B. WILL THIS WELL BE A COMMUNITY SWD WELL DURING THE NEXT REPORTING CYCLE? | | | | | | | | |
| | CERTIFICATION | | | | | | | |
| I certify under penalty of law that I have personally examined and am familiar with the information submitted in this report and all attachments, and that based on my personal knowledge or 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. (L. R. S. 30:17) | | | | | | | | |
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) | | | | | DNE | | | |
| Joe Ball, President | | | | | (225) 342-5569 | | | |
| SIGNAT | | IN DI | 5- | DAT | E | | | |
| × 10 Dall | | | | Marc | March 6, 2012 | | | |
| | | | | | | | | |
| | | | | | | | | |

COMMUNITY SALTWATER DISPOSAL WELL/SYSTEM NOTIFICATION/CERTIFICATION

Community Saltwater Disposal Well or System is a saltwater <u>disposal well within an oil or gas field</u> which is used by operators in the field or adjacent fields for disposal of their produced water.

| 1. | Saltwater is | altwater is transported to this community well by: | | | | | |
|----|--|--|-----------------|--------------------------|----|--|--|
| | Truck | Pipeline | Other (Explain) | | | | |
| 2. | Certification | | | | | | |
| - | I,Joe Ball (Name of Company Official) | | | , President . (Title) | ., | | |
| | hereby certify that the information contained herein is accurate and complete to the best of my knowledge. further certify that the community disposal well and system identified herein is a <u>noncommercial operation</u> and that operators using the system share only in the cost of operating and maintaining the well, related storage tanks, and equipment | | | | | | |

March 6, 2012 Signatur (Date)

3. Attach one (1) copy of all signed agreements for disposal of produced saltwater. Such agreements must contain wording acceptable to the Commissioner and indicate compliance with the certification in 2. above.

NOTE: This community well notification/certification replaces the annual filing of Form UIC-13.

» Source Fluid Attachment

- Must be completed for each Class II Disposal/Injection well and submitted with the Form UIC-10 or Form UIC-10A. All sources of fluid injected into these wells must be reported using this attachment sheet.
- Commercial SWD facilities are not required to complete the Source Fluid Attachment sheet of manifested fluids, however, this sheet must be completed for any non-manifested fluids such as fluids received by pipeline.

- » Source Fluid Attachment- Source Types
 - Source Type A

Produced fluids from oil and gas production wells operated by your organization located within the field in which the subject injection well is located

- Group all Source Type A Fluids <u>LUW Code</u>.
- Complete each column where "A" is marked in the header

• Source Type B

Produced fluids from oil and gas production wells operated by your organization located in fields other than the field in which the subject injection well is located

- Group all Source Type B Fluids by Serial Number
- Complete each column where "B" is marked in the header

Source Type C

Produced fluids from oil and gas production wells operated by organizations other than yours.

- Group all Source Type C Fluids by Serial Number
- Complete each column where "C" is marked in the header

Source Type D

Fluids from wells and other sources that cannot be identified by an Office of Conservation LUW code. These fluids include but are not limited to gas plant waste waters not classified as hazardous, brine produced from hydrocarbon storage and brine wells in salt domes, out of state oil and gas production wells, offshore-federal oil and gas production wells, etc.

- Group all **Source Type D** Fluids by **Organization**
- Complete each column where "D" is marked in the header

Organization ID: J000

FORM UIC-10 SOURCE FLUID ATTACHMENT

No: 001

FOR CALENDAR YEAR 2011

Serial Number: 979999

Well Name: JOE BALL SWD

Operator Name: JOE BALL, LLC

SOURCE LUW CODE or SERIAL WELL ORGANIZATION LUW TYPE VOLUME ORG (BBLS/YEAR) TYPE WELL NAME NUMBER NUMBER NAME ID CODE (A, B, C, D)(A, B, C, D)(A.B.C) (BC)(B.C) (CD)(C)(A) LUW for LEASE wells operated by the operator in the field 006033 25,178 A 2 A 043056 25.025 -LUWs for UNIT wells operated by the operator in the field 2 043059 31,861 A SN (LUW) for individual well operated by the operator in the field 227963 18,650 A Well operated by the operator in a different field 001 В JS BALL ET AL 225693 17,253 229653 BLAND & CO, LLC С 001 B000 L BLAND CO 27,023 Community Wells С L BLAND CO 229658 002 BLAND & CO, LLC B000 30,258 С 229705 BLAND & CO, LLC L BLAND CO 003 B000 26,180 Completed By: Joe Ball Phone No: 225-342-5515

Signature:

Source Type 'A' - Fluids from operator's wells within this field Notes: (The LUW Code for a well that is not part of a Lease or Unit is it's Serial Number)

Date: March 12, 2012

Source Type 'C' - Fluids from other operator's wells

Source Type 'B' - Fluids from operator's wells from other fields

Source Type 'D' - Fluids from "Other" sources

Form UIC-WH1 Work History/ Resume Report for Injection Wells

- » Submit a Form UIC-WH1 to IMD within 20 days of the completion of work activities on the well, along with any other reporting requirements.
- » The only exception is for work permits issued to plug and abandon a well; this activity should be reported on the Form UIC-P&A
- » Failure to submit a Form UIC-WH1 will result in IMD issuing a Notice of Violation to the operator.

Form UIC-P&A Injection Well Plugging and Abandonment Report

- » Submit a Form UIC-P&A to IMD within 20 days of the completion of work activities on the well, along with any other reporting requirements.
- » Form UIC-P&A is one form that combined the information required in the Form UIC-WH1 and the Plug & Abandon Report
- » Failure to submit a Form UIC-WH1 will result in IMD issuing a Notice of Violation to the operator.

Monitoring

Mechanical Integrity Definition

» A well has Mechanical Integrity if:

Internal Integrity

There is no significant leak in the casing, tubing, or packer; and

External Integrity

There is no significant fluid movement into an underground source of drinking water (USDW) through vertical channels adjacent to the injection wellbore.

Mechanical Integrity Failure

- » The <u>Mechanical Integrity Failure</u> occurs when:
 - A gauge pressure loss of 5% or greater occurs during an MIPT (or a pressure loss greater than 5 psi in Class I wells);
 - The annulus of the well cannot be completely filled with water;
 - The annulus of the well cannot maintain pressure;
 - While injecting, water flows from the casing valve when it is open, thus indicating a communication problem in the well;
 - There is a vacuum on the annulus when the casing valve is opened;
 - An inspector arrives at the well for a scheduled test, but the operator is absent or unprepared for the test.

Mechanical Integrity Reporting a Failure

- » If a mechanical failure or down-hole problem indicates that the injection well is not, or may not be directing the injected fluid into the permitted or authorized zone, then the operator must comply with the following:
 - The well must be shut-in; and
 - The operator must call the appropriate CES or IMD within 24 hours and verbally notify them of the failure.

Mechanical Integrity Repairing a Failure

- When the operator notifies the CES or IMD of the failure, a Work Permit Application Number and Notice of Violation will be issued to the operator, which will allow the operator to pull the tubing and packer and repair the well. The operator will have 30 days to repair the well under that work permit.
- » If additional work is necessary to repair the well, the operator must submit a Form UIC-17 Work Permit Application to IMD within 30 days of the well failure. The Form UIC-17 should detail the additional work necessary to repair the well, and if approved, the operator will have 90 to repair the well.
- » If the operator is unable to repair the well within required timeframe, then the operator must comply with the following:
 - Submit a letter or email requesting an extension to repair the well;
 - Provide a financial instrument in an amount determined by IMD; and,
 - If the well is not repaired within one (1) year, then the well must be plugged and abandoned.

Test & Inspections

Inspectors Areas of Enforcement

The Injection and Mining Division (IMD) employs seven (7) Conservation Enforcement Specialists (CES) to administer the inspection and enforcement activities for injection wells.

» Pete Bradford (Area 1)

Bossier, Caddo, Webster

» Rex Darden (Area 2)

Bienville, Caldwell, East Carroll, West Carroll, Claiborne, Franklin, Lincoln, Madison, Morehouse, Ouachita, Richland, Union

» Bill Jones (Area 3)

Avoyelles, Catahoula , Concordia, LaSalle, Tensas

Inspectors Continued

» Jackie Hebert (Area 4)

Allen, Beauregard, DeSoto, Evangeline, Grant, Natchitoches, Rapides, Red River, Sabine, Vernon, Winn

» Vacant (Area 5)

Acadia, Ascension, East Baton Rouge, West Baton Rouge, East Feliciana, West Feliciana, Iberia, Lafayette, Livingston, St. Helena, St. Landry, St. Martin, St. Tammany, Tangipahoa, Washington

» Kevin Sonnier (Area 6)

Calcasieu, Cameron, Jefferson Davis, Vermilion

» Billy Carnes (Area 7)

Assumption, Lafourche, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne

Inspectors Responsibilities

The IMD CES are responsible for:

- » Witnessing Mechanical Integrity Pressure Test (MIPT);
- » Witnessing any other mechanical integrity tests approved by IMD;
- » Performing site and well inspections;
- » Responding to injection well emergencies, and
- » Investigating complaints

Mechanical Integrity Pressure Tests (MIPT) Types of Witnessed MIPT

The following MIPTs must be witnessed by a CES, unless otherwise noted by IMD:

» Initial MIPT

MIPT performed on a new drill or converted injection well. The test should be performed after the well is perforated and the tubing and packer is set in the well. A successful MIPT must be witnessed by a Conservation Enforcement Specialist (CES/Inspector) before the well will be issued a Permit-to-Inject.

» Compliance MIPT

MIPT performed when an operator has completed remedial work on a well. An MIPT must be performed before the well is returned to service.

Mechanical Integrity Pressure Tests (MIPT) Types of Witnessed MIPT Continued

» Periodic MIPT

A scheduled MIPT that is witnessed by a CES at least once every five (5) years.

- If a well requires additional mechanical integrity monitoring, then a more frequent test schedule may be assigned to the well. Notice of the revised schedule will be stated in the Permit-to-Inject.
- IMD will notify the operator when it is time to schedule a test; however, it is the responsibility of the operator to ensure that a witnessed test is performed according to the well's prescribed schedule.

Mechanical Integrity Pressure Tests (MIPT) Unwitnessed MIPT

- » Depending on the schedule and availability of the CES, IMD may give permission for a Class II Injection well operator to perform an unwitnessed MIPT and static fluid level measurement on their well.
- » Form UIC-5: Class II Well Integrity Test Affidavit The results on the test/measurement must be reported on the From UIC-5, Class II Well Integrity Test Affidavit, and must comply with the following:
 - The ORIGINAL Form UIC-5 must be submitted to the Injection and Mining Division within seven (7) days of performing the test.
 - All MIPTs reported on Form UIC-5 must be performed by the operator and witnessed by a third party who is not an employee of the operator.

Mechanical Integrity Pressure Tests (MIPT) Criteria for Performing a MIPT

The following are the simplified criteria for performing a MIPT:

- » A minimum of 300 psi fluid pressure must be applied to the casing annulus if the existing pressure on the casing annulus is not sufficient.
- » A differential of approximately 100 psi shall be maintained between the casing annulus test pressure and any existing formation pressure or injection pressure in the tubing during the test.
- » The test pressure shall be monitored for a period of no less than 30 minutes.
- » A test pressure loss of 5% (or 5 psi for Class I wells) is the maximum allowable loss during the test period.

Inspections Types

The following inspection types are performed by the CES:

» Periodic Inspection

Inspection performed in conjunction with all MIPTs and initial facility inspections. The principal items that are addressed include well site identification, special operational provisions, well head conditions, and well site conditions.

» Compliance Inspection

Inspection performed when the operator has completed remedial work as prescribed by a Compliance Notice, Notice of Violation, or Compliance Order.

Inspections Types Continued

» Plugging and Abandonment Activities

Field activity performed to visually observe activities involved in the plugging and abandonment activities approved by a work permit.

» Emergency Responses

Response to a noncompliance action that causes an immediate threat to damage private property, the environment or is a threat to public safety.

» Complaint Investigation

Field activity to investigate a complaint concerning the operation of a specific injection well. The compliant may have been initiated by a concerned citizen or by representatives of other State or Federal regulatory agencies.

Compliance

Orphaned Wells

Taken over by an Active Operator

- » If permit has NOT been expired, then IMD will conduct a file review and require the new operator to address any deficiencies in the following areas:
 - MIPT compliance status
 - Construction compliance
 - Cement record review
 - Reporting compliance
- » If permit has been EXPIRED, the new operator will be required to meet the following:
 - Submit a UIC-2 SWD Application within 1 YEAR of the status being changed to 08, Inactive
 - If a UIC-2 SWD Application is not submitted within 1 YEAR, then the operator will have 60 days to plug and abandon the well

Types of Violations

» Compliance Notices

- Letters sent to inform Operator of actions to be taken to remain compliant
- Examples: UIC-10, MIPT Test Reminders

» Notice of Violation

- Letters sent to inform Operators they are out of compliance and the required corrective actions
- Examples: Failure to submit WH-1, Failure to pass MIPT

» Compliance Orders

- Order sent for failure to properly respond to a Notice of Violation
- Requires Operator to P&A and may assess a Civil Penalty