

STATE OF WYOMING
DEPARTMENT OF ENVIRONMENTAL QUALITY
UNDERGROUND INJECTION CONTROL PERMIT ISSUED UNDER
WYOMING WATER QUALITY RULES
CHAPTER 27

Draft Permit No. UIC-2022-0101 v1.1

Triangle Unit, Class 5F2 Non-Hazardous Injection Wells

In compliance with the Wyoming Environmental Quality act (Wyoming Statute (Wyo. Stat.) §§ 35-11-101 through 1104, specifically 301(a)(i) through 301 (a)(iv), Laws 1973, Ch. 250, Section 1) and Wyoming Water Quality Rules (WWQR), Chapter 27.

Cowboy Clean Fuels, LLC.
5680 Greenwood Plaza Blvd., Suite 500
Denver, CO 80111

is hereby authorized, contingent upon Permit conditions, to operate a Class 5F2 nonhazardous underground injection control (UIC) well (Facility ID No. WYS-005-00684), known as The Triangle Unit, to inject molasses feedstock for biogenesis of Methane for extraction. The injection facility, located in Campbell County, consists of twenty-nine (29) former coalbed methane (CBM) injection wells. The maximum injection rate for the wells within the Triangle Unit shall not exceed 117 gallons per minute (gpm) or 4,000 barrels per day (bbl/day) per well. Injections are authorized and limited to the Big George coal of the Fort Union Formation.

I. GENERAL PERMIT CONDITIONS

A. PROHIBITIONS

- 1) No person shall:
- 1) Conduct any authorized injection activity in a manner that results in a violation of any Permit condition, or representations made in the application. The conditions of this Permit supersede any application content (WWQR Chapter 27, Section 20(a)(i)) (WWQR Chapter 27, Section 20(a)(i)).

- a) Construct, install, modify, or improve this authorized injection facility except in compliance with this Permit (WWQR Chapter 27, Section 20(a)(ii)).
- b) No person shall inject any hazardous waste which has been banned from land disposal pursuant to Chapter 1, Wyoming Hazardous Waste Rules and Regulations unless the disposal conforms to that chapter.

B. EFFECT OF PERMIT

Any underground injection activity not specifically authorized in this Permit is prohibited. The Permittee must comply with all applicable provisions of the Safe Drinking Water Act (SDWA) and Title 40 of the Code of Federal Regulations (CFR) §§ 124, 144, 145, and 146. Such compliance does not constitute a defense to any action brought under Section 1431 of the SDWA, 42 United State Code § 300(i), or any other common law, statute, or regulation other than Part C of the SDWA. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege, nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations (WWQR Chapter 27, Section 6(h)(iii)(G)). Nothing in this Permit shall be construed to relieve the Permittee of any duties under all applicable laws or regulations. The conditions in this Permit supersede any application content.

C. SEVERABILITY

The provisions of this Permit are severable, and if any provision of the Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected.

D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and §144.5, and Wyo. Stat. §16-4-203(d)(v), any information submitted to Wyoming Department of Environmental Quality (WDEQ) pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, WDEQ may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed and processed in accordance with the provisions of the Wyoming Public Records Act, Wyo. Stat. §16-4-201 through 205. Claims of confidentiality for the following information will be denied:

- 1) Name and address of the Permittee, or
- 2) Information dealing with the existence, absence, or level of contaminants in drinking water.

E. CONDITIONS APPLICABLE TO ALL CLASS 5F2 UNDERGROUND INJECTION CONTROL (UIC) PERMITS (WWQR Chapter 27, Section 6(h)(iii))

The following conditions are required for all UIC permits. Specific requirements for implementing these conditions are included in Part II of this permit as necessary.

- 1) Duty to Comply: The Permittee shall comply with all applicable UIC Program regulations and all conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency Permit issued in accordance with 40 CFR §144.34.
- 2) Duty to Reapply: If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must submit a complete application for a new permit at least one hundred and eighty (180) days before this Permit expires.
- 3) Permit Duration: This Permit is authorized for a period of no more than ten (10) years in accordance with WWQR Chapter 27, Section 6(b). Under this Permit, the Department may consider injection after the authorization period a violation of the Permit if the Permittee has not submitted a timely request for Permit renewal. This Permit will be reviewed by WQD at least once every five (5) years and may be reviewed more frequently. Permits that do not satisfy the review criteria are subject to modification, revocation and reissuance, or termination.
- 4) Need to Halt or Reduce Activity Not a Defense: It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the Permit.
- 5) Duty to Mitigate: The Permittee shall take all reasonable steps to minimize and correct any adverse impact on the environment resulting from noncompliance with this Permit.
- 6) Penalties for Violating Permit Conditions: Any person who violates a Permit requirement is subject to civil penalties, fines, and other enforcement actions. Any person who willfully violates a Permit condition may be subject to criminal prosecution.
- 7) Proper Operation and Maintenance: The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance include effective performance, adequate funding, adequate Permittee staffing, and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or

auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit. The Permittee is alone responsible for the operation of the facility covered by this Permit. Operation of this facility by another entity is a violation of this Permit unless a transfer of this Permit has first been approved by the Director as outlined in WWQR Chapter 27, Section 7(d)(xv)(A)-(D).

- 8) Property Rights: This Permit does not convey any property rights or any exclusive privileges. This Permit does not authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
- 9) The filing of a request by the Permittee, or at the instigation of the Administrator, for permit modification, revocation, or termination, or the notification of planned changes or anticipated noncompliance shall not stay any condition of this Permit.
- 10) Duty to Provide Information: The Permittee shall furnish to WDEQ, within a time specified, any information which WDEQ may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to WDEQ, upon request, copies of records required to be kept by this Permit.
- 11) Inspection and Entry: The Permittee shall allow WDEQ personnel and their invitees to enter the premises where the facility is located, or where records are kept under the conditions of this Permit and collect resource data as defined by Wyo. Stat. § 6-3-414, inspect and photograph the facility, collect samples for analysis, review records, and perform any other function authorized by law or regulation. The Permittee shall secure and maintain such access for the duration of the Permit.
 - a) The Permittee shall secure and maintain such access for the duration of the permit.
 - b) If the facility is located on property not owned by the Permittee, the Permittee shall also secure and maintain from the landowner upon whose property the facility is located permission for WDEQ personnel and their invitees to enter the premises where a regulated facility is located, or where records are kept under the conditions of this Permit, and collect resource data as defined by Wyo. Stat. § 6-3-414, to inspect and photograph the facility, collect samples for analysis, review records, and perform any other function authorized by law. The Permittee shall secure and maintain such access for the duration of the permit.
 - c) If the facility cannot be directly accessed using public roads, the Permittee shall also secure and maintain permission for WDEQ personnel and their invitees to enter and cross all

- properties necessary to access the facility. The Permittee shall secure and maintain such access for the duration of the permit.
- d) The Permittee shall maintain in its records documentation that demonstrates that the Permittee has secured permission for WDEQ personnel and their invitees to access the permitted facility, including:
 - i. Permission to access the land where the facility is located,
 - ii. Permission to collect resource data as defined by Wyo. Stat. § 6-3-414, and
 - iii. Permission to enter and cross all properties necessary to access the facility if the facility cannot be directly accessed from a public road.
 - e) The Permittee shall also maintain in its records a current map of the access route(s) to the facility and contact information for the owners or agents of all properties that must be crossed to access the facility. The Permittee shall ensure that the documentation, map, and contact information are current at all times. The Permittee shall provide the documentation, map, and contact information to WDEQ personnel upon request. On closure of a facility, the Permittee shall maintain such records for a period of three (3) years.
 - f) Inspectors shall not be required by the Permittee to sign any waiver of liability.
- 12) The Permittee shall furnish the Administrator any information necessary to establish a monitoring program pursuant to WWQR Chapter 27, Section 15.
- 13) All samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity, and records of all monitoring information be retained by the Permittee. The monitoring information to be retained shall be that information stipulated in the monitoring program established pursuant to the criteria of WWQR Chapter 27 Section 15.
- 14) Planned Changes: The Permittee shall give notice to WDEQ as soon as possible of any planned physical alterations or additions to the permitted facility. The Permittee shall give advance notice to WDEQ, as soon as possible, of any planned physical alterations or additions to the permitted leachfields. Any change in well construction requires prior approval by WDEQ and may require a permit modification under the requirements of WWQR Chapter 27, Section 7(d)(vii).

- 15) Any modification which may result in a violation of any permit condition shall be reported to the Administrator through the submission of a new or amended permit application and shall not be implemented until a new or modified permit has been issued.
- 16) Permit Transfer: Any transfer of this Permit must first be approved by the Administrator, and no transfer will be approved if the facility is not in compliance with the existing permit unless the proposed permittee agrees to bring the facility into compliance (WWQR Chapter 27, Section 7(d)(xv)(B)).
- 17) Compliance Schedules: Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted to WDEQ no later than thirty (30) days following each schedule date.
- 18) Endangering Noncompliance: Confirmed noncompliance resulting in a migration of injected fluid outside the discharge zone shall be reported to the Administrator at (307) 777-7501 within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances and a written report shall be provided within five (5) days. The written submission shall contain:
 - a) A description of the noncompliance and its cause.
 - b) The period of noncompliance, including exact dates and times, and if the noncompliance has not been controlled, the anticipated time it is expected to continue.
 - c) Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- 19) The Permittee shall report all instances of noncompliance not already required to be reported under Part I, Sections E.17 and E.18 at the time monitoring reports are submitted. The reports shall contain the information listed in Section E.18 of this Part.
- 20) If the Permittee becomes aware that it failed to submit all relevant facts in the permit application or submitted incorrect information in the permit application or in any report to WDEQ, the Permittee shall promptly submit such facts or information.
- 21) The Permittee shall submit a written report to the Administrator of all remedial work concerning the failure of equipment or operational procedures which resulted in a violation of a permit condition, at the completion of the remedial work.

- 22) For any aborted or curtailed operation, in lieu of a final report, a complete report shall be submitted within thirty (30) days of complete termination of the discharge or associated activity.
- 23) Requirements Prior to Commencing Injection: Injection activities may not commence
- a) Establish Financial Assurance in accordance with WWQR Chapter 27, Section 19 and Part II, Section K of this Permit.
 - b) Pressure testing of the casing before injection and at least once every five (5) years thereafter.
 - c) Mechanical integrity of the well has been demonstrated in accordance with WWQR Chapter 27 Section 13(p)(vii) and Part II, Section G(3) of this Permit.
- 24) Notification Prior to Conversion or Abandonment: The Permittee shall notify the Administrator at such time as the permit required before conversion or abandonment of the well or in the case of area permits before closure of the project.
- 25) Plugging and Abandonment Requirements: The Class 5F2 injection well(s) covered by this Permit shall be abandoned in accordance with WWQR Chapter 27, Section 18 and Part II, Section L of this Permit.
- 26) The Permittee shall ensure that all activities and habitat disturbances related to injection well(s) authorized by this Permit comply with stipulations under the Governor's Executive Order 2019-3 on Greater Sage-Grouse Core Area Protection and are conducted in accordance with Wyoming Game and Fish Department, Wildlife Environmental Review recommendations to protect sage-grouse habitat.
- 27) The Permittee shall ensure that all activities and habitat disturbances related to injection well(s) authorized by this Permit comply with stipulations under the Governor's Executive Order 2020-1 on Mule Deer and Antelope Migration Corridor Protection and are conducted in accordance with practices and stipulations specified by the Wyoming Game and Fish Department.
- 28) Certifications: All applications, reports, and other information submitted to the Administrator shall contain the following certification:

“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 knowing violations”

- 29) Signatory Authority: All applications, reports, and other information submitted to the Administrator shall be signed by a person who meets the requirements to sign permit applications in WWQR Chapter 27 Section 6(f)(xiv), or for routine reports, a duly authorized representative.
- 30) The Permittee shall report any changes to physical or mailing address, phone, or email, and any changes of the duly authorized representative to Water Quality Division (WQD) within one (1) month of the change.
- 31) All applications, reports, and other information submitted to the Administrator shall be in a format approved by the administrator. Submittals may be completed electronically to the ‘Electronics Documents Submittal’ link located at <https://deq.wyoming.gov/water-quality/groundwater/>. If a hard copy is to be submitted, submittals may be sent to:

Wyoming Department of Environmental Quality – Water Quality Division
Attn: UIC Program
200 West 17th Street
Cheyenne, WY 82002

- 32) Permit termination shall be in writing and shall contain facts or reasons supporting the request. Proposed permit terminations shall be developed as a draft permit and are subject to the public notice and hearing requirements outlined in WWQR Chapter 27, Section 21.

II. SPECIFIC PERMIT CONDITIONS

The injection wells authorized under this Permit are located in Campbell County, Wyoming. The locations for the wells are presented in Table 1. A general location map is included in the permit application.

Table 1: Injection Well Location and Legal Description of the Area of Review

Well Name	Legal Description			Latitude	Longitude
Triangle Unit 11-32	NWNW, Section 32 T47N R75W			44.00983	-105.907583
Triangle Unit 12-32	SWNW, Section 32 T47N R75W			44.00581	-105.908278
Triangle Unit 12-33	SWNW, Section 33 T47N R75W			44.00656	-105.88839
Triangle Unit 21-32	NENW, Section 32 T47N R75W			44.01031	-105.90247
Triangle Unit 22-32	SWNW, Section 32 T47N R75W			44.00619	-105.902639
Triangle Unit 31-32	NWNE, Section 32 T47N R75W			44.00985	-105.89824
Triangle Unit 32-31	SWNE, Section 31 T47N R75W			44.00652	-105.9177
Triangle Unit 32-32	SWNE, Section 32 T47N R75W			44.00664	-105.897694
Triangle Unit 41-31	NENE, Section 31 T47N R75W			44.00978	-105.913028
Triangle Unit 41-32	NENE, Section 32 T47N R75W			44.0105	-105.8931
Triangle Unit 42-31	SENE, Section 31 T47N R75W			44.00619	-105.912722
Triangle Unit 42-32	NESE, Section 32 T47N R75W			44.00235	-105.89326
Triangle Unit 14-28	SWSW, Section 28 T47N R75W			44.01418	-105.88776
Triangle Unit 12-29	SWNW*, NWSW	Section 28	T47N R75W	44.01971	-105.90996
	SENE, NESE	Section 29			
Triangle Unit 14-29	SWSW, Section 29 T47N R75W			44.01296	-105.90688
Triangle Unit 23-29	NESW, Section 29 T47N R75W			44.01761	-105.9024
Triangle Unit 32-29	SWNE Section 29, T47N R75W			44.02135	-105.89791
Triangle Unit 34-29	SWSE, Section 29 T47N R75W			44.0136	-105.89755
Triangle Unit 34-30	SWSE, Section 30 T47N R75W			44.01374	-105.91744
Triangle Unit 43-29	NESE*, SESE, Section 29 T47N R75W			44.01622	-105.89334
Triangle Unit 43-30	NESE, Section 30 T47N R75W			44.01658	-105.9136
Triangle Unit 21-29	NENW, Section 29 T47N R75W			44.02374	-105.90309
Triangle Unit 14-32	SESE	Section 31	T47N R75W	44.99862	-105.90856
	SWSW*	Section 32			
Triangle Unit 23-32	NESW, Section 32 T47N R75W			44.00316	-105.90269
Triangle Unit 34-32	SWSE, Section 32 T47N R75W			43.99896	-105.89741
Triangle Unit 43-31	NESE, Section 31 T47N R75W			44.00307	-105.9122
Triangle Unit 21-33	NENW, Section 33 T47N R75W			44.01003	-105.88215
Triangle Unit 32-3	SWNE, Section 3 T46N R75W			43.99244	-105.85741
Triangle Unit 34-3	SWSE, Section 3 T46N R75W			43.98551	-105.85775

* Represents Well Location

A. DISCHARGE ZONE

- 1) No person shall discharge to any zone except the authorized discharge zone as described in this Permit (WWQR Chapter 27, Section 20(d)(i)).
 - a) The authorized discharge zones are as follows: The Big George Coal is estimated to be approximately a sixty-eight (68) to eighty-six (86) foot thick zone throughout the Triangle Unit encountered below 1,106 feet-below ground surface (ft-bgs).
 - b) If the Permittee determines that the underreamed intervals identified in Table 2 are inadequate, and additional underreams are necessary, prior authorization will be required. The authorization request shall be submitted for review and approval by the Administrator.

Table 2: Triangle Unit Wells Underreamed Intervals

Well Name	Surface Elevation (feet (ft) above mean sea level)	Depth to Top of Perforated Interval (feet below ground surface (ft-bgs))	Depth to Bottom of Perforated/Slotted Liner Intervals (ft-bgs)	Perforated Intervals (Net Thickness (ft))	Well True Vertical Depth (ft-bgs)
Triangle Unit 11-32	4,795	1,187	1,266	79	6,064
Triangle Unit 12-32	4,795	1,212	1,087	75	6,085
Triangle Unit 12-33	4,806	1,187	1,264	77	6,083
Triangle Unit 21-32	4,815	1,235	1,310	75	6,130
Triangle Unit 22-32	4,822.4	1,275	1,346	71	6,174.4
Triangle Unit 31-32	4,796	1,202	1,277	75	3,084
Triangle Unit 32-31	4,819	1,262	1,341	79	6,181
Triangle Unit 32-32	4,835.3	1,259	1,333	74	6,187.3
Triangle Unit 41-31	4,748	1,171	1,247	76	6,009
Triangle Unit 41-32	4,855	1,246	1,324	78	6,194
Triangle Unit 42-31	4,799	1,221	1,287	66	6,112
Triangle Unit 43-32	4,869	1,269	1,346	77	6,320
Triangle Unit 14-28	4,805	1,222	1,301	79	6,120
Triangle Unit 12-29	4,702	1,106	1,180	74	5,897
Triangle Unit 14-29	4,761	1,159	1,230	71	6,009
Triangle Unit 23-29	4,741	1,145	1,219	74	5,977
Triangle Unit 32-29	4,783	1,156	1,232	76	6,029
Triangle Unit 34-29	4,792	1,180	1,257	77	6,059
Triangle Unit 34-30	4,771	1,229	1,303	74	6,093
Triangle Unit 43-29	4,835	1,190	1,257	67	6,102

Well Name	Surface Elevation (feet (ft) above mean sea level)	Depth to Top of Perforated Interval (feet below ground surface (ft-bgs))	Depth to Bottom of Perforated/Slotted Liner Intervals (ft-bgs)	Perforated Intervals (Net Thickness) (ft)	Well True Vertical Depth (ft-bgs)
Triangle Unit 43-30	4,711	1,157	1,230	73	5,984
Triangle Unit 21-29	4,751	1,112	1,174	62	5,943
Triangle Unit 14-32	4,763	1,185	1,263	78	6,035
Triangle Unit 23-32	4,824	1,242	1,316	74	6,155
Triangle Unit 34-32	4,853	1,266	1,343	77	6,213
Triangle Unit 43-31	4,831	1,254	1,326	72	6,173
Triangle Unit 21-33	4,784	1,129	1,200	71	5,991
Triangle Unit 32-3	4,915	1,275	1,346	71	6,276
Triangle Unit 34-3	4,840	1,228	1,292	64	6,152

2) Groundwater Classification

- a) The groundwater in the Big George Coal has been classified as **Class II** by ambient water quality in accordance with WWQR, Chapter 8 Section 4 (d)(iii). Class II Groundwater of the State is suitable for agricultural uses.
 - i. There are currently no appropriated water uses within the Area of Review (AOR).
 - ii. Groundwater obtained during sampling events of the Big George Coal of the Fort Union Formation has Sodium Adsorption Ratio (SAR) of 13.4 - 14.6 milliequivalents per liter (meq/L). However, SAR is a measure of water quality for irrigation that indicates the relative levels of sodium versus calcium and magnesium. A high SAR can damage soil structure by causing the dispersion of clay particles leading to reduced water infiltration, aeration, and permeability. Therefore, it is not considered as part of the groundwater classification.
 - iii. Groundwater obtained during sampling events of the Big George Coal of the Fort Union formation has a concentration of Total Dissolved Solids (TDS) of 1,210 milligrams per liter (mg/L).
- b) Groundwater of Class II shall not be degraded to make it unusable as a source of water for its intended use.

B. AREA OF REVIEW

- 1) Area of Review: The AOR for an injection well is the maximum area affected by the injected material. The calculation determines the total amount of void space around and down gradient from the point of injection and uses accepted groundwater theory to determine the extent of any affected groundwater around the well. The AOR shall never be less than the area of potentially impacted groundwater and shall be legally described by township, range and section to the nearest ten (10) acres as described under the Public Lands Survey System. The results of the AOR calculations are summarized in Table 3 and the legal description of each AOR are described using the Public Lands Survey System to the nearest ten acres in Table 1.

Table 3: Area of Review Summary

Well Name	Radius of AOR (ft)
Triangle CBM Unit 11-32	881.23
Triangle CBM Unit 12-32	875.78
Triangle CBM Unit 12-33	875.78
Triangle CBM Unit 21-32	881.23
Triangle CBM Unit 22-32	935.42
Triangle CBM Unit 31-32	870.42
Triangle CBM Unit 32-31	860.00
Triangle CBM Unit 32-32	875.78
Triangle CBM Unit 41-31	865.16
Triangle CBM Unit 41-32	870.42
Triangle CBM Unit 42-31	898.24
Triangle CBM Unit 43-32	865.16
Triangle CBM Unit 14-28	849.94
Triangle CBM Unit 12-29	892.42
Triangle CBM Unit 14-29	904.13
Triangle CBM Unit 23-29	886.79
Triangle CBM Unit 32-29	875.75
Triangle CBM Unit 34-29	881.23
Triangle CBM Unit 34-30	892.46
Triangle CBM Unit 43-29	922.52
Triangle CBM Unit 43-30	892.46
Triangle CBM Unit 21-29	955.83
Triangle CBM Unit 14-32	875.78
Triangle CBM Unit 23-32	875.78
Triangle CBM Unit 34-32	865.16

Well Name	Radius of AOR (ft)
Triangle CBM Unit 43-31	860.00
Triangle CBM Unit 21-33	904.13
Triangle CBM Unit 32-3	835.50
Triangle CBM Unit 34-3	826.26

- a) There are one hundred and eighty-six (186) wells within the AOR. Ninety (90) wells do not penetrate the upper confining layers.
- b) There are ninety-six (96) Triangle CBM Unit production wells that penetrate the upper confining layers and injection zone. A subset of these wells is authorized under this Permit for feedstock injection activities by Cowboy Clean Fuels, LLC. Based on a review of borehole histories and current production activities of these wells, no corrective action is required.

3) Implementation of Corrective Actions

- a) If any additional wells requiring corrective action are found within the AOR, a list of these wells along with their locations and construction data shall be provided to WDEQ within thirty (30) days of their identification.
- b) The Permittee shall submit a plan to propose and complete corrective action for any well listed in subsection (3)(a) above in a way that prevents the migration of fluids into a USDW or may result in injectate entering a zone not authorized for injection.
- c) The Permittee may not commence corrective action activities without prior written approval from WDEQ.

C. PROPOSED CHANGES AND WORKOVERS

- 1) The Permittee shall give advance notice to WDEQ, as soon as possible, of any planned physical alterations or additions to the permitted injection wells and may require a permit modification under the requirements of WWQR Chapter 27, Section 7(d)(vii).
- 2) In addition, the Permittee shall provide all records of well workovers, logging, or other subsequent test data, including required mechanical integrity testing, to WDEQ within thirty (30) days of completion of the activity, or with the next quarterly report, whichever is later.

- 3) Drilling, work-over, and plugging procedures must follow applicable work plans that have been reviewed and approved by WDEQ.
- 4) If a well is re-entered to pull the tubing/packer, a well workover report and pressure testing in accordance with Part II Section G(3) of this Permit, shall be submitted to the Administrator within thirty (30) days or with the next quarterly report after the test is done, whichever is later.
- 5) Demonstration of mechanical integrity shall be performed within thirty (30) days of completion of workovers or alterations and prior to resuming injection activities, in accordance with Part II, Section G(3) of this Permit.

D. OPERATING, MONITORING, AND REPORTING PLAN

- 1) Each injection well shall be constructed, operated, and maintained to prevent the migration of fluids into a USDW or may result in injectate entering a zone not authorized for injection.
- 2) Injection shall be conducted through tubing that has been secured by a packer set within one hundred (100) ft. of the top of the authorized discharge zone (WWQR Chapter 27, Section 6(h)(iii)(Y)). Injection shall occur only through the authorized underreamed intervals (Table 2).
- 3) **The Limiting Surface Injection Pressure (LSIP) in Table 4 for the injection well is a permanent limit.** The LSIP is based on calculations presented for fracture gradient presented in the UIC application supplemental information dated August 25 and September 15, 2025. Based on review of historical injection data submitted by Cowboy Clean Fuels, LLC. this LSIP is below fracture pressure of the receiving formation. The limit applies for the duration of this Permit, unless an additional step-rate injection test (SRT) is conducted for each well and the recalculated LSIP is approved by the Administrator.
- 4) **The maximum injection rate for the wells within the Triangle Unit shall not exceed 117 gpm or 4,000 bbl/day per well. The actual injection volume shall not exceed 1,460,000 barrels per year for the wells in the Triangle Unit authorized under this Permit.**
- 5) The maximum instantaneous injection rate for each well shown in Table 4 is allowed provided that the LSIP is not exceeded except as necessary during well stimulation approved by the Administrator.

- 6) Exceeding the LSIP in Table 4 or creating or propagating fractures within the receiver or confining zone once injection has commenced are violations of this Permit and shall be reported pursuant to Part I, Section E(18) of this Permit.
- 7) An automatic kill switch shall be installed on the injection tubing and set to preclude violations of LSIP limits found in Table 4.
- 8) Settings for low- and high-pressure alarms shall account for annulus pressure changes due to variations in temperature of the injected and annulus fluids and if a detection of annulus pressure outside of the allowed pressure range in Part II, Section D, Table 4 occurs, the permittee shall immediately cease injection and shut in the well(s).
- 9) The Permittee may conduct additional step-rate injection tests at their discretion to refine estimates of the Surface Injection Pressure (SIP) as injection continues. The SIP will be used to recalculate the LSIP. The Permittee may request the modification to the LSIP, in writing and justified to WDEQ with the results of a SRT conducted.
 - a) If the recalculated LSIP is greater than the permitted LSIP in Table 4, the Permittee must obtain the approval of the Administrator before operating the well at a pressure above the permitted LSIP.
 - b) If the recalculated LSIP is less than the permitted LSIP in Table 4, the Permittee must cease injection and not restart injection until the wellhead pressure can be maintained below the recalculated LSIP.

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Table 4: Maximum Injection Rates, Annulus Pressures, and Limiting Surface Injection Pressures

Parameter	Well
Maximum Injection Rate (bbl/d)	4,000
Maximum Injection Rate (gpm)	117
Maximum Annulus Pressure (pounds per square inch gage (psig)) ¹	800
Minimum Annulus Pressure (psig)	200
Estimated Fracture Gradient, F (pounds per square inch per foot (psi/ft))	0.7
Fracture Pressure, $P_f = F \cdot D_p$	774
Depth to Top of Formation, D_p (ft-bgs)	1,106
Temperature at Mid-Point of Perforations (degrees Fahrenheit (°F))	72
Maximum Total Dissolved Solids of Injectate (milligrams per liter (mg/L))	<5,000
Density of Injectate, ρ_j (grams per cubic centimeter (g/cm ³))	1.05
Injectate Fluid Gradient (psi/ft) $grad_j = \rho_j \cdot 12 \frac{in}{ft} \cdot 16.387 \frac{cm^3}{in^3} / 453.592 \frac{g}{lb}$	0.4555
Hydrostatic Pressure (psi) $P_h = D_p \cdot grad_j$	503.45
Tubing Length, T_L (ft)	1,106
Tubing Inside Diameter, d (inches (in))	2.441
Tubing Friction Loss Factor, T (psi/1000 ft)	2.99
Average Injection rate, q (gpm)	20
Pressure Loss due to Tubing Friction (psi/ft) ² $P_d = (4.52q^{1.85}) / (c^{1.85}d^{4.8655})$	0.002995
Total Pressure Loss from Tubing Friction (psi) $P_L = P_d \cdot T_L$	3.31
$SIP = P_f - P_h + P_L$ (psig)	274.06
$LSIP = 0.9 \cdot SIP$ (psig)	246.65

10) The Permittee is required to operate in accordance with statements, representations, and procedures presented in the complete permit application and supporting documents as accepted and approved by the Administrator. If such procedures conflict with those of this Permit, the conditions in this Permit shall take precedence.

¹ During the first twelve (12) months of normal injection operations, the range shall not exceed eight hundred (800) psi. However, within the first twelve (12) months of normal injection operations, the Permittee shall monitor and determine the cyclic range of annular pressure fluctuation for the well.

² c = Hazen-Williams design coefficient for lined stainless-steel piping, 145.

- 11) The Permittee may request an increase in the maximum rate(s) allowed in Table 4 above. Any such request shall be made in writing and justified to WDEQ. Should any increase in rate be requested, the Permittee shall demonstrate to the satisfaction of WDEQ that the proposed increase will not interfere with the operation of the facility, its ability to meet conditions described in this Permit, change its well classification, or cause migration of injectate or pressure buildup to occur beyond the AOR. The injection rate shall not cause an exceedance of the injection pressure limitation established under Part II, Section D, Table 4.
- 12) Injection fluids shall be limited to only fluids authorized by this Permit. The Permittee is required to notify WDEQ in writing at least ninety (90) days prior to its first planned injection of fluid. In addition, prior to initial injection of fluids, the Permittee must submit to WDEQ analytical results of the fluid in accordance with the conditions under Part II, Section F(8). Once injection of the fluid is approved, analytical results shall be reported to WDEQ within thirty (30) days of testing and shall be included in the next report in accordance with reporting requirements under Part II, Section I. The testing of the injection fluids shall be conducted in accordance with the requirements under Part II, Section F. Any well stimulation or treatment procedure performed at the discretion of the Permittee shall be proposed and submitted to WDEQ for approval prior to implementation.
- 13) The annulus between the injection tubing and the long string casing shall be filled with a corrosion-inhibiting fluid and be monitored and maintained in a way that allows reliable leak detection.
- 14) The annulus pressure shall be maintained in accordance with Part II, Section D and the limits set in Table 4.
- 15) A minimum pressure of two hundred (200) psi at shut-in conditions shall be maintained on the tubing/casing annulus. This pressure range shall be submitted with the first annual report due after injection commences for WDEQ review and approval. Any annular pressure measured outside of this established normal pressure range shall be reported orally within twenty-four (24) hours, followed by a written submission within five (5) days, as a potential loss of mechanical integrity and per Part I, Section E(18). Event details, including associated injection pressures and temperatures shall be submitted to WDEQ for review and consultation as to whether a loss of mechanical integrity occurred.

E. PERMITTED WASTES

This Permit does not allow for the injection of any waste. Injection of any substance defined as a waste is a violation of this Permit and requires notification under Part I, Section E(18).

F. ENVIRONMENTAL MONITORING

- 1) The monitoring program shall be adequate to ensure knowledge of migration and behavior of the discharge in the receiver and may be required for any circumstances where groundwaters of the state could be affected (WWQR Chapter 27, Section 15(a)). Cowboy Clean Fuels, LLC. developed and submitted a Sampling and Analysis Plan (SAP) with their application for a permit modification. Upon issuance of this Permit, the SAP is considered approved by the Department.
- 2) The Permittee shall not deviate from the SAP without filing an amended plan and obtaining Department approval for that amended plan. In addition to the approved plan, the Permittee shall comply with additional monitoring requirements as outlined in Part II, Section F and Table 5 of this Permit.
- 3) The Permittee is responsible for properly installing, operating, maintaining, and removing all necessary monitoring equipment.
- 4) The Permittee conducted baseline sampling from outfalls currently producing from the Big George Coal from where the produced water will be obtained from and to which the injectate will be applied. The following constituents were analyzed:
 - a) Coliforms, Sulfur Reducing Bacteria, and Iron Fixing Bacteria.
 - b) Major Ions, Dissolved (bicarbonate as HCO_3 , Chloride, Fluoride, Sulfate, Calcium, Magnesium, Sodium).
 - c) Metals, Dissolved (Aluminum, Cadmium, Copper, Iron, Lead, Manganese, Mercury, Zinc).
 - d) Metals, Total (Arsenic, Barium, Selenium).
 - e) Radionuclides (Radium 226 and Radium 228).
- 5) The environmental monitoring program required under this Permit consists of:

- a) Produced water from the outfalls for constituents listed in Table 5 shall be conducted quarterly and reported quarterly in accordance with the SAP.
 - b) Provide for monitoring of the quality of the injected water quarterly.
 - c) Provide for metering of water injected into each well in accordance with the schedule outlined in Part II, Section I.
- 6) Provide for disinfection of the water injected if analysis shows that coliform bacteria, sulfate reducing bacteria or iron fixing bacteria are present in the water as pumped from the coal seam. Treatment methods must be methods that would be appropriate for treating water in a public water supply system.
 - 7) For each well, or newly underreamed zones within an existing well, the Permittee shall measure the initial reservoir pressure and collect a baseline groundwater quality sample from each aquifer or formation within the new discharge zones.
 - 8) The Permittee shall take samples at or before the wellhead for analysis. Test results shall be submitted to WDEQ with quarterly and annual reports as described in Part II, Section I. Quarterly and annual samples must include analysis for all constituents and parameters in Part II, Section F, Table 5 unless an alternative analyte list and sampling schedule is approved by the WDEQ as part of an amended injectate analysis plan (WWQR Chapter 27, Section 15(e)).
 - 9) Within thirty (30) days after the start of injection, or whenever there is a change in injection fluids, injectate sampling and analyses shall be performed as outlined in Part II, Section F(4) above. Exceedances of any constituent identified in Tables 6 and 8 characterizes the injectate as waste and is not Permitted for injection. Injection of wastes is a Permit violation.
 - 10) The WDEQ may periodically request additional injection fluid samples (in addition to the quarterly and annual samples) be collected for one or more of the constituents and parameters listed in Part II, Section F, Table 5 below. The Permittee shall provide the analytical results of any requested injection fluid samples within thirty (30) days or with the next quarterly report, whichever is later.

Table 5: Environmental Monitoring Program

Constituent or Parameter	Chemical Abstracts Service No.	Lab Method	Water Quality Standard ³
Metals			
Arsenic	7440-38-2	200.7 or 200.8	0.10
Selenium	7782-49-2	200.7 or 200.8	0.02
Aluminum	7429-90-5	200.7 or 200.8	5.00
Beryllium	7440-41-7	200.7 or 200.8	0.10
Boron	7440-42-8	200.7 or 200.8	0.75
Cadmium	7440-43-9	200.7 or 200.8	0.01
Chromium	7440-47-3	200.7 or 200.8	0.10
Cobalt	7440-48-4	200.7 or 200.8	0.05
Copper	7440-50-8	200.7 or 200.8	0.20
Iron	7439-89-6	200.7 or 200.8	5.00
Lead	7439-92-1	200.7 or 200.8	5.00
Lithium	7439-93-2	200.7 or 200.8	2.50
Manganese	7439-96-5	200.7 or 200.8	0.20
Nickel	7440-02-0	200.7 or 200.8	0.20
Vanadium	7440-62-2	200.7 or 200.8	0.1
Zinc	7440-66-6	200.7 or 200.8	2.0
Radionuclides			
Combined Total Radium 226 and Radium 228	---	A7500-RA	5 picocuries per liter (pCi/L)
Inorganic Constituents			
Bicarbonate as HCO ₃	144-55-8	A2320B	---
Bromide	24959-67-9	300.0 or SM4500-Br ⁻	---
Carbonate	471-34-1	A2320B	---
Chloride	16887-00-6	300.0	100
Iodide	20461-54-5	300.0 or SM4500-I ⁻	---
Calcium	7440-70-2	200.7 or SM3500-Ca	---
Magnesium	7439-95-4	200.7 or SM3500-Mg	---
Potassium	7440-09-7	200.7 or SM3500-K	---
Sodium	7440-23-5	200.7 or SM3500-Na	---

³ Units are mg/L unless otherwise noted above.

Constituent or Parameter	Chemical Abstracts Service No.	Lab Method	Water Quality Standard ³
Sulfate	14808-79-8	300.0 or SM4110 B	200
General Groundwater Quality Parameters			
Temperature in °F	---	SM2550 B	---
Turbidity	---	SM2130	---
pH	---	150.1 or SM4500H+B	4.5-9 standard unit (s.u.)
Hardness as CaCO ₃	---	130.2	---
Specific Conductance at 25 degrees Celsius (°C)	---	SM2510 B	---
Specific Gravity	---	D1429	---
Total Dissolved Solids	---	2540C	2,000.0
Bacteria			
Total Coliform	---	SM9223B	Most Probably Number of bacteria per 100 mL
E-coli Coliform	68583-22-2	SM9223B	
Sulfate Reducing	524680963	SM9240	Colony Forming Units per milliliter (CFU/mL)
Iron Related	7439-89-6 ⁴	SM9240	

G. INJECTION FORMATION TESTING

A work plan for any planned formation testing shall be submitted for WDEQ review, comment, and approval prior to implementing the test. Once approved, the Permittee may schedule the formation testing, providing WDEQ at least thirty (30) day notice before the testing is conducted. If available, a WDEQ representative will be present to monitor and evaluate the formation testing.

1) Step Rate Test (SRT)

- a) The Permittee submitted an SRT Plan (included in the CCF Injection Facilities Operational Monitoring Plan) as part of the permit application. Upon issuance of this Permit, the SRT Plan

⁴ CAS number for a single iron-related bacteria is not available. However, using the CAS number for the chemical element they interact with may be appropriate.

is considered approved by the department. The Permittee shall not deviate from this plan without filing an amended plan and obtaining department approval for the amended plan.

- b) Digital data, analyses, and interpretations for the step-rate tests shall be submitted to the Administrator within thirty (30) days or with the next quarterly report after the test is done, whichever is later.

2) Fall-Off Pressure Test (FOT)

- a) The Permittee submitted a FOT Plan (included in the CCF Injection Facilities Operational Monitoring Plan) as part of the permit application. Upon issuance of this Permit, the FOT Plan is considered approved by the department. The Permittee shall not deviate from this plan without filing an amended plan and obtaining department approval for the amended plan.
- b) Along with the analysis and interpretation, the Permittee shall submit plots of injection rate, pressure, and the pressure derivative versus time on appropriate graphs. If the method used differs from previous methods used for the same well, the analyst should discuss the comparability of the results. Analytical reports shall include shut-in static reservoir pressure, and a cumulative behavior plot of the injection zone.
- c) Data required shall include monitoring of pressures for at least one (1) hour prior to test start; and injection duration equal in time to the length of at least one fall-off period prior to the start of the FOT. A downhole device to measure pressures for the annual pressure FOT should be used.
- d) Digital data, results, analyses, and interpretations for the FOT shall be submitted to the Administrator at the address in Part I, Section E(31) with the annual report due in January of each year, as required in Part II, Section (I).
- e) The latest static reservoir pressure and its cumulative behavior over time on a graphic plot of the injection zone shall be determined and reported with the FOT report listed above.

3) Pressure Testing

- a) The Permittee submitted a Pressure Testing Plan (included in the CCF Injection Facilities Operational Monitoring Plan, labeled as MIT Procedure for **Well Name**) as part of the permit application. Upon issuance of this Permit, the Pressure Testing Plan is considered approved by the department. The Permittee shall not deviate from this plan without filing an amended plan and obtaining department approval for the amended plan.

- b) The Permittee shall notify the WQD a minimum of thirty (30) days prior to any pressure testing.
- c) WDEQ may require that an additional pressure test be conducted at any time during the permitted life of any well authorized by this Permit. The Permittee shall also arrange and conduct pressure tests according to the plan submitted.
- d) A Pressure Test shall be completed within thirty (30) days from completion of any work-over where well integrity is compromised, or within thirty (30) days when any loss of mechanical integrity becomes evident during operation. An internal pressure test shall be conducted on any well which lost mechanical integrity.
- e) A passing result is indicated if the casing still has 690 psi at the end of the 15-minute shut in time.
- f) Data, results, analyses, and interpretations for the tests shall be submitted to the administrator at the address in Part I, Section E(31) within thirty (30) days or with the next quarterly report after the test is done, whichever is later (WWQR Chapter 27, Section 8(g)).
- g) In the event of a failed Pressure Test following the MIT Procedure outlined in the Operational Monitoring Plan, the Permittee shall notify the Administrator, in accordance with Part I, Section D (18) of this Permit. The Permittee shall perform a Temperature Log as outlined in the Operational Monitoring Plan. The Permittee shall not deviate from this plan without filing an amended plan and obtaining department approval for the amended plan.
- h) Furthermore, in the event of a failed Pressure Test, injection activities shall be suspended immediately, and the wells shall be immediately shut-in, and operation shall not be resumed until the Permittee has taken necessary actions to restore and confirm mechanical integrity of the well.
- i) Injection shall not resume until the well has been repaired, a complete Pressure Test has been passed, and written permission to resume operation has been obtained from the Administrator.

H. FIELD ACTIVITY SUBMITTAL, NOTIFICATION, AND REPORTING

- 1) Prior to each field activity required in the following Part II, Section G, the Permittee shall submit plans for procedures and specifications to the WDEQ, UIC Program for approval. The

submittal address is provided in Part I, Section E(31). No field activity in these sections may proceed without prior written approval from WDEQ.

- 2) The Permittee must notify the WDEQ at least thirty (30) days prior to performing any required field activity, after the WDEQ approves the plans/procedures for testing, in order to allow the WDEQ to arrange to witness if desired.
- 3) The Permittee shall submit results of each field activity required in Part II, Section G to WDEQ within thirty (30) days of completion unless otherwise noted.

I. REPORTING

- 1) Reporting Information: Records of monitoring activity required under this Permit shall include:
 - a) Date, exact location, and time of sampling or field measurements.
 - b) Name(s) of individual(s) who performed sampling or measuring.
 - c) The types of sample containers used, methods of preservation, and holding times.
 - d) Date(s) laboratory analyses were performed.
 - e) Name(s) of individual(s) who performed laboratory analyses.
 - f) The analytical techniques or methods used.
 - g) Results and precision of such analyses.
 - h) Chain of Custody forms.
- 2) **Monitoring Devices**
 - a) The Permittee is responsible for properly installing, operating, maintaining and removing all necessary monitoring equipment.
 - b) Continuous monitoring devices

- i. The Permittee shall install a tap on the discharge line between the injection pump and the wellhead for the purpose of obtaining representative samples of injection fluid.
- ii. The Permittee shall monitor the injection pressure, both in the annulus and in the tubing, continuously and record the readings on a strip chart recorder, a circular chart recorder, or electronically.
- iii. The Permittee shall monitor the injection rate continuously and record the rates and volumes using digital recording devices.
- iv. Injectate rate/volume, injectate temperature, annular pressure, and injection pressure shall be measured at the wellhead using equipment of sufficient precision and accuracy. All measurements must be recorded at minimum to a resolution of one tenth of the unit of measure (e.g. injection rate and volume must be recorded to a resolution of a tenth of a gallon; pressure must be recorded to a resolution of a tenth of a psig; injection fluid temperature must be recorded to a resolution of one tenth of one degree °F). Exact dates and times of measurements, when taken, must be recorded and submitted. Each well shall have a dedicated flow meter installed so as to record all injection flow. The Permittee shall monitor the following parameters, at the prescribed frequency, and record the measurements at this required frequency, using the prescribed instruments (Table 6). For this Permit, continuous monitoring requires a minimum frequency of at least one data point every thirty (30) seconds.

Table 6: Injection Monitoring Frequency

Monitoring Parameter	Frequency	Instrument
Daily Injection Volume (gallons)	Daily	Digital Totalizer
Total Cumulative Volume (gallons)	Continuous	
Injection rate (gallons per minute)	Continuous	Digital Recorder
Well head injection pressure (psig)		
Annular pressure (psig)		
Injection fluid temperature (°F)		

- 3) A narrative description of all non-compliance that occurred during the reporting period.
- 4) Annual Reports shall be submitted to the Administrator no later than thirty (30) days after the end of each calendar year (by January 30). The fourth quarter results may be submitted with the annual report instead of a separate quarterly report. The Annual Report for each well shall include the following information in addition to that required for the quarterly report:

- a) A graphical representation of the injection pressures and volumes for the previous five (5) years operation and a digital file (e.g., .csv, .txt, .xls, .xlsx) containing these data. The graph shall have calendar dates as the abscissa and pressure and volume as the ordinates.
 - b) Graphical representations of the analyte concentrations over time and a digital file (e.g., .docx, .csv, .xls, .xlsx) containing these data. The graphs shall show the injectate quality for the previous five (5) years of operation and shall be prepared on scales appropriate to the variation observed.
- 5) The quarterly reports are to be reported within 30 days of the last day of each period (January 30th, April 30th, July 30th, October 30th).
- 6) The quarterly results shall be submitted online at <https://deq.wyoming.gov/water-quality/> under Electronic Document Submittal link. The Permittee shall submit, in accordance with the required schedule, accurate reports to WDEQ containing, at minimum, the following information:
- a) Injection rates for each month of the quarter, including:
 - i. Minimum instantaneous injection rates.
 - ii. Volume-weighted average injection rates.
 - iii. Maximum instantaneous injection rates.
 - iv. Maximum Permitted injection rate.
 - b) Injection pressure for each month of the quarter, including:
 - i. Minimum daily injection pressure.
 - ii. Average daily injection pressure.
 - iii. Maximum daily injection pressure.
 - iv. Maximum Permitted injection pressure.
 - v. Pressures at which alarms or kill switches are activated.

c) Injection volume per well, including:

- i. Total volume for each month.
- ii. Total volume for the quarter.
- iii. Total volume to date.

d) Annulus pressures, including:

- i. Maximum for each month.
- ii. Minimum for each month.
- iii. Set point for continuous pressure monitoring.
- iv. Pressures at which alarms or kill switches are activated.
- v. Quarterly analytical data required in Part II, Section F, Table 5 above.
- vi. Any Permit exceedances within the quarter.
- vii. Description of all events that triggered alarms or shutdowns and the responses taken during the quarter.
- viii. Reports for any well tests or well workovers conducted more than thirty (30) days before the end of the quarter.
- ix. Injection fluid characteristics for parameters specified in Part II, Section F, Table 5.

c) Annual analytical data required in Part II, Section F, Table 5 above.

d) Annual evaluation of the financial assurance as required in Part II, Section K.

7) A summary of reporting and testing requirements is presented in Table 7.

Table 7: Reporting Schedule for Class 5F2 UIC Permit

TASK	FREQUENCY	DUE
Annual Report	Annually	January 30 th annually
Quarterly Monitoring Reports	Quarterly	January 30 (4 th Quarter of previous year) April 30 (1 st Quarter) July 30 (2 nd Quarter) October 30 (3 rd Quarter)
Pressure Test	<p>– Pressure Test and Temperature Log Every 5 years, if casing liners are installed pressure testing will be conducted on annual basis</p> <p><u>Pressure Test</u> – after any well workover activities</p>	Report submitted within 30 days of test completion or with the next quarterly monitoring reports, whichever comes first
Annual Pressure Fall off Test (APFT)	Annually	Report Submitted within 30 days of test completion or with the next quarterly monitoring reports, whichever comes first
Step Rate Test (SRT)	One-Time per well; within 1 year of permit authorization or at the time of well completion and prior to waste injection	Report submitted at the completion of any remedial work
Non-compliance Report	During the corresponding reporting period	Report submitted with the quarterly reports that the non-compliance occurred during
Well Workover Report	As needed	Report submitted within 30 days of work being completed or with the next quarterly monitoring reports, whichever comes first. Part I MIT is required after well workover is complete.
Remedial Well Work	As needed after any failure of equipment or operational procedures that resulted in a violation of a permit condition	Report submitted at the completion of any remedial work
Aborted operations	As needed	In lieu of an annual report a complete report shall be submitted within 30 days of complete termination of the discharge or associated activity
Financial Assurance update – cost estimate	Annually	January 30 th annually

J. RECORDKEEPING

- 1) The Permittee shall retain the following records and shall have them available at all times for examination by WDEQ personnel, in accordance with the following:
- 2) All monitoring information, including required observations, calibration and maintenance records, recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the Permit application.
- 3) Records and results of Pressure Tests, any other tests required by WDEQ, and any well workovers completed.
- 4) Information in J(2) and J(3) above shall be retained for a period of three (3) years after closure of the facility at which time the Permittee shall notify the Administrator and either deliver the records to WDEQ or discard them as directed by the Administrator.
- 5) Information on the physical nature and chemical composition of all injected fluids.
- 6) Information in J(5) and J(6) above shall be retained until three (3) years after completion of any specified plugging and abandonment procedures. The Administrator may require the owner/Permittee to deliver the records to the Administrator at the conclusion of the retention period.
- 7) The Permittee shall furnish the Administrator, upon request, copies of records required to be kept by this Permit.

K. FINANCIAL ASSURANCE (WWQR Chapter 27, Section 19)

- 1) The Permittee is required to demonstrate and maintain financial assurance responsibility and resources to close, plug, abandon, reclaim, and maintain post-closure care for the underground injection operation in a manner prescribed by the Administrator.
- 2) The Permittee shall prepare a written cost estimate, in current dollars, of the cost of third-party plugging and abandonment of the well, surface reclamation, post-closure care, removal of infrastructure including but not limited to piping, above and below ground tanks, buildings, impoundments, access roads, fencing, electrical facilities, or any other physical materials used in the operation and maintenance of the injection well.

- 3) The Permittee shall adjust the cost estimate for inflation and increases in cost within sixty (60) days after each anniversary of the date on which the first cost estimate was prepared.
- 4) The Permittee shall revise the cost estimate whenever a change in the plan increases the cost and adjust the revised cost estimate for inflation.
- 5) Upon WDEQ review of the annual evaluation, if additional financial assurance is requested, the financial assurance instrument shall be submitted to the Department of Environmental Quality, **Attn: Bond Analyst, 200 W. 17th Street, 4th Floor, Cheyenne, WY 82002.**
- 6) The obligation to maintain financial responsibility survives the termination of the Permit or the cessation of injection.
- 7) Financial assurance instruments or an approved replacement financial assurance instrument shall be maintained as long as these wells are covered under this Permit.
- 8) Upon completion of any activities identified in the cost estimate, the amount of the financial surety required may be reduced by the Administrator.

L. PLUGGING AND ABANDONMENT (P&A)

1) Notice of P&A

The Permittee shall notify the Administrator of plans to convert or abandon an injection or monitor well at least ninety (90) days prior to the start of any conversion or abandonment activity (WWQR Chapter 27, Section 6(h)(iii)(V)).

2) P&A Plans

The Permittee shall plug and abandon the well(s) as provided in the P&A Procedure (stamped and dated August 25, 2023) submitted with the application for a permit modification. WDEQ reserves the right to change the manner in which a well will be plugged if the well is modified during its permitted life, if the well is not consistent with WDEQ requirements for construction or mechanical integrity, or otherwise at WDEQ's discretion.

3) P&A Report

The Permittee shall submit a P&A report within thirty (30) days after plugging and abandonment of any wells covered by this Permit, detailing the compliance with the P&A

procedures outlined in the original Permit application, and describing any deviation from the original plan.

4) Cessation of Injection Activities

a) After a cessation of injection operations for two (2) years, a well is considered inactive. In this case, the Permittee shall plug and abandon the inactive well(s) in accordance with the P&A Plans, unless the Permittee:

i. Provides notice to WDEQ;

ii. Has demonstrated that the well(s) will be used in the future;

iii. Conducts a Pressure Test in accordance with the schedule outlined in Part II, Section G(3) of this Permit while the well remains inactive.

iv. Final cessation of injection activities will require that the well be plugged and abandoned within six (6) months of final cessation.

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III. PERMIT ISSUANCE

This Permit consists of 32 pages. Further, it is based upon representations made by Cowboy Clean Fuels, LLC., through their application for permit modification submitted February 4, 2025, with subsequent information submitted June 2, August 22, and September 15, 2025. It is the responsibility of the Permittee to read, understand, and comply with all terms and conditions of this Permit. This Permit and the authorization to construct, test, and inject are issued for a period of ten (10) years unless terminated under the conditions set forth in Part I, Section E(32) of this Permit.

This Permit is issued and becomes effective on the date signed by the Director.

Jennifer Zygmunt, Administrator
Water Quality Division

Date

Todd Parfitt, Director
Department of Environmental Quality

Date