

ALBERTA ENERGY REGULATOR

PROCEEDING ID 403

IN THE MATTER OF the *Responsible Energy Development Act* and the Regulations and Rules made thereunder; and

IN THE MATTER OF Alberta Energy Regulator Application Nos. 1614037, 1784753, 1928016, 1809825, 30608934, 30602032, 1928017, 30608918 and 1928430 made by Pure Environmental Waste Management Ltd. under the *Oil and Gas Conservation Act*, *Public Lands Act*, *Pipeline Act*, and the respective regulations made thereunder.

**JOINT SUBMISSION OF PURE ENVIRONMENTAL WASTE MANAGEMENT LTD.
AND SUNCOR ENERGY INC. ON DISPOSITION OF THE APPLICATIONS**

January 31, 2022

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I. EXECUTIVE SUMMARY

A. Joint Submission on Disposition

1. Pure Environmental Waste Management Ltd. ("**Pure**") filed Application Nos. 1614037, 1784753, 1928016, 1809825, 30608934, 30602032, 1928017, 30608918 and 1928430 ("**Applications**") with the Alberta Energy Regulator ("**AER**") in connection with its oilfield waste management operation in the Hangingstone area ("**Hangingstone Project**"), which includes an oilfield waste management facility located at 10-25-085-10 W4M ("**Hangingstone Facility**"). The Hangingstone Facility is subject to Approval WM 211 that was issued by the AER in 2019.
2. Suncor filed Statement of Concern nos. 31628, 31692, 31738, 31739, 31740, 31750, and 31757 (the "**SOCs**") with the AER opposing the Applications.
3. In response to a Notice of Hearing issued by the AER on October 13, 2020, Suncor submitted a request to participate in Proceeding 403 (the "**Proceeding**") and Pure filed a response to that request. The panel of the AER hearing commissioners assigned to this Proceeding (the "**Panel**") granted Suncor full participation rights¹ and, after receiving submissions from the Parties, established a list of issues for the hearing.² Subsequently, the Panel established a process for the Parties to file written hearing submissions and issue information requests.
4. On July 31, 2021, Pure and Suncor jointly requested that the Panel suspend the process steps in this Proceeding so that the parties could pursue settlement discussions regarding the disposition of the Applications. On August 4, 2021, the Panel granted that request and suspended all filing deadlines.
5. In response to subsequent requests by Pure and Suncor, the Panel further adjourned the Proceeding by letters dated September 2, 2021, October 10, 2021, and November 2, 2021.
6. The Parties wish to inform the AER that they have reached a settlement and have prepared this Joint Submission on Disposition for the Panel's consideration, outlining the proposed disposition of the Applications ("**Proposed Disposition**").
7. The Parties acknowledge that a private agreement between Pure and Suncor is not necessarily dispositive of the Applications. The Panel must be satisfied that approval of any of the Applications

¹ Exhibit 07.01, AER Letter to Parties re Hearing Participation, 12 November 2020.

² Exhibit 12.01, AER Letter to Parties re Hearing Issues, Schedule and Format, 17 December 2020.

is consistent with the requirements of the *Oil and Gas Conservation Act*³ ("**OGCA**"), *Pipeline Act*⁴, and *Public Lands Act*⁵ as well as the AER's mandate under the *Responsible Energy Development Act*⁶ ("**REDA**"). Suncor and Pure respectfully submit that the Proposed Disposition outlined in this Joint Submission, which aligns with the private settlement agreement between the Parties, satisfies those requirements.

8. Accordingly, the Parties jointly request that the AER approve the Proposed Disposition, including the specific conditions outlined in respect of some of the Applications and cancel the hearing.

B. Settlement Agreement

9. Through the Applications and its written evidence, Pure has consistently maintained that the AER should approve all of the Applications. Conversely, through its SOCs and written evidence, Suncor has advocated that certain of the Applications be dismissed in their entirety while certain other Applications should be subject to a number of conditions.
10. Both Pure and Suncor maintain the positions advanced through their written materials filed with the AER in this Proceeding. However, for the purposes of resolving this Proceeding expeditiously and in a manner that mitigates uncertainty associated with a hearing process, the Parties have agreed to the Proposed Disposition, which differs in some key respects from the positions that Suncor and Pure have advanced independently in this Proceeding.
11. Any differences between the positions advanced by the Parties independently in this Proceeding and the terms of the Proposed Disposition are the result of that careful commercial compromise negotiated between Suncor and Pure. The Proposed Disposition set out in this Joint Submission is being made without prejudice to the ability of the Parties to revert back to their respective positions in this Proceeding should the Panel not accept the Proposed Disposition in all material respects.
12. Additionally, while the Parties acknowledge that the Panel must make its own independent decision with respect to each of the Applications, the Parties are concerned that any decision which deviates materially from the Proposed Disposition could impair the settlement arrangement.
13. In order to mitigate that concern, Suncor and Pure respectfully request that, if the Panel is considering deciding on the Applications in a manner that differs materially from the Proposed Disposition, including rejection of any conditions set forth in the Proposed Disposition or by the

³ RSA 2000, c O-6.

⁴ RSA 2000, c P-15.

⁵ RSA 2000, c P-40.

⁶ SA 2012, c R-17.3.

imposition of additional conditions not contemplated in the Proposed Disposition, that the Parties be given an opportunity to review and make further submissions before the Panel issues a final decision.

14. For greater clarity, should the Panel not accept the Proposed Disposition in all material respects, the Parties may be required to revisit settlement discussions or request that the Joint Submission on Disposition be withdrawn and that the hearing process resume, at which point the Parties may continue advancing their independent positions, consistent with the evidence filed prior to the adjournment of the hearing process.

II. **BACKGROUND**

15. As noted above, Pure is the owner and operator of the Hangingstone Project.
16. Suncor is the operator of Meadow Creek East In Situ Project ("**Meadow Creek East**") and the Meadow Creek West In Situ Project ("**Meadow Creek West**") and, together with Meadow Creek East, the "**Meadow Creek Projects**"). The Meadow Creek Projects are a joint venture between Suncor and CNOOC Petroleum North America ULC. As the operator, Suncor holds Approval No. PIA-003, as amended, from the AER for Meadow Creek East and Approval No. IA-001 for Meadow Creek West.

A. **Proceeding 403**

17. Between November 2019 and May 2020, Pure filed the Applications all in respect of its Hangingstone Project. In particular, Pure applied for:
 - (a) a licence to drill a disposal well with a surface location at 07-20-085-09 W4M and bottom hole located at 07-16-085-09 W4M ("**07-16 Well**"),⁷
 - (b) a mineral surface lease for the 07-16 Well site;⁸
 - (c) an approval of a scheme to dispose of Class 1b fluids in the 07-16 Well,⁹
 - (d) a licence to construct and operate a pipeline to deliver produced water from the Pure's Hangingstone Facility to the 07-16 Well and a licence of occupation for that pipeline;¹⁰

⁷ Application No. 1784753.

⁸ Application No. 1614037.

⁹ Application No. 1928016.

¹⁰ Application No. 1809825.

- (e) a licence to drill a disposal well with a surface location at 10-25-085-10 W4M and bottom hole located at 09-19-085-09 W4M ("**09-19 Well**");¹¹
 - (f) an approval of a scheme to dispose of class 1b fluids in the 09-19 Well;¹²
 - (g) a licence to construct and operate a pipeline to deliver water from an existing well located at 07-25-085 10 W4M to Pure's Hangingstone Facility and licence of occupation for that pipeline;¹³ and
 - (h) approval of amendments to its existing Hangingstone Facility.¹⁴
18. Suncor filed the SOC's opposing the Applications.

III. JOINT SUBMISSION

19. This portion of the Joint Submission outlines the Proposed Disposition. As noted above, the Parties agreed to the Proposed Disposition as part of the settlement agreement that was intended to balance a number of different interests. To the extent any aspect of the Proposed Disposition differs materially from positions taken by either Suncor or Pure in this Proceeding, these differences were agreed to without prejudice to the ability of the Parties to continue advocating their original positions should the AER not accept the Proposed Disposition.
20. The Proposed Disposition constitutes a compromise between the parties and accordingly, neither party should be taken to agree with or accept any single aspect of the Proposed Disposition in isolation. The basis for this Joint Submission is that all aspects of the Proposed Disposition, taken together, reflect a reasonable compromise that the Parties submit should be accepted by the Panel.

A. Denial of the 07-16 Well and Related Applications

21. As part of the Proposed Disposition, and without prejudice to the ability of the Parties to advance different positions should the Proposed Disposition not be accepted, the Parties are jointly requesting that Application Nos. 1784753, 1928016, 1614037, and 1809825 all of which pertain to the 07-16 Well and proposed disposal operations of that well, be denied. The Parties jointly request that the Panel's reasons expressly state that the denial of Application Nos. 1784753, 1928016, 1614037 and 1809825 is Without Prejudice to Pure's ability to make applications under the *Oil and Gas Conservation Act, Directive 056, the Pipeline Act and the Public Lands Act* to for injection wells and related disposal operations anywhere outside of the Suncor Operating Area (as that term is

¹¹ Application No. 30602032.

¹² Application No. 1928017.

¹³ Application No. 30608918.

¹⁴ Application Nos. 1928430 and 30608934.

defined below). When considered as part of the compromise reflected in the Proposed Disposition, this outcome reasonably balances Pure and Suncor's respective needs for disposal capacity in the Hangingstone region.

B. Conditional Approval of the 09-19 Well and Related Applications

22. As part of the Proposed Disposition, and without prejudice to the ability of the Parties to advance different positions, should the Proposed Disposition not be accepted, the Parties jointly submit that Application Nos. 30602032 and 1928017 pertaining to the 09-19 Well and proposed disposal operations at that well should be conditionally approved. Specifically, the Parties jointly submit that approval of Application Nos. 30602032 and 1928017 should be subject to the following conditions:

- (a) The holder of the licence and scheme approval in respect of the 09-19 Well shall provide 75 days' written notice to Suncor or any successor operator of the Meadow Creek Projects prior to performing injection tests at the 09-19 Well.
- (b) The holder of the licence and scheme approval in respect of the 09-19 Well shall provide Suncor or any successor operator of the Meadow Creek Projects with each piece of the following information within 30 days of the holder receiving such piece of information (collectively the "**Well Information**"), provided the tests are conducted and information is collected and recorded by or for the benefit of the holder:
 - (i) for any injection or pumping tests, well test data consisting of pressure and metered rates with corresponding time stamps within 30 days after downloading upon completion of any injection test, including production/injection and buildup/falloff periods of any injection or pumping tests. Such well test data must be provided to the maximum gauge/meter resolution in both Excel and PAS formats;
 - (ii) gauge specifications, including type, model, make, accuracy, resolution and landing depth in both measured depth and true vertical depth (with Kelly Bushing elevation reference or the reference datum and elevation clearly specified if different);
 - (iii) perforation interval(s) or open-hole completion zone(s) in measured depth and true vertical depth (with Kelly Bushing elevation reference);
 - (iv) initial formation pressure with units specified (i.e. Absolute or Gauge pressures, kPaa vs kPag);
 - (v) vendor reports for all injection/production tests;

- (vi) viewing access for drill cuttings or permission to view core for any new drills if not in available in the public domain within a reasonable time once a request by Suncor is made; and
 - (vii) porosity and permeability data.
- (c) The holder of the licence and scheme approval in respect of the 09-19 Well, or any well that replaces the 09-19 Well if the 9-19 Well is not drilled, shall ensure that the average maximum injection rate measured as a daily average over a twelve month period, does not exceed 3000 m³/day.
23. When considered as part of the compromise reflected in the Proposed Disposition, the Parties submit that this outcome reasonably balance both Pure and Suncor's need for disposal capacity in the Hangingstone region.

C. Conditional Approval of Amendments to Approval WM 211

24. As part of the Proposed Disposition, and without prejudice to the ability of the Parties to advance different positions should the Proposed Disposition not be accepted, the Parties jointly submit that Application No. 1928430 for an amendment to Approval WM 211 should be approved provided that the following conditions be imposed on Approval WM 211:
- (a) the holder of Approval WM 211 shall not drill or operate any disposal well, at a surface or bottom hole location, nor contract with any third party to drill or operate, any disposal wells inside the purple and blue outlined area¹⁵ identified in the attached Schedule "A";
 - (b) The holder of Approval WM 211 shall inject at a maximum injection rate of 3000 m³/day at the 09-19 Well, measured as a daily average over a twelve month period.
25. In addition, as part of the agreement leading to the Proposed Disposition, Suncor and Pure have each covenanted that they will not make, and will not cause or encourage any third party to make, any future applications to the AER for authorizations (including amendments) for any surface or subsurface storage or disposal of any fluid or substance by way of wells, pipelines or schemes at certain surface or bottom hole locations, as set out in Schedule "A". Specifically, Suncor has committed not to make, cause or encourage any such applications within the purple and green shaded areas identified in the attached Schedule "A". Similarly, Pure has covenanted not to make,

¹⁵ For greater clarity, this area includes sections 13, 14, 23-26 and 32-36 of Township 085 Range 10 W4M; sections W ½ 17, 18, 19 W ½ 20, W ½ 29 and 30 -36 of Township 085, Range 9 W4M and sections 31 and 32 of Township 085 Range 8 W4M.

cause or encourage any such applications within the purple and blue shaded areas identified in the attached Schedule "A".

26. In addition, as part of the agreement leading to the Proposed Disposition, the Parties further agreed that Suncor would retain the ability to maintain a downhole gauge for continuous monitoring and conduct injection tests using Suncor's 100/02-29-085-09W4/0 Well ("**02-29 Well**"), provided that any such injection tests into the Keg River Formation would be for a maximum of no longer than two weeks in any given calendar year and provided further that, if Suncor does decide to conduct any injection tests at the 02-29 Well, Suncor agrees to share any Well Information from the 02-29 within 30 days of receiving such information with Pure, provided the tests were conducted and the information was collected and recorded by or for the benefit of Suncor.
27. While Suncor does not have any applications before the AER in this proceeding, the Parties nevertheless wish to make the Panel aware of these aspects of the agreement leading to the Proposed Disposition. The Parties respectfully request that the commitments made by Suncor as outlined in paragraphs 25 and 26, above, be expressly acknowledged in the Panel's reasons for decision on the Applications, should the Panel decide to accept the Proposed Disposition. In addition, the Parties are jointly asking that the commitments referenced in paragraphs 25 and 26 above be reflected in a memorandum on the AER file and record for Proceeding 403 for Suncor's approvals IA-001 and PIA-003. If in the future Suncor applies to the AER for any renewal or amendment with respect to approvals IA-001 and PIA-003, Suncor intends to request that the AER update those approvals to expressly include Suncor's commitments as conditions of IA-001 and PIA-003.
28. When considered as part of the overall compromise reflected in the Proposed Disposition, this outcome reasonably balances Pure and Suncor's respective needs for disposal capacity in the Hangingstone region.

D. Approval of Applications 30608934 and 30608918

29. As part of the Proposed Disposition, and without prejudice to the ability of the Parties to advance different positions should the Proposed Disposition not be accepted, the Parties jointly submit that Application Nos. 30608934 and 30608918 should be approved.

IV. PROPOSED DISPOSITION

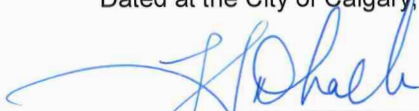
30. In light of the foregoing, Pure and Suncor jointly submit that the Panel should make an order or orders as follows:
- (a) Denying Application Nos. 1784753, 1928016, 1614037, and 1809825, all pertaining to the 7-16 Disposal Well;

- (b) Approval of Application No. 30602032 and 1928017 pertaining to the 9-19 Well subject to the conditions outlined in this Joint Submission on Disposition;
- (c) Approval of Application No. 1928430 pertaining to the Hangingstone Oilfield Waste Management Facility subject to the conditions outlined in this Joint Submission on Disposition; and
- (d) Approval of Application Nos. 30608934 and 30608918.

31. Alternatively, if the Panel is considering a decision with respect to the Applications that differs from the Proposed Disposition, the Parties respectfully request that the Panel provide the Parties with an opportunity to review and make further submissions prior to the Panel issuing a final decision on the Applications.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 31st DAY OF JANUARY, 2022.

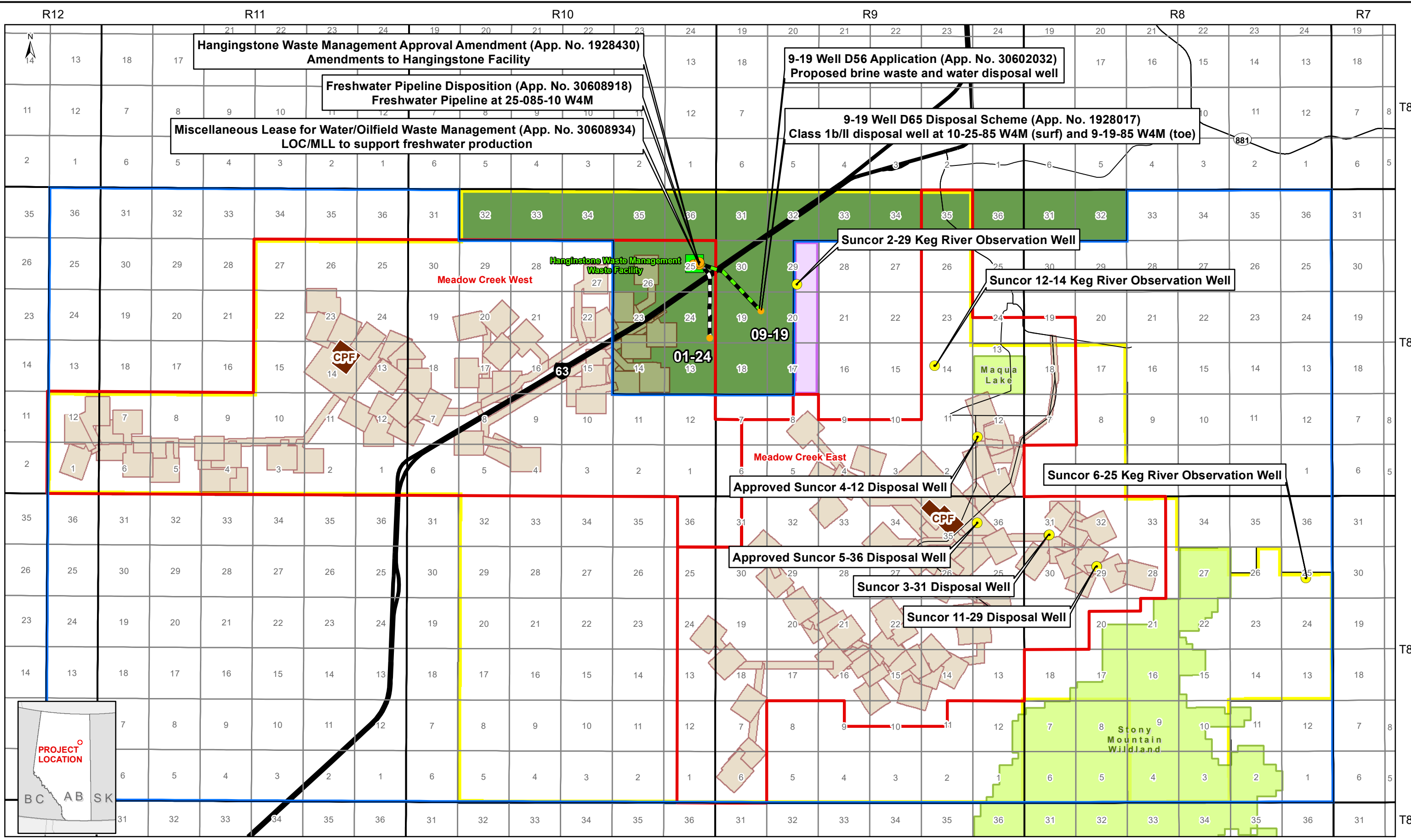
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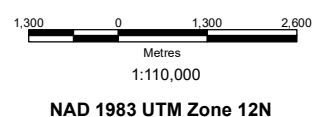
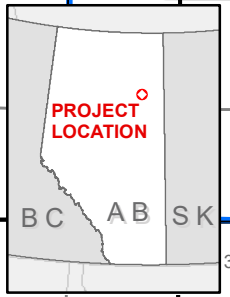
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|----------------------------------|-----------------------------------|--|-------------------------------------|
| ● Suncor Well Location | — Pure Horizontal Well (Proposed) | ▭ Meadow Creek Project Areas | ▭ Suncor Disposal Operating Area |
| ● Pure Surface Hole Location | — Pure Horizontal Well (Approved) | ▭ Meadow Creek Footprint - ASV (Acceptable Survey Variance) Dispositions | ▭ Pure Disposal Operating Area |
| ● Pure Bottom Hole Location | ▭ Suncor CPF (Proposed) | ▭ Suncor Meadow Creek Oil Sands Leases | ▭ Keg River Disposal Exclusion Area |
| ▭ Pure Waste Facility (Approved) | | | ▭ Parks and Protected Areas |

Keg River Formation Operating Area Settlement Agreement

