



02055563

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



DE DA ET CE ES DA

SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

RECEIVED JUL 20 2012 COGCC

Complete the Attachment Checklist

OP OGCC

1. OGCC Operator Number: 68710 4. Contact Name: Scott Patrick
2. Name of Operator: Peterson Energy Operating, Inc.
3. Address: 2154 West Eisenhower Boulevard City: Loveland State: CO Zip: 80537
5. API Number: 05- OGCC Facility ID Number: 332714
6. Well/Facility Name: Knowlton 7. Well/Facility Number: 64N91W / 10NWNW
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWNW, Sec. 10, T4N, R91W, 6 PM
9. County: Moffat #081 10. Field Name: Moffat - #55700
11. Federal, Indian or State Lease Number:

General Notice

CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)
CHANGE SPACING UNIT
CHANGE OF OPERATOR (prior to drilling):
CHANGE WELL NAME NUMBER
ABANDONED LOCATION:
NOTICE OF CONTINUED SHUT IN STATUS
SPUD DATE:
REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)
SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK
RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.

Technical Engineering/Environmental Notice

Notice of Intent
Report of Work Done Date Work Completed: 5/23/2012
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)
Intent to Recomplete (submit form 2)
Request to Vent or Flare
E&P Waste Disposal
Change Drilling Plans
Repair Well
Beneficial Reuse of E&P Waste
Gross Interval Changed?
Rule 502 variance requested
Status Update/Change of Remediation Plans
Casing/Cementing Program Change
Other: Hydrogen Sulfide Detected for Spills and Releases

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Scott Patrick Date: 7/20/2012 Email: scott.patrick@petersonenergy.com
Print Name: Scott Patrick Title: Petroleum Engineer

COGCC Approved: David Anderson Title: PE II Date: 7/30/2012

CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

RECEIVED JUL 20 2012 COGCC

1. OGCC Operator Number: 68710 API Number:
2. Name of Operator: Peterson Energy Operating, Inc. OGCC Facility ID # 332714
3. Well/Facility Name: Knowlton Well/Facility Number: 64N91W / 10N
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWNW, Sec. 10, T4N, R91W, 6 PM

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS

- 1. Facility Name: Knowlton
2. COGCC Facility Number: 332714
3. H2S concentration: 3200 ppm
4. Date sample or measurement was collected: 5/23/12
5. Type of measurement or analysis (e.g., gas analysis, meter measurement, or colorimetric tube): Gas Analysis
6. Description of sample point: The sample was collected from an active oil storage tank (#9753). An appropriate length of Teflon collection tubing with a 7 micron air filter was placed within one foot of the liquid level as per regulatory collection requirements for static conditions.
7. Absolute Open Flow Potential in cubic feet per day (CFPD) at the H2S source(s): 4-point flow test or an alternate method approved by the Director: There is no associated gas production, so the absolute open flow potential for this location would be 0 CFPD.
8. If flow is not open to the atmosphere, then state that the source is not flowing and include a description of the potential for atmospheric release and duration in which the container or gathering line would likely be opened for servicing operations: Storage tank #9753 is not open to the atmosphere and is not a flowing source. A release from the tank could occur when the thief hatch is opened to check the oil level or when oil samples are taken prior to transferring the oil to trucks.
9. Distance to the nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent. There is an unoccupied storage shed 450 ft uphill to the west and a residence that is 715 ft to the northwest.
10. Distance to the nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use: County Road 39 is 330 ft from the tank battery.

Six (6) additional measurements were taken outside of the tanks by the 3rd party testing company: two (2) on the catwalk between the tanks, two (2) at the base of the stairs between the tanks and two (2) inside the pump house. Weather indicated on the collector report showed that wind speed ranged from no breeze to 2-3 mph. These additional samples all reported H2S levels below the reading/lower detection limit of 0.007 ppm. As a result, a Public Protection Plan is not required by the COGCC.

Peterson Energy Management, Inc. has a Company Policy for Hydrogen Sulfide (H2S) Specific Training. Employees assigned to work areas where H2S is present will receive appropriate training and information. This will address the characteristics and health effects of H2S as well as safe work practices when working in an area where H2S may be present.

Per BLM Onshore Order 6.III.D.2, a 5-foot barbed wire fence is being installed around the storage tanks. Appropriate H2S signage has also been installed at the facility along with a permanent wind sock. A chemical treatment, including a scavenger and biocide, will be used to reduce current H2S levels and to kill bacteria, preventing further H2S accumulation. The facility will be monitored to determine if a regular treatment will need to be performed.

Andrews, David

From: Andrews, David
Sent: Monday, July 16, 2012 3:17 PM
To: 'Scott Patrick'
Cc: Ellsworth, Stuart
Subject: RE: H2S at Knowlton Tank Batteries near Hamilton, CO

Scott,

The existing samples will suffice, and a Public Protection Plan will not be required by COGCC. However, if BLM requires a Public Protection Plan, then submit a copy with your forthcoming Sundry Notice. Previous sampling and analysis for the tank and other on-site sample locations should be summarized on the Sundry Notice.

Please include the information requested in my 7/9/2012 email below (except for additional sample results, as discussed above) with your forthcoming Sundry Notice.

Thanks,

Dave

From: Scott Patrick [mailto:Scott.Patrick@petersonenergy.com]
Sent: Monday, July 16, 2012 2:44 PM
To: Andrews, David
Cc: Ellsworth, Stuart
Subject: RE: H2S at Knowlton Tank Batteries near Hamilton, CO

Hi David,

The samples collected on the catwalk and on the ground near the tanks were all within 50' of the tanks.

Thanks,

Scott Patrick

Petroleum Engineer
Peterson Energy Management, Inc.
2154 West Eisenhower Boulevard
Loveland, CO 80537

Mobile: 970-286-5574
scott.patrick@petersonenergy.com

From: Andrews, David [mailto:David.Andrews@state.co.us]
Sent: Monday, July 09, 2012 5:20 PM
To: Scott Patrick
Cc: Ellsworth, Stuart
Subject: RE: H2S at Knowlton Tank Batteries near Hamilton, CO

Scott,

Yes, please verify the distances.

Thanks,

Dave

From: Scott Patrick [<mailto:Scott.Patrick@petersonenergy.com>]
Sent: Monday, July 09, 2012 5:12 PM
To: Andrews, David
Cc: Ellsworth, Stuart
Subject: RE: H2S at Knowlton Tank Batteries near Hamilton, CO

From I know, it's less than 50', but I'd have to verify that.

Thanks,

Scott

From: Andrews, David [<mailto:David.Andrews@state.co.us>]
Sent: Monday, July 09, 2012 5:02 PM
To: Scott Patrick
Cc: Ellsworth, Stuart
Subject: RE: H2S at Knowlton Tank Batteries near Hamilton, CO

Scott,

Were they 50' or less from the tank?

Thanks,

Dave

From: Scott Patrick [<mailto:Scott.Patrick@petersonenergy.com>]
Sent: Monday, July 09, 2012 5:00 PM
To: Andrews, David
Cc: Ellsworth, Stuart
Subject: RE: H2S at Knowlton Tank Batteries near Hamilton, CO

Dave,

Six other gas samples around the facility were also tested (on the ground, in the pump house and on the catwalk) in addition to the storage tanks. All these samples indicated no detectable levels of H2S. Would these measurements suffice for determining if a Public Protection Plan is required?

Thanks,

Scott Patrick

Petroleum Engineer
Peterson Energy Management, Inc.
2154 West Eisenhower Boulevard
Loveland, CO 80537

Mobile: 970-286-5574
scott.patrick@petersonenergy.com

From: Andrews, David [<mailto:David.Andrews@state.co.us>]
Sent: Monday, July 09, 2012 4:11 PM
To: Scott Patrick
Cc: Ellsworth, Stuart
Subject: RE: H2S at Knowlton Tank Batteries near Hamilton, CO

Scott,

Per our telephone conversation earlier today, I understand that the detection shown below was a laboratory analysis of a gas sample collected from the static headspace of a tank. You indicated that the production wells produce oil only (no gas). COGCC's Hydrogen Sulfide Policy requires a Sundry Notice with the following information:

1. Well or Facility name
2. API Number or COGCC Facility Number
3. H₂S concentration in ppm
4. Date sample or measurement was collected
5. Type of measurement or analysis (e.g., gas analysis, meter measurement, or colorimetric tube)
6. Description of sample point
7. Absolute Open Flow Potential in cubic feet per day (CFPD) at the H₂S source(s): 4-point flow test or an alternate method approved by the Director.
8. If flow is not open to the atmosphere, then state that the source is not flowing and include a description of the potential for atmospheric release and duration in which the container or gathering line would likely be opened for servicing operations.
9. Distance to the nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent.
10. Distance to the nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use.

With regard to a Radius of Exposure calculation, the source is static, so the flow (Q) component of the equation is zero, and therefore, the calculated radius would be zero. Considering the relatively high concentration detected at the tank, please take measurements (meter, colorimetric tube, or gas analysis) from at least three locations 50 feet away from the tank, including one measurement in a down-wind direction to evaluate whether or not a Public Protection Plan should be prepared.

Does Peterson Energy Operating have an OSHA Hydrogen Sulfide Plan for this facility or corporate policies regarding employee right to know that involve training for your employees and contractors? Please include a brief description of these plans or policies on the Sundry Notice.

Please include a description of any planned or ongoing mitigation at the facility (e.g., biocide treatment and re-testing), and include a summary of additional safety measures implemented at the site, including signage and fencing.

As indicated on the Hydrogen Sulfide Policy, Peterson Energy Operating has 45 days to submit the Sundry Notice. Please email it directly to my attention. Do not send a duplicate hard copy to our Denver or Rifle offices.

Thanks,

David D. Andrews, P.E., P.G.
Engineering Supervisor - Western Colorado

State of Colorado
Oil and Gas Conservation Commission
707 Wapiti Court, Suite 204
Rifle, Colorado 81650
Office Phone: (970) 625-2497 Ext. 1
Cell Phone: (970) 456-5262
Fax: (970) 625-5682
E-mail: David.Andrews@state.co.us
Website: <http://www.colorado.gov/cogcc>

From: Andrews, David
Sent: Monday, July 09, 2012 9:23 AM
To: 'Scott Patrick'
Cc: Ellsworth, Stuart
Subject: RE: H2S at Knowlton Tank Batteries near Hamilton, CO
Importance: High

Scott,

Was this detection from a field instrument (meter), a colorimetric tube, or a gas analysis? Was the sample taken from a gas stream or the static headspace of a tank? Was the location at Peterson's injection well (Knowlton #13, API No. 081-05197) or one of the nearby producing wells? Has Peterson prepared and implemented any type of safety plan?

Please review the attached policy.

Thanks,

David D. Andrews, P.E., P.G.
Engineering Supervisor - Western Colorado

State of Colorado
Oil and Gas Conservation Commission
707 Wapiti Court, Suite 204
Rifle, Colorado 81650
Office Phone: (970) 625-2497 Ext. 1
Cell Phone: (970) 456-5262
Fax: (970) 625-5682
E-mail: David.Andrews@state.co.us
Website: <http://www.colorado.gov/cogcc>

From: Scott Patrick [<mailto:Scott.Patrick@petersonenergy.com>]
Sent: Friday, July 06, 2012 11:49 AM
To: Andrews, David
Subject: H2S at Knowlton Tank Batteries near Hamilton, CO

Hi David,

The Northwest Colorado Notification Policy said to contact you regarding any H2S detection. A 3rd party test of the tank batteries at the Knowlton Lease near Hamilton, CO showed elevated levels of H2S (up to 3200 ppm). Please feel free to e-mail me or call me when you get back into the office and I can submit any additional forms and notification as necessary.

Thanks,

Scott Patrick

Petroleum Engineer
Peterson Energy Management, Inc.
2154 West Eisenhower Boulevard
Loveland, CO 80537

Office: 970-669-7411
Mobile: 970-286-5574
scott.patrick@petersonenergy.com