



JOHN BEL EDWARDS
GOVERNOR

State of Louisiana
DEPARTMENT OF NATURAL
RESOURCES
OFFICE OF CONSERVATION

THOMAS F. HARRIS
SECRETARY

RICHARD P. IEYOUB
COMMISSIONER OF CONSERVATION

January 19, 2023

Joshua Bradley
Eagle US 2, LLC (E208)
1300 PPG Drive
Westlake, LA 70669

Re: PPG Well No. 006-X, SN 57788 (Cavern Code No. 10-01-05);
PPG Well No. 006-Y, SN 58711 (Cavern Code No. 10-01-05);
PPG Well No. 006-Z, SN 971287 (Cavern Code No. 10-01-05);
PPG Well No. 007A, SN 67269 (Cavern Code No. 10-01-06);
PPG Well No. 007B, SN 67270 (Cavern Code No. 10-01-06);
PPG Well No. 007C, SN 971288 (Cavern Code No. 10-01-06)
Sulphur Mines Salt Dome (8759), Calcasieu Parish, Louisiana

******* FIRST SUPPLEMENT TO COMPLIANCE ORDER NO. IMD 2022-027 *******

Dear Mr. Bradley:

This First Supplement to Compliance Order is issued under the general authority of the Minerals, Oil and Gas and Environmental Quality Law, La. R.S. 30:1 *et seq*, and under the specific authority set forth in La. R.S. 30:6(8), 18.

FINDINGS OF FACT

The Office of Conservation has determined that Eagle US 2, LLC (“Eagle”) has violated the Conservation Law and regulations thereunder, specifically Statewide Order No. 29-M-3 (Subpart 5 of LAC 43:XVII.Chapter 33), in the following particulars.

1. That Eagle is the current operator-of-record for the following cavern wells at the Sulphur Mines salt dome facility:

SERIAL NUMBER	WELL NAME/NO.	CURRENT STATUS	STATUS DATE
57788	PPG Well No. 006-X	Inactive	February 19, 2015
58711	PPG Well No. 006-Y	Dry & Plugged	July 13, 2017
971287	PPG Well No. 006-Z	Dry & Plugged	July 19, 2017
67269	PPG Well No. 007A	Dry & Plugged	October 23, 2018
67270	PPG Well No. 007B	Inactive	February 19, 2015
971288	PPG Well No. 007C	Dry & Plugged	October 23, 2018

2. That beginning on December 28, 2021, data show that caverns PPG Well No. 006-X (“PPG 006-X”) and PPG Well No. 007B (“PPG 007B”) experienced a sustained pressure decrease. Eagle failed to provide the twenty-four (24) hour notification and five (5) day written notification to the Injection and Mining Division of the Office of Conservation (“IMD”) of the sustained pressure decrease, violating the reporting requirements mandated in LAC 43:XVII.3309.I.8.
3. That IMD issued Compliance Order No. IMD 2022-027 on April 27, 2022 in response to Findings of Facts Nos. 1 and 2, requiring payment of Civil Penalty and the submission of monitoring and investigative plans.
4. That IMD received Mechanical Integrity Test (“MIT”) reports on May 31, 2022 for PPG 006-X and PPG 007B. Both caverns passed nitrogen-brine MITs, therefore demonstrating that both caverns had regained mechanical integrity.
5. That Eagle responded to the Orders, paying the Civil Penalty and submitting monitoring and investigative plans in the correspondence titled “Response to Compliance Order No. IMD 2022-027”, which was received by IMD on June 24, 2022.
6. That Eagle notified IMD on November 8, 2022, that PPG 7B was experiencing a decreasing pressure trend, indicating a potential loss of mechanical integrity. Eagle proposed investigative techniques, including a MIT,
7. That a meeting was held on November 10, 2022, with the cavern operators on Sulphur Mines dome to discuss enhanced monitoring plan changes as well as the ability of the operators to acquire available 3-D seismic data on and about the salt dome.
8. That Eagle provided an update to IMD on January 5, 2023, including data collected from PPG 007B which indicated that the cavern continued to lack mechanical integrity and that Eagle was injecting brine into the cavern to maintain positive pressure on the cavern. Eagle proposed additional investigative techniques including running density and other investigative wireline logs in PPG 007B.
9. That Eagle notified IMD on January 11, 2023, that during the period of time that Eagle deployed a sonar investigative tool, they did not inject brine and were able to calculate that the leak rate in the cavern had increased from approximately 2 psi/hour on January 5th, 2023, to 6 psi/hour on January 11, 2023. Eagle also stated during this time frame that the rate of brine injection into the cavern was increased to maintain positive pressure on the cavern.
10. That Eagle provided an update to IMD on January 13, 2023, and stated that the rate of brine injection to maintain positive pressure on PPG 007B had further increased. Additionally, Eagle proposed certain investigative and monitoring techniques at or about the site of PPG 007B.
11. That Eagle notified IMD on January 13, 2023, that small, localized bubbling had been discovered around the plugged Cavern 7 wellbore PPG Well No. 007A (“PPG 007A”).

ORDERS

Under the statutory authority cited above, and given the apparent loss of mechanical integrity that PPG 007B is again experiencing, Eagle is hereby ordered to comply with the following:

1. Eagle is ordered as soon as possible but not later than thirty (30) days to submit the following work plans:
 - a. A plan to investigate any impacts to the Underground Source of Drinking Water (“USDW”) and surrounding surface waters,
 - b. Safety and emergency response plans including but not limited to incident procedures for timely verbal and written notification to all adjacent and potentially impacted landowners, dome operators and applicable local, state and federal agencies.
 - c. A plan to conduct a geomechanical analysis of the salt dome,
 - d. A plan to generate a failure analysis report in the event of cavern destabilization,
 - e. A plan to acquire, process, and evaluate 3-D seismic data covering the area of investigation, and
 - f. A plan to install microseismic monitoring in and about the area of investigation including an early detection and advance warning notification system.
2. Eagle is ordered as soon as possible but not later than thirty (30) days to update the existing subsidence monitoring plan to incorporate enhanced measures to monitor historical and current subsidence trends on the dome.
3. Eagle is ordered as soon as possible but within seven (7) days to collect samples at all observed oil, gas, or brine expressions at the surface. Eagle must expeditiously perform constituent sample analyses on all collected samples.
4. Eagle is ordered as soon as possible but within seven (7) days to request access from Yellow Rock to collect oil samples from the tubing and tubing annulus of Serial Number 110159, Fee SWD No. S-7. Eagle must perform an isotopic and constituent analysis on these samples and compare them to a similar analysis for the oil collected from PPG 007B.
5. The Commissioner of Conservation reserves the right to require further investigative and remediation actions as may be deemed necessary.
6. The Commissioner reserves the right, pursuant to La R.S. 30:1 et seq., more specifically La R.S. 30:18(A)(6), to levy additional civil penalties or other sanctions as provided by law.

All documents (written responses, forms, logs, pictures, diagrams, etc.) prepared by Eagle in response to this Compliance Order shall be submitted to Stephen H. Lee, Director of the Injection and Mining Division. Please reference the order number (IMD 2022-027 - Supplemental Order) in documents submitted.

Failure to comply with this Compliance Order shall subject Eagle to additional civil penalties of not more than thirty-two thousand, five hundred dollars (\$32,500.00) per day for each day of continuing violation and for each individual violation as provided in RS 30:18 in addition to any other appropriate regulatory sanctions as provided by law.

Within seven (7) days of receipt of this Compliance Order, Eagle may make a written request for an informal conference with the Commissioner and Conservation staff at no charge. Within twenty (20) days of receipt of this Compliance Order, Eagle may make a written request for a public hearing pursuant to La R.S. 30:6(G) and 8. A public hearing request must be accompanied by a check or money order in the non-refundable amount of seven hundred fifty-five dollars (\$755.00) as provided by Statewide Order 29-R (Chapter 7 of LAC 43:XIX), or the request for a hearing will not be considered. If a public hearing is requested, a request for an informal conference will be denied.

Should Eagle have any questions concerning this Compliance Order, please contact Corey Shircliff at (225) 342-5586 or by e-mail at Corey.Shircliff@la.gov.

ISSUED THIS DATE PURSUANT TO LAW.



RICHARD P. IEYOUB

COMMISSIONER OF CONSERVATION

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CERTIFIED MAIL
RETURN RECEIPT REQUIRED
ARTICLE NO.