

NOTICE OF VIOLATION

August 17, 2020

NOV: V20-0231 WellSTAR Compliance ID: 12205254

Mr. Joseph Cobb Berry Petroleum Company, LLC 11117 River Run Blvd Bakersfield, CA 93311

VIOLATION: SURFACE EXPRESSION FIELD: Midway Sunset; LEASE: Southwestern; SEC. 2 T.31S R.22E DATE OF SURFACE EXPRESSION: August 15, 2020 INSPECTOR: Allan Koch

Reference: Public Resources Code (PRC) section 3106, subdivision (a); California Code of Regulations (CCR), title 14, sections 1724.11, 1724.6, 1724.7, and 1724.10

Dear Mr. Cobb:

On August 15, 2020, Berry Petroleum Company, LLC (Berry) reported a surface expression that occurred on the "Southwestern" lease at 35.25438, -119.5824 within Section 2 T31S/R22E in the Midway Sunset Oilfield to both the Geologic Energy Management Division (CalGEM) and California Governor's Office of Emergency Services (CalOES) OES # 20-4392 (Exhibit A). This surface expression is a violation of, at least, CCR section 1724.11, subdivision (a).

On August 15, 2020, CalGEM staff visited the site (Exhibit B). The surface expression at 35.25438, -119.5824 within Section 2 T31S/R22E in the Midway Sunset Oilfield is a violation and needs to be stopped.

All surface expressions are violations and Berry must stop the continued flow of all expressions and work to ensure the absence of reoccurrences. As such, the Acting State Oil and Gas Supervisor requires Berry to perform the following required actions to begin to address the occurrence of the surface expression at the "Southwestern" lease at 35.25438, -119.5824 within Section 2 T31S/R22E in the Midway Sunset Oilfield:

1. Meet with the Division within 30 days of the date of this letter to present a root cause analysis of the surface expression, diagnostic testing performed, and corrective actions taken to prevent future surface expressions.

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> Per CCR section 1724.11 subdivision (d), immediately implement a minimum 300 feet steam restriction radius around the August 15, 2020 surface expression. If the surface expression continues to flow for more than five days, then the operator shall immediately implement a minimum 600 feet steam restriction radius around the surface expression.

Furthermore, per CCR section 1724.11 subdivision (d), if the surface expression(s) continue to flow for more than 10 days, then the Division has the authority to expand the radius around the surface expression within which injection shall cease. The Division will determine the expanded radius based on consideration of the flow rate of the surface expression, geologic factors, and operational parameters.

- 3. Place prominent "Danger" or "Warnings" near (as safety dictates) the surface expression and restrict access to the area until the surface expression has stopped flowing and the area deemed safe for reentry by a professional engineer licensed under Chapter 7 of Division 3 of the California Business and Professions Code, as per CCR section 1724.11 subdivision (i).
- 4. Incorporate the "Southwestern" lease (35.25438, -119.5824) event within a Surface Expression Monitoring & Prevention Plan, for review and approval by the Division by September 17, 2020. At a minimum, per CCR section 1724.11 subdivision (b)(1), the plan shall include the following:

(A) A subsurface injection-production mass balancing surveillance system utilizing a continuous tilt meter array or other ground monitoring system approved by the Division; or implementation of a real-time pressure/flow monitoring system that will give adequate warning to prevent surface expressions.

(B) A map of the project area with all surface expressions, including cracks, fissures, and sink holes related to underground injection, and containment measures prominently marked. A current map of these features shall be provided to the Division and shall be updated as these features are discovered, installed, or changed.

(C) Protocols for restriction of access to areas where there are surface expressions or surface expression containment measures.

(D) Training, including safety measures and identification of possible hazards, for field personnel working in areas where there are surface expressions or where surface expressions may occur.

As indicated above, the occurrence of a surface expression is a violation of CCR section 1724.11, subdivision (a). In addition to any civil penalties that may issue for the occurrences of surface expressions since this prohibition went into effect on April 1,

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2019, failure to follow the above requirements, and remedy the current ongoing violations, may result in an additional Notice of Violation and/or enforcement actions. Such enforcement actions could include the issuance of a civil penalty and/or a remedial work order pursuant to PRC sections 3236.5 and/or 3224, respectively.

If you have any questions, please call the Acting District Deputy, Chris Jones at (661) 322-4031.

Sincerely,

DocuSigned by: Christepher of Jones

Chris Jones Acting District Deputy, Inland District

Enclosure(s)

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Exhibit A

CAL-OES Report 20-4392

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Exhibit B

Location of the Surface Expression

