## Sonja Loyd

**From:** Schwab, Kay <Schwab.Kay@epa.gov>
**Sent:** Wednesday, April 16, 2014 2:45 PM
**To:** Sonja Loyd
**Cc:** Chen, Isaac; Kaspar, Paul
**Subject:** (Partial) info re: "similar" facilities with biomonitoring requirements
**Attachments:** TX0074012 Bryan Mound info.pdf; TX0092827 Big Hill info.pdf; TDS and Chloride DMR Data For LA0049492 ran 04 2014.xls

Hi Sonja,
As follow-up to our conversation this morning, I was able to pull together some info for you regarding a couple of Texas oil storage facilities with brine discharges that have had biomonitoring requirements for one or more permit cycles (see attached). They are both currently being reissued by EPA R6 and are currently @ public notice (see link below). Also, attached above is the TDS & chloride data pulled from ICIS for LOOP.

http://epa.gov/region6/water/npdes/publicnotices/tx/txdraft.htm



ED_001774D_00023556-00001

Integrated Compliance Information System NPDES

Reports Home FE&C Help Logout

Home : Search Permits : Edit Permit TX0074012 : Basic Info

Facilities | NPDES Permit | Compliance Monitoring | DMRs | Program Reports | NPDES Violations | Enforcement Actions

BASIC INFO PERMITTED FEATURES LIMIT SETS NARRATIVE CONDITIONS TRACKING EVENTS HISTORY

NPDES ID: TX0074012
Permit Type: NPDES Individual Permit
Permittee Name: USDE-BRYAN MOUND FACILITY
Major/Minor Indicator: Minor

Issue Date: 12/29/2008
Effective Date: 02/01/2009
Expiration Date: 01/31/2014

**Permit**

*NPDES ID: TX0074012

**Permit Status**

*Permit Status: Admin Continued

Approved for Electronic DMR Submission: Yes

**Dates**

Original Issue Date: 10/08/1978
Issue Date: 12/29/2008
Effective Date: 02/01/2009
Expiration Date: 01/31/2014
Retirement Date:
Termination Date:

**Compliance Tracking Status:**

| Status | Start Date | End Date | Reason |
|---|---|---|---|
| On | 02/01/2009 | | System Changed Value |

***Permittees**

| Organizational Formal Name | Street | City | State | Zip |
|---|---|---|---|---|
| USDE-BRYAN MOUND FACILITY | 1900 COUNTY ROAD 242 A | FREEPORT | TX | 77541 |

**Major/Minor Status:**

Rating Code:

| Status | Start Date | End Date |
|---|---|---|
| Minor | 02/01/2009 | |

**RNC Status**

| Year | Quarter | RNC Status (Automatic) | RNC Status (Manual) | Corrected RNC Status (Manual) |
|---|---|---|---|---|
| 2014 | 2 | SNC DMR Non-Receipt Violation | | |
| 2014 | 1 | SNC DMR Non-Receipt Violation | | |
| 2013 | 4 | SNC DMR Non-Receipt Violation | | |
| 2013 | 3 | SNC DMR Non-Receipt Violation | | |
| 2013 | 2 | SNC DMR Non-Receipt Violation | | |
| 2013 | 1 | SNC DMR Non-Receipt Violation | | |
| 2012 | 4 | SNC DMR Non-Receipt Violation | | |
| 2012 | 3 | SNC DMR Non-Receipt Violation | | |
| 2012 | 2 | SNC DMR Non-Receipt Violation | | |
| 2012 | 1 | SNC DMR Non-Receipt Violation | | |
| 2011 | 4 | SNC DMR Non-Receipt Violation | | |
| 2011 | 3 | SNC DMR Non-Receipt Violation | | |
| 2011 | 2 | SNC DMR Non-Receipt Violation | Resolved | |
| 2011 | 1 | SNC DMR Non-Receipt Violation | | Resolved |
| 2010 | 4 | SNC DMR Non-Receipt Violation | | Resolved |
| 2010 | 3 | SNC DMR Non-Receipt Violation | | Resolved |
| 2010 | 2 | SNC DMR Non-Receipt Violation | | Resolved |
| 2010 | 1 | SNC DMR Non-Receipt Violation | | Resolved |
| 2009 | 4 | SNC DMR Non-Receipt Violation | | Resolved |
| 2009 | 3 | SNC DMR Non-Receipt Violation | | Resolved |
| 2009 | 2 | SNC DMR Non-Receipt Violation | | Resolved |
| 2009 | 1 | SNC DMR Non-Receipt Violation | | Resolved |

Integrated Compliance Information System NPDES

Reports Home
FE&C Help
Logout

Home : Search Permits : Edit Permit TX0074012 : History

Facilities | NPDES Permit | Compliance Monitoring | DMRs | Program Reports | NPDES Violations | Enforcement Actions

BASIC INFO PERMITTED FEATURES LIMIT SETS NARRATIVE CONDITIONS TRACKING EVENTS HISTORY

NPDES ID: TX0074012 Issue Date: 12/29/2008
Permit Type: NPDES Individual Permit Effective Date: 02/01/2009
Permittee Name: USDE-BRYAN MOUND FACILITY Expiration Date: 01/31/2014
Major/Minor Indicator: Minor

*Record 1 to 1*

| Permit Action | Effective Dates |
|---|---|
| Previous Version | 11/01/2003 - 01/31/2009 |

*Record 1 to 1*

View

Home | Help | Logout | FE&C | Reports

EPA U.S. Environmental Protection Agency

Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

NPDES Permit No. TX0074012

# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

U.S. Department of Energy
Strategic Petroleum Reserve
Project Management Office
900 E. Commerce Rd.
New Orleans, LA 70123

is authorized to discharge from a facility located approximately 2 miles south of Freeport on State Highway 288 in Brazoria County, Texas

to federal receiving waters named the Gulf of Mexico, and the Brazos River Diversion Channel, Waterbody Segment Code No. 1201 of the Brazos River Basin from

Final Outfall 001: Latitude - 28° 50' 28"N; Longitude - 95° 19' 33"W
Final Outfall 002: Latitude - 28° 54' 58"N; Longitude - 95° 22' 29"W
Final Outfall 003: Latitude - 28° 55' 00"N; Longitude - 95° 22' 30"W
Final Outfall 004: Latitude - 28° 55' 02"N; Longitude - 95° 22' 33"W
Final Outfall 005; Latitude - 28° 55' 02"N; Longitude - 95° 22' 32"W
Final Outfall 006; Latitude - 28° 54' 55"N; Longitude - 95° 23' 13"W

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on November 1, 2003

This permit and the authorization to discharge shall expire at midnight, October 31, 2008

Issued on September 26, 2003

Miguel I. Flores
Director
Water Quality Protection Division (6WQ)

Prepared by

Maria E. Okpala
Environmental Engineer
Permits Section (6WQ-PP)

## PART I - REQUIREMENTS FOR NPDES PERMITS

## SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

Outfall 001 (Final)

Discharge type: Intermittent

Latitude:28° 50' 28" N, Longitude: 95° 19' 33" W

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge brine from cavern depressuring, through tank from outfall serial number 001 through a brine diffuser 3.5 miles offshore to the Gulf of Mexico. Such discharges shall be limited and monitored by the permittee as specified below:

**Final Effluent limits**

**Outfall 001 (Brine pipeline diffuser) - *intermittent discharge***

| Effluent Characteristics | Discharge Limitations | | |
|---|---|---|---|
| | kg/day (lbs/day) | Other Units (specify) | |
| | Daily Avg. | Daily Avg. | Daily Max. |
| Flow STORET: 50050 | N/A | Report, MGD | Report, MGD |
| Oil & Grease STORET: 00556 | N/A | 10 mg/l | 15 mg/l |
| TSS STORET: 00530 | N/A | Report, mg/l | Report, mg/l |
| TDS STORET: 70295 | N/A | Report, mg/l | Report, mg/l |
| pH (standard units) STORET:00400 | N/A | 6.0 (min.) | 9.0 (max.) |

| EFFLUENT CHARACTERISTIC | DISCHARGE MONITORING | |
|---|---|---|
| | 30-DAY AVG MINIMUM | 7-DAY MINIMUM |
| Whole Effluent Toxicity Testing (7-Day Static Renewal) 1/ | | |
| *Mysidopsis bahia* | Report | Report |
| *Menidia beryllina* | Report | Report |

**all 001 (Brine pipeline diffuser) - *intermittent discharge***

| PARAMETERS/STORET CODES | MONITORING REQUIREMENTS | |
|---|---|---|
| | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
| Flow STORET: 50050 | Continuous[1] | Record |
| Oil and Grease STORET: 00556 | 1/month[1] | Grab |
| TSS STORET: 00530 | 1/ month[1] | Grab |
| TDS STORET: 70295 | 1/ month[1] | Grab |
| pH (Standard Units) STORET:00400 | 1/month[1] | Grab |

| EFFLUENT CHARACTERISTIC | MONITORING REQUIREMENTS | |
|---|---|---|
| | FREQUENCY | TYPE |
| Whole Effluent Toxicity Testing (7-Day Static Renewal) 1/ | | |
| Mysidopsis bahia | 1/Quarter | 24-Hr. Composite |
| Menidia beryllina | 1/Quarter | 24-Hr. Composite |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from Outfall 001.

FOOTNOTES

1/ Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

[1] When discharging

Integrated Compliance Information System NPDES

Reports Home FE&C Help Logout

Home : Search Permits : Edit Permit TX0092827 : Basic Info

Facilities | NPDES Permit | Compliance Monitoring | DMRs | Program Reports | NPDES Violations | Enforcement Actions

BASIC INFO PERMITTED FEATURES LIMIT SETS NARRATIVE CONDITIONS TRACKING EVENTS HISTORY

NPDES ID: TX0092827
Permit Type: NPDES Individual Permit
Permittee Name: USDOE-BIG HILL STORAGE COMPLEX
Major/Minor Indicator: Minor

Issue Date: 12/29/2008
Effective Date: 02/01/2009
Expiration Date: 01/31/2014

**Permit**

*NPDES ID: TX0092827

**Permit Status**

*Permit Status: Admin Continued

Approved for Electronic DMR Submission: ☐ Yes

**Dates**

Original Issue Date: 01/17/1984
Issue Date: 12/29/2008
Effective Date: 02/01/2009
Expiration Date: 01/31/2014
Retirement Date:
Termination Date:

**Compliance Tracking Status:**

| Status | Start Date | End Date | Reason |
|---|---|---|---|
| On | 02/01/2009 | | System Changed Value |

***Permittees**

| Organizational Formal Name | Street | City | State | Zip |
|---|---|---|---|---|
| USDOE-BIG HILL STORAGE COMPLEX | 24784 BIG HILL ROAD | WINNIE | TX | 77665 |

**Major/Minor Status:**

Rating Code:

| Status | Start Date | End Date |
|---|---|---|
| Minor | 02/01/2009 | |

**RNC Status**

| Year | Quarter | RNC Status (Automatic) | RNC Status (Manual) | Corrected RNC Status (Manual) |
|---|---|---|---|---|
| 2014 | 2 | SNC DMR Non-Receipt Violation | | |
| 2014 | 1 | SNC DMR Non-Receipt Violation | | |
| 2013 | 4 | SNC DMR Non-Receipt Violation | | |
| 2013 | 3 | SNC DMR Non-Receipt Violation | | |
| 2013 | 2 | SNC DMR Non-Receipt Violation | | |
| 2013 | 1 | SNC DMR Non-Receipt Violation | | |
| 2012 | 4 | SNC DMR Non-Receipt Violation | | |
| 2012 | 3 | SNC DMR Non-Receipt Violation | | |
| 2012 | 2 | SNC DMR Non-Receipt Violation | | |
| 2012 | 1 | SNC DMR Non-Receipt Violation | | |
| 2011 | 4 | SNC DMR Non-Receipt Violation | | |
| 2011 | 3 | SNC DMR Non-Receipt Violation | | |
| 2011 | 2 | SNC DMR Non-Receipt Violation | | |
| 2011 | 1 | SNC DMR Non-Receipt Violation | | |
| 2010 | 4 | SNC DMR Non-Receipt Violation | | |
| 2010 | 3 | SNC DMR Non-Receipt Violation | | |
| 2010 | 2 | SNC DMR Non-Receipt Violation | | |
| 2010 | 1 | SNC DMR Non-Receipt Violation | | |
| 2009 | 4 | SNC DMR Non-Receipt Violation | | |
| 2009 | 3 | SNC DMR Non-Receipt Violation | | |
| 2009 | 2 | SNC DMR Non-Receipt Violation | | |
| 2009 | 1 | SNC DMR Non-Receipt Violation | | |

Integrated Compliance Information System NPDES

Reports Home
FE&C Help
Logout

Home : Search Permits : Edit Permit TX0092827 : History

Facilities | NPDES Permit | Compliance Monitoring | DMRs | Program Reports | NPDES Violations | Enforcement Actions

BASIC INFO PERMITTED FEATURES LIMIT SETS NARRATIVE CONDITIONS TRACKING EVENTS HISTORY

NPDES ID: TX0092827
Permit Type: NPDES Individual Permit
Permittee Name: USDOE-BIG HILL STORAGE COMPLEX
Major/Minor Indicator: Minor

Issue Date: 12/29/2008
Effective Date: 02/01/2009
Expiration Date: 01/31/2014

*Record 1 to 1*

| Permit Action | Effective Dates |
|---|---|
| Previous Version | 11/01/2003 - 01/31/2009 |

*Record 1 to 1*

View

Home | Help | Logout | FE&C | Reports

EPA U.S. Environmental Protection Agency

Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

NPDES Permit No. TX0092827

# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

U.S. Department of Energy
Strategic Petroleum Reserve
Project Management Office
900 E. Commerce Rd.
New Orleans, LA 70123

is authorized to discharge from a facility located approximately 4 miles south of State Highway 73 and approximately 9 miles southeast of Winnie, Jefferson County, Texas

to receiving waters named the Gulf of Mexico for outfall 001, the Intracoastal Waterway for outfalls 002 and 009 and the Spindletop Marsh for outfalls 003, 004, 005, 006, 007and 008

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on November 1, 2003

This permit and the authorization to discharge shall expire at midnight, October 31, 2008

Issued on September 26, 2003

Miguel I. Flores
Director
Water Quality Protection Division (6WQ)

Prepared by

Maria E. Okpala
Environmental Engineer
Permits Section (6WQ-PP)

## PART I - REQUIREMENTS FOR NPDES PERMITS

## SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

Outfall 001 (Final)

Discharge type: Intermittent

Latitude:29° 33' 56" N, Longitude: 94° 11' 52" W

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge brine from cavern depressuring, non-contact bearing cooling water, raw water pipeline pigging, and seal flush return flow water from outfall serial number 001 through a brine diffuser 3.5 miles offshore to the Gulf of Mexico. Such discharges shall be limited and monitored by the permittee as specified below:

**Final Effluent limits**

**Outfall 001 (Brine pipeline diffuser) - *intermittent discharge***

| Effluent Characteristics | Discharge Limitations kg/day (lbs/day) Daily Avg. | Other Units (specify) Daily Avg. | Daily Max. |
|---|---|---|---|
| Flow STORET: 50050 | N/A | Report, MGD | Report, MGD |
| Oil & Grease STORET: 00556 | N/A | 10 mg/l | 15 mg/l |
| TSS STORET: 00530 | N/A | Report, mg/l | Report, mg/l |
| TDS STORET: 70295 | N/A | Report, mg/l | Report, mg/l |
| pH (standard units) STORET:00400 | N/A | 6.0 (min.) | 9.0 (max.) |

| EFFLUENT CHARACTERISTIC | DISCHARGE MONITORING 30-DAY AVG MINIMUM | 7-DAY MINIMUM |
|---|---|---|
| Whole Effluent Toxicity Testing (7 Day Static Renewal) 1/ | | |
| Mysidopsis bahia | Report | Report |
| Menidia beryllina | Report | Report |

**Outfall 001 (Brine pipeline diffuser) - *intermittent discharge***

| PARAMETERS/STORET CODES | MONITORING REQUIREMENTS | |
|---|---|---|
| | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
| Flow STORET: 50050 | Continuous[1] | Record |
| Oil and Grease STORET: 00556 | 1/month[1] | Grab |
| TSS STORET: 00530 | 1/ month[1] | Grab |
| TDS STORET: 70295 | 1/ month[1] | Grab |
| pH (Standard Units) STORET:00400 | 1/month[1] | Grab |

| EFFLUENT CHARACTERISTIC | MONITORING REQUIREMENTS | |
|---|---|---|
| | FREQUENCY | TYPE |
| Whole Effluent Toxicity Testing (7 Day Static Renewal) 1/ | | |
| *Mysidopsis bahia* | 1/Quarter | 24-Hr. Composite |
| *Menidia beryllina* | 1/Quarter | 24-Hr. Composite |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from Outfall 001.

FOOTNOTES

1/ Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

[1] When discharging

## Permit LA0049492

| Permit Name | Version Nmbr | Curr. Major Minor Status | Issue Date | Effective Date | Expiration Date |
|---|---|---|---|---|---|
| LOOP LLC- Deepwater Port Complex | 0 | Major | 9/12/2008 | 10/1/2008 | 9/30/2013 |

### Version # 0

### Outfall 004A

#### 00940 Chloride [as Cl] / Location 1 / Season 0 / Base

| Limit Start Date | Limit End Date | Sample Type | Frequency of Analysi |
|---|---|---|---|
| 10/1/2008 | 9/30/2013 | GRAB | Monthly |

| Limit | C2 | C3 |
|---|---|---|
| Limit Unit Desc | Milligrams per Liter | Milligrams per Liter |
| Statistical Base | MO AVG | DAILY MX |
| Limit Value | | |
| **DMR Values** | C2 | C3 |
| 1/31/11 | NODI=C | NODI=C |
| 2/28/11 | NODI=C | NODI=C |
| 3/31/11 | NODI=C | NODI=C |
| 4/30/11 | NODI=C | NODI=C |
| 5/31/11 | NODI=C | NODI=C |
| 6/30/11 | NODI=C | NODI=C |
| 7/31/11 | NODI=C | NODI=C |
| 8/31/11 | NODI=C | NODI=C |
| 9/30/11 | 191500 | 191500 |
| 10/31/11 | NODI=C | NODI=C |
| 11/30/11 | NODI=C | NODI=C |
| 12/31/11 | NODI=C | NODI=C |
| 1/31/12 | NODI=C | NODI=C |
| 2/29/12 | NODI=C | NODI=C |
| 3/31/12 | NODI=C | NODI=C |
| 4/30/12 | 182500 | 182500 |
| 5/31/12 | 199000 | 199000 |
| 6/30/12 | 201250 | 210000 |
| 7/31/12 | NODI=C | NODI=C |
| 8/31/12 | NODI=C | NODI=C |
| 9/30/12 | NODI=C | NODI=C |
| 10/31/12 | NODI=C | NODI=C |
| 11/30/12 | NODI=C | NODI=C |
| 12/31/12 | NODI=C | NODI=C |
| 1/31/13 | NODI=C | NODI=C |
| 2/28/13 | NODI=C | NODI=C |
| 3/31/13 | NODI=C | NODI=C |
| 4/30/13 | NODI=C | NODI=C |
| 5/31/13 | NODI=C | NODI=C |
| 6/30/13 | 188500 | 188500 |
| 7/31/13 | 189500 | 189500 |
| 8/31/13 | 185750 | 186500 |
| 9/30/13 | 182500 | 187500 |

| | | |
|---|---|---|
| 10/31/13 | 180500 | 180500 |
| 11/30/13 | NODI=C | NODI=C |
| 12/31/13 | NODI=C | NODI=C |
| 1/31/14 | NODI=C | NODI=C |
| 2/28/14 | NODI=C | NODI=C |

## 70295 Solids, total dissolved / Location 1 / Season 0 / Base

| Limit Start Date | Limit End Date | Sample Type | Frequency of Analysi |
|---|---|---|---|
| 10/1/2008 | 9/30/2013 | GRAB | Weekly |

| Limit | C2 | C3 |
|---|---|---|
| Limit Unit Desc | Milligrams per Liter | Milligrams per Liter |
| Statistical Base | MO AVG | DAILY MX |
| Limit Value | | |
| **DMR Values** | **C2** | **C3** |
| 1/31/11 | NODI=C | NODI=C |
| 2/28/11 | NODI=C | NODI=C |
| 3/31/11 | NODI=C | NODI=C |
| 4/30/11 | NODI=C | NODI=C |
| 5/31/11 | NODI=C | NODI=C |
| 6/30/11 | NODI=C | NODI=C |
| 7/31/11 | NODI=C | NODI=C |
| 8/31/11 | NODI=C | NODI=C |
| 9/30/11 | 311500 | 311500 |
| 10/31/11 | NODI=C | NODI=C |
| 11/30/11 | NODI=C | NODI=C |
| 12/31/11 | NODI=C | NODI=C |
| 1/31/12 | NODI=C | NODI=C |
| 2/29/12 | NODI=C | NODI=C |
| 3/31/12 | NODI=C | NODI=C |
| 4/30/12 | 287900 | 304000 |
| 5/31/12 | 297167 | 318500 |
| 6/30/12 | 288500 | 295000 |
| 7/31/12 | NODI=C | NODI=C |
| 8/31/12 | NODI=C | NODI=C |
| 9/30/12 | NODI=C | NODI=C |
| 10/31/12 | NODI=C | NODI=C |
| 11/30/12 | NODI=C | NODI=C |
| 12/31/12 | NODI=C | NODI=C |
| 1/31/13 | NODI=C | NODI=C |
| 2/28/13 | NODI=C | NODI=C |
| 3/31/13 | NODI=C | NODI=C |
| 4/30/13 | NODI=C | NODI=C |
| 5/31/13 | NODI=C | NODI=C |
| 6/30/13 | 362450 | 433200 |
| 7/31/13 | 304533 | 317000 |
| 8/31/13 | 307314 | 314800 |
| 9/30/13 | 299650 | 309000 |
| 10/31/13 | 291700 | 295400 |
| 11/30/13 | NODI=C | NODI=C |
| 12/31/13 | NODI=C | NODI=C |
| 1/31/14 | NODI=C | NODI=C |
| 2/28/14 | NODI=C | NODI=C |