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Matthew Lepore, Director
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

RE: RWSU – Rule 502.b Variance Extension Letter for Rule 1101.e

Dear Director Lepore,

Chevron received approval of a flowline variance on January 29, 2016, which was issued for a period of one year and could be extended on an annual basis for up to four years in the Director's discretion. Chevron submits the following information and requests a one-year extension of the flowline variance for the Rangely, Skinner Ridge and Wilson Creek Fields.

For 2016, there were no spills in Chevron's Skinner Ridge and Wilson Creek facilities. While there were some spills in Rangely, the table below demonstrates that the Rangely oil spill rate of 10 bbls/MM was less than half of the Colorado overall-operator results of 27 bbls/MM. The Rangely water spill rate of 45 bbls/MM was also well below the Colorado overall-operator result of 68 bbls/MM. Chevron achieved these favorable results in Rangely while handling water in both the production system and injection system, as compared with most operators in Colorado who handle water only in their production system.

	Total Colorado Oil Spill Rate	Total RWSU Oil Spill Rate
Year	Bbls/ MM	Bbls/ MM
2010	99	0
2011	83	3
2012	91	0
2013	60	0
2014	26	1
2015	12	0.4
2016	27	10

	Total Colorado Water Spill Rate	Total RWSU Water Spill Rate
Year	Bbls/ MM	Bbls/ MM
2010	93	37
2011	98	57
2012	44	26
2013	44	17
2014	53	28
2015	85	21
2016	68	45

While Chevron experienced an increase in the Rangely oil and water spill rates from the previous year, upgrades being made to facilities and systems are anticipated to result in significant improvements targeted at the areas of highest risk. The releases by line type in 2016 are summarized in the following table:

Release Type	Number	Volume Oil	Volume Water
		BBLs	BBLs
Spool on Location	9	0.0	2722.1
Spool at Trunk line	4	0.0	213.6
Water injection Lines	7	0.5	637.0
Production Flowlines	4	32.9	296.1
Non- Flowline*	7	0.8	486.2
TOTAL	31	34.2	4354.9

*Non-Flowline releases includes:
2 - cellars overflowing after heavy rain with water and oil sheen
2 - spills while abandoning lines
3 - Process facility

Efforts to improve spill performance in 2016 (completed) and 2017 (planned) include the following:

2016 Completed Work

- **Spools on Location - CO2 and Water Injection System:** 30 risers replaced.
- **Rangely Oil Gathering System Replacement:** Continue 5-year, $55MM project to replace Chevron Pipeline (CPL) Oil Gathering System.
  - The low pressure separation system for 12 facilities has been centralized
  - Approximately 11 miles of CPL Oil Gathering System has been removed from service and abandoned
- **Cathodic Protection System:** Cathodic protection survey completed for the entire field
- **Monitoring System:** End device testing on monitoring systems
- **Abandonment Activities:**
  - 9 produced water tanks removed from service
  - Over 20 low pressure vessels along with 9 +/- miles of surface low pressure gas gathering lines removed from service
- **Line Replacements:**
  - Replaced 11,700 feet of production flowlines (3" and 4") with 10,000 feet being in environmentally sensitive areas in close proximity to the White River
  - Replaced 3,100 feet of water injection laterals (3")
  - Replaced over 10,000 feet of produced fluid gathering lines (between 10" and 18")
- **Producing Well Flowline Hydro-testing:** Tested 20% of producing well flowlines from the wells to the collection stations. Issues were identified in 10% of hydro-tests and Chevron repaired or replaced these lines. NOTE: Chevron's internal standards require testing at a lower frequency but higher pressure than the COGCC rule.
- **Operator Training:** Continued operator training efforts to reduce spills. NOTE: No human error caused spills.
- **Steel Encasement:** Chevron reinforced fiberglass line with steel encasement in a wash area that experienced erosion.

2017 and 2018 Planned Work

- **Spools on Location - CO2 and Water Injection System:** Over the course of 2017 and 2018, Chevron will complete its program to replace Corvel-lined spool pieces across location on all of its active injectors. These Corvel-lined spools were the source of 70.4% of all of Chevron's flowline-related water spills, by volume, in Rangely in 2016.
- **Rangely Oil Gathering System Replacement:** Complete 5-year, $55MM project to replace Chevron Pipeline Oil Gathering System (2017)
    - Cease utilization of and remove from service the remaining 17 miles of CPL Oil Gathering System
- **Cathodic Protection System:** Replace 19 Cathodic Protection System ground beds (2017 & 2018)
- **Monitoring System:**
    - Continue end device testing on monitoring systems
    - Upgrade siphon monitoring system
- **Abandonment Activities:**
    - Remove from service 9 produced water tanks during 2017
    - Remove from service 21 low pressure vessels along with 15 miles of surface low pressure gas gathering lines
- **Producing Well Flowline Hydro-testing:** Continue hydro-testing program to test 20% of all flowlines each year on producing wells, per the Chevron testing standards. Tests are completed from the wellhead to the collection station.
- **Line Replacement:** Continue to evaluate and prioritize critical line replacements and execute as deemed appropriate.
- **Operator Training:** Continued operator training efforts to reduce spills.

While Chevron outperformed industry spill rates during 2016, Chevron strives to achieve continuous performance improvement. The programs described above are intended to achieve this result. The variance allows Chevron to continue focusing its efforts on replacement of higher risk lines and on more proactive and advanced technology activities such as using guided wave radar to test risers, and using ultrasonic thickness testing.

Summary

As the historical data shows, Chevron's performance exceeds industry performance within the State. Focused efforts are planned for 2017 and 2018 to minimize leak volumes.

The current COGCC Rule 1101.e would result in a significant increase in workload that would expose our people to more risks and additional spills that would require cleanup. Additionally, the increase in resources to perform the amount of testing would be significant and negatively impact Chevron's already rigorous inspection program. This may lead to an increase of spills and result in significant downtime and lost production to our operations not to mention additional risk of impacting the environment.

Accordingly, Chevron respectfully requests a written extension of the previously approved variance request that validates the current Rangely Weber Sand Unit Asset Integrity Program for all lines in the field in lieu of pressure testing annually, and confirms the effectiveness of the current documentation and notification processes to the COGCC.

Let me know if you have any questions, and please feel free to contact me at (432) 687-7209 or tim.r.popp@chevron.com.

Regards,

Tim Popp

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Rangely Technical Team Supervisor

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Enclosures (3)