



40-9091

September 21, 2016

Mr. Mark Rogaczewski
District III Supervisor
Wyoming Department of Environmental Quality - Land Quality Division
2100 West 5th Street
Sheridan, WY 82801

Attn: Document Control Desk
Director
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Re: Strata Energy Inc. Ross ISR Project
Response to Comments on Quarterly Report required under WDEQ-LQD Permit to Mine No. 802
and USNRC Materials License SUA-1601
Second Quarter 2016

Dear Mr. Rogaczewski and NRC Director:

By letter dated July 22, 2016, WDEQ-LQD District 3 provided comments on the Second Quarter 2016 report. Attached is Strata's response to those comments, changes to the report, and a new certification.

If you have any questions regarding the provided information, please contact me at 307-467-5995 or by email at mgriffin@stratawyo.com.

Sincerely,
STRATA ENERGY INC.

A handwritten signature in black ink, appearing to read "M. Griffin", written over a faint circular stamp.

Mike Griffin
Vice President of Permitting, Regulatory and Environmental Compliance

Attachments: Response to comments on Second Quarter 2016 Report – 1 copy to NRC, 2 copies to WDEQ-LQD

NM5520



**Response to Comments on Second Quarter 2016 Report
Permit to Mine #802**

Comment: *In Section 4 of the report, Strata states that several wells failed MITs, were repaired, and then passed MITs. Section 5 of the report (Well Repair and Plugging) must provide an explanation of how wells that failed MITs were repaired. Please provide this information.*

- MU1-OZ288 - Failed 1st Attempt, Passed 2nd Attempt; it appears that the inflators didn't seal properly on the first try and/or the inside of the well casing was dirty. The text in Section 4 described this (i.e., resetting the bottom packer). No repair was required to pass MIT and no change to the report was necessary to address this comment.

Seven wells failed the initial test and were repaired with sleeves:

- MU2-DM18 - Set sleeve (3" x 10' Blanks) @ 555' – 565' to cover the 560' joint
- OW1B60 - Set sleeve (3" x 10' Blanks) @ 435' – 445' to cover the 440' joint
- MU2-DM7 - Set sleeve (3" x 10' Blanks) @ 75' – 85' to cover the 80' joint
- MU2-OZ21A - Set sleeve (3" x 10' Blanks) @ 495' – 505' to cover the 500' joint
- MU2-DM10 - Set sleeve (3" x 10' Blanks) @ 595' – 625' to cover the 600' joint
- MU2-DM13 - Set sleeve (3" x 10' Blanks) @ 255' – 265' to cover the 260' joint
- MU2-DM15 - Set sleeve (3" x 10' Blanks) @ 575' – 585' to cover the 580' joint

Section 5 (page 2) of the report has been revised and is attached.

Comment 2: *Even though low pressures are not necessarily a compliance issue for Strata, Strata should provide an explanation for the low pressures shown in Table 2 from Header Houses 1, 2 and 3 between June 2 and June 6. Also, in Table 3, Strata shows two periods in April and June of zero bleed (zero fluid injection and 0 production pumping). Was this due to repairs in the CPP following a spill?*

In Table 2 Daily Maximum Injection Pressure, the low pressures shown between June 2 and June 6 are the result of the CPP being shut down after the failure of a pipeline¹. There was no circulation at the time so pressure instrumentation recorded residual pressure left in the lines. In Table 3, the periods showing no bleed were at the same time as the low pressure readings in Table 2 and were due to the

¹ The WDEQ-LQD was notified of this pipeline failure and the resultant plant shutdown in an email from Mr. Nikolas Roche, Strata Radiation Safety Officer to Mr. Dave Schellinger, WDEQ-LQD Permit Coordinator at 0932 MDT on June 2, 2016.



repairs taking place in the CPP; there was no circulation during those times. This was noted in footnotes 1 and 2 to Table 3, so no revision to the report is necessary in response to this comment.

Comment 3: Table 3 shows excessive bleed over much of the last reporting quarter. The average bleed, 2.2%, included the 0% bleed occurrences. Was 0% an actual measurement, or was it entered as zero because no active pumping was taking place (including it skews the resulting average by negative 0.2%)?

As noted above, the 0% bleed occurrences are entered values that replaced phantom readings during the times when there was no active pumping taking place during plant repairs. This was explained in the footnotes at the end of Table 3. No change to the report was necessary in response to this comment.

The average bleed appears excessive in Table 3 because it is a measurement of bleed diverted from the injection manifold in the CPP and does not take into account the volume of liquid that is reinjected into the formation through bicarbonate injection. The values in Table 3 are "total" bleed and are a measurement of bleed as a metered value (i.e., flowmeter at the bleed manifold) as required in WDEQ/LQD Noncoal Chapter 11, Sections 14(a)(ii) and 15 (b). The actual or net bleed after taking bicarbonate injection into consideration was 1.28 percent for the second quarter.

The format and data requirements for quarterly reports were prepared in consultation with the LQD immediately after Permit to Mine #802 was approved in late 2012/early 2013. If the LQD prefers that net bleed be reported in Table 3, please inform the undersigned and those changes will be made.



CERTIFICATION

This certification is required by WDEQ-LQD Non-Coal Rules and Regulations Chapter 11. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

A handwritten signature in black ink, appearing to read "MLG", is written over a horizontal line.

Michael L. Griffin

Vice President of Permitting, Regulatory, and Environmental Compliance
Strata Energy Inc.

Section 18 T53N R67W, and 6 wells were installed in Section 7 T53N R67W. Well completion details are available at the mine site.

1 Mechanical Integrity Testing

30 MU1 wells located in Section 18 T53N R67W passed mechanical integrity test (MIT) during the period. Included in these 30 wells is OZ 288 which failed the initial MIT but passed after resetting the bottom packer. Also included are OZ 81 and 281 which were worked over to enhance flow and passed a second MIT. OZ 318 was repaired and passed the subsequent MIT.

89 MU2 baseline/monitor wells passed the MIT in the second quarter. 37 of the wells are located in Section 18 T53N R67W, 28 wells are located in Section 13 T53N R68W, 13 wells are located in Section 07 T53N R67W, and 11 wells are located in Section 12 T53N R68W. Three wells (OW1B60-1, OW1B57-1, and OW1B58-1) were part of the Ross Regional Monitor wells. OW1B60-1 failed the initial test, was repaired and passed the subsequent test. Seven wells (DM 18, DM 7, OZ 21A, DM 10, DM 13, and DM 15) failed the initial test, were repaired, and passed the subsequent test. Five wells (OZ 10, DM 10, OZ 4, DM 4, and DM11) were re-tested as a check after the initial pump test. All wells passed the MIT again. MIT results are included in Appendix A.

2 Well Repair and Plugging Activities

Plugging and abandonment of cased wells is performed in accordance with Permit to Mine No. 802, Mine Plan Section 5.11 and Reclamation Plan Addendum RP-1 and in accordance with WDEQ-LQD Noncoal Rules and Regulations Chapter 8 and Wyoming Statute 35-11-404. Well abandonment reports are submitted in the WDEQ-LQD Annual Report as required by Permit to Mine No. 802.

19 MU 2 wells were abandoned in the second quarter with high solids bentonite grout. 15 of the wells were drilled and abandoned (D & A) planned mining holes. 2 wells (12-18 DM and 12-18 OZ) were Ross Regional wells and 2 wells (OZ 17 and PM 1) were planned MU 2 baseline/monitor wells. All 18 holes are located in Section 18 T53N R67W and 1 hole, OZ 17 is located in Section 12 T53N R68W. Seven wells failed MIT, were repaired by installing sleeves, and subsequently passed MIT.

32 Historic down gradient MU2 holes located in Section 18 T53N R67W were re-entered and abandoned with high solids bentonite grout during the second quarter.

3 Water Quality of Injected Fluids

A typical lixiviant solution is provided in Table MP.4-2 of the Mine Plan with representative concentration ranges that could be found in the lixiviant. If changes occur to the ranges, Strata committed to updating the table in the annual report. Additionally, WDEQ-LQD Chapter 11, Section 14(a)(ii)(A) Non Coal Rules and Regulations requires that the nature of the injection fluids be monitored at least monthly to yield representative data on the characteristics of the fluid and Section 15(b)(i) requires that it is reported in the Quarterly Reports.

Table 1 depicts the injection fluid composition for the period based on a grab sample collected each month.