Jim Geringer, Governor

The State
of Wyoming

Department of Environmental Quality

Herschler Building • 122 West 25th Street • Cheyenne, Wyoming 82002

ADMIN/OUTREACH	ABANDONED MINES	AIR QUALITY	INDUSTRIAL SITING	LAND QUALITY	SOLID & HAZ. WASTE	WATER QUALITY
307-777-7758	307-777-6145	307-777-7391	307-777-7369	307-777-7756	307-777-7752	307-777-7781
FAX 777-3610	FAX 777-6462	FAX 777-5616	FAX 777-6937	FAX 777-5864	FAX 777-5973	FAX 777-5973

GENERAL UNDERGROUND INJECTION CONTROL PERMIT

AUTHORIZATION TO DISCHARGE COAL BED METHANE PRODUCED WATER INTO A CLASS 5C5 INJECTION WELL

PERMIT NUMBER: **5C5-1**

In compliance with the provisions of the Wyoming Environmental Quality Act and Chapter 16 Wyoming Water Quality Rules and Regulations adopted thereunder, Class 5C5 coal bed methane injection wells are hereby authorized to discharge to ground waters of the State of Wyoming. This permit covers wells located within the north half of Campbell County, State of Wyoming which are discharging or may discharge waste water into the Wasatch, Fort Union, Lance and/or Fox Hills Formations in accordance with the requirements of this permit. The specific area covered by this permit includes Township 48 North and all townships north of Township 48 North within Campbell County. The operator of a Class 5C5 facility eligible for coverage under this permit shall submit the information required within Part II of this permit to provide notice of intent to be covered under this permit. Coverage under this permit is allowed when the department issues a written authorization for acceptance of operations to the permit applicant. This permit consists of this page, all pages of the preamble and table of contents and pages 1 through 13 of permit conditions. The application form for coverage under this permit is found in Appendix A and the required quarterly report form is found in Appendix B.

This permit becomes effective on the date of issuance. Owners or operators of existing Class 5C5 facilities required to obtain a permit have six (6) months from the effective date of this general permit to make application for coverage or make application to obtain an individual permit.

This permit shall will be reviewed every five (5) years.

Gary Beach
Administrator - Water Quality Division

9/18/01
Date

Dennis Hemmer
Director - Department of Environmental Quality

9-21-01
Date

PREAMBLE

The purpose of this preamble is to provide operators of Class 5C5 facilities (coal bed methane) disposal systems with some practical advice for complying with the conditions of this permit.

Under the Environmental Quality Act and Chapter 16, Wyoming Water Quality Rules and Regulations, a discharge to groundwater cannot be allowed unless a permit is obtained from the department. A subsurface discharge cannot be allowed which would render groundwater unsuitable for any use for which it was suitable before the discharge. Chapter 8, Wyoming Water Quality Rules and Regulations defines the uses that groundwater is suitable for. Obtaining coverage under this permit does not provide authority to pollute groundwater or surface water or cause public health or environmental impacts. As well as allowing an applicant covered under this permit to discharge to groundwater, this permit allows the department to obtain information from the permittee to conduct a review of the potential to impact public health and down gradient groundwater users. Based on this review, the department may require the permittee to obtain an individual permit and conduct groundwater monitoring to characterize impacts. Under Section 7, Chapter 16, coverage under this permit shall not be extended to any facility if such a facility would be in violation of any state approved source water protection area. The discharge must meet Chapter 8 groundwater standards prior to injection. Facilities should be constructed to prevent spills from entering the discharge. Provision should be made for disinfecting the water using technology appropriate for drinking water prior to injection.

This general permit is limited to the north part of Campbell County from the south line of Township 48 North to the Wyoming state line on the north. This area was selected for this general permit because virtually all of the coal bed methane produced water in the area only meets the quality standards for Class III groundwater of the state under Chapter 8, Wyoming Water Quality Rules and Regulations. This fact alone makes it possible to write a general permit which is relatively simple, since all receiving aquifers must be class III groundwater or aquifers of lesser quality.

Applicants should find the information easy to obtain and to complete the application forms. For assistance, please contact the UIC Program Supervisor at (307) 777-7095.

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Part I. COVERAGE UNDER THIS PERMIT

A. Permit Area

This permit covers all areas within Campbell County from the south boundary of Township 48 North to the Wyoming state line on the north.

B. Facilities Covered Under This Permit

1. This permit covers only facilities that inject through wells, and only facilities which inject into the Wasatch, Fort Union, Lance and/or Fox Hills Formations. There are no formations deeper than the Fox Hills Formation which contain usable groundwater. Companies who wish to inject into any formation deeper than the Fox Hills Formation should obtain a class II UIC permit from the Wyoming Oil and Gas Conservation Commission.

2. This permit covers existing 5C5 injection wells and will cover new 5C5 injection wells as they are constructed.

3. The following list of existing injection wells may be covered under this General Permit. Coverage is contingent upon application for coverage. Those operators of existing wells which can be covered under this General Permit who fail to obtain coverage must apply for and obtain an individual permit no later than six (6) months from the date of this General Permit.

UIC FACILITY	COMPANY	PROJECT	T	R	SECTION
WYS 005-161	Anchor Bay Corp.	Wolfe 8-27WA	49	72	27 SE¼NE¼
WYS 005-155	Big Basin Petroleum	LX Bar Lxfee 1-1i	55	75	1 NE¼NE¼
WYS 005-162		LX Bar Lxfee 1-2	55	75	1 NW¼NE¼
WYS 005-163		BCWI 9-5	53	73	5 NE¼SE¼
WYS 005-158	CMS Oil and Gas	West #6-28 I-1	56	75	28 SE¼NW¼
WYS 005-164		West #5-28i-1	56	75	28 SW¼NW¼
WYS 005-165		West #12-28i-1	56	75	28 NW¼SW¼
WYS 005-166		West #8-29i-1	56	75	29 SE¼NE¼
WYS 005-216		Wolff #10-34 I-1	56	76	34 NW¼SE¼
WYS 005-217		Wolff #8-34 I-1	56	76	34 SE¼NE¼
WYS 005-218		Wolff #2-34 I-1	56	76	34 NW¼NE¼
WYS 005-167	Skull Creek A. LLC	Scoria Recharge Well 44-1R	54	73	1 SW¼SE¼
WYS 005-168		Scoria Recharge Well 44-12R	54	73	12 SE¼SE¼
WYS 005-169		Scoria Recharge Well 41-12R	54	73	12 NE¼NE¼
WYS 005-170		Scoria Recharge Well 32-12R	54	73	12 SW¼NE¼
WYS 005-171		Scoria Recharge Well 31-12R	54	73	12 NW¼NE¼
WYS 005-172		Scoria Recharge Well 22-7R	54	72	7 SE¼NW¼
WYS 005-173		Scoria Recharge Well 23-6R	54	72	6 NE¼SW¼
WYS 005-174		Scoria Recharge Well 11-7R	54	72	7 NW¼NW¼
WYS 005-175	Skull Creek A. LLC	Rogers Muddy Sand Unit WSW #1	55	73	36 SE¼SE¼

UIC FACILITY	COMPANY	PROJECT	T	R	SECTION
WYS 005-157	Petroleum Development Corporation	LX 10-25R	56	75	25 NW¼SE¼
WYS 005-176	Petroleum Development Corporation	LX 14-25R	56	75	25 SE¼SW¼
WYS 005-177		LX 1-35R	56	75	35 NE¼NE¼
WYS 005-160	J.M. Huber	RAG 11-41S	48	72	11 NW¼SW¼
WYS 005-178	Pennaco	Dead Horse Creek Bluebonnet Caballo 20-17	48	75	17 SE¼NE¼
WYS 005-179		Jim Wolff SR-1	49	72	25 NE¼NW¼
WYS 005-180		Jim Wolff SR-2	49	72	25 SE¼NW¼
WYS 005-181		Jim Wolff SR-3	49	72	35 SE¼NE¼
WYS 005-182		Jim Wolff SR-4	49	72	26 SE¼NW¼
WYS 005-183		Sunburst SR-1	49	72	3 SE¼SE¼
WYS 005-184		Sunburst SR-2	49	72	3 SE¼SE¼
WYS 005-185		Steinhoeffel SR-1	49	72	1 NW¼NE¼
WYS 005-186		Steinhoeffel SR-2	49	72	1 SW¼NE¼
WYS 005-187		Steinhoeffel SR-3	49	72	1 NE¼SE¼
WYS 005-188		Steinhoeffel SR-4	49	72	1 SW¼SW¼
WYS 005-189	Prima Oil and Gas	Stones Throw 78-12FH	55	74	16 NW¼NE¼ (Tract 78)
WYS 005-190		Stones Throw 78-12FU	55	74	16 NW¼NE¼ (Tract 78)
WYS 005-145		N. Shell Draw #25-12FH	52	75	25 NW¼NE¼
WYS 005-146		Hoblit Ranch ST-4-75FU	55	74	4 SE¼SW¼
WYS 005-147		Hoblit Ranch ST-4-75FH	55	74	4 SE¼SW¼
WYS 005-148		Werner Ranch ST-6-FU	55	74	6 SE¼NW¼
WYS 005-149		Werner Ranch ST-6-FH	55	74	6 SE¼NW¼
WYS 005-191		Wild Turkey 19-43 FU	49	76	19 SW¼SE¼
WYS 005-192		Wild Turkey 20-42 FU	49	76	20 NW¼SE¼
WYS 005-193		Wild Turkey 21-43 FU	49	76	21 SW¼SE¼
WYS 005-194		Wild Turkey 22-34 FU	49	76	22 SE¼SW¼
WYS 005-195		Wild Turkey 27-34 FU	49	76	27 SE¼SW¼
WYS 005-196		Wild Turkey 28-42 FU	49	76	28 NW¼SE¼
WYS 005-197		Wild Turkey 29-41 FU	49	76	29 NE¼SE¼
WYS 005-198		Wild Turkey 30-32 FU	49	76	30 NW¼SE¼
WYS 005-199		Wild Turkey 31-42 FU	49	76	31 SW¼SE¼
WYS 005-200		Wild Turkey 32-32 FU	49	76	32 NW¼SW¼

UIC FACILITY	COMPANY	PROJECT	T	R	SECTION
WYS 005-201		Wild Turkey 6-41 FU	48	76	6 NE¼SE¼
WYS 005-202		Wild Turkey 19-43 FH	49	76	19 SW¼SE¼
WYS 005-203	Prima Oil and Gas	Wild Turkey 21-43 FH	49	76	21 SW¼SE¼
WYS 005-204		Wild Turkey 32-32 FH	49	76	32 NW¼SW¼
WYS 005-205	Westport Oil and Gas	Duwal 34-5	48	72	5 SW¼SE¼
WYS 005-206		Appel 41-8	48	72	8 NE¼NE¼
WYS 005-207		Bone Pile WSW#1	48	72	7 SE¼SE¼
WYS 005-208	First Sourcenergy Wyoming, Inc	Eldridge #22-28-5275F	52	75	28 SE¼NW¼
WYS 005-209		Eldridge #24-28-5275f	52	75	28 SE¼SW¼
WYS 005-210		Eldridge #32-28-5275F	52	75	28 SW¼NE¼
WYS 005-211		Eldridge #33-28-5275F	52	75	28 NW¼SE¼
WYS 005-212		Floyd #41-28-5275Ca	52	75	28 NE¼NE¼
WYS 005-150	Energy Consulting and Operating LLC and VHJ Federated	Spotted Horse 15	55	75	28 SE¼SE¼
WYS 005-151		Spotted Horse	54	75	2 SE¼NE¼
WYS 005-213		Spotted Horse	54	75	3 NE¼SW¼
WYS 005-214		Spotted Horse	54	75	3 SW¼SE¼
WYS 005-215		Spotted Horse 16 13-1	54	75	1 SW¼SW¼

4. CMS Oil and Gas has one project with five injection wells permitted as a class 5C3 injection project. That project is permitted under permit UIC 00-233 to cover the Kline Draw Injection Facilities (WYS 005-128) in Section 19, SW¼NW¼; the LS Draw Injection Facilities (WYS 005-129) in Section 20, SE¼NW¼; and Section 28, NW¼SW¼; Township 56 North, Range 75 West, and the Inkline Injection Facilities (WYS 005-130) in Section 23, SW¼NW¼; and Section 34, NW¼SE¼; Township 56 North, Range 76 West. CMS may elect to relinquish permit UIC 00-233 and be covered under this General Permit if it chooses to do so.

5. First Sourcenergy Wyoming, Inc. has one project with one injection well permitted as a class 5C3 injection project. That project is permitted under permit UIC 01-004 to cover the Black Panther Injection Well (WYS 005-159) in Section 28, SW¼NE¼, Township 52 North, Range 75 West, of the 6th Principal Meridian. First Sourcenergy Wyoming, Incl may elect to relinquish permit UIC 01-004 and be covered under this General Permit if it chooses to do so.

C. Facilities Not Covered Under This Permit

1. The following facilities are not required to obtain coverage under this general permit:

   a. Any existing 5C3 or 5C5 facility covered by an individual permit issued pursuant to Chapter 16, Water Quality Rules and Regulations.

   b. 5C5 facilities which are not within this permit area.

D. Operator May Choose Coverage By An Individual Permit

Any operator covered by a general permit may at any time apply for and obtain an individual permit for the same facility. Once issued, an individual permit will eliminate coverage by the general permit for that facility.

E. Authorized Operations

1. This permit provides authorization to the facility operator to discharge coal bed methane produced water pursuant to the provisions contained herein. **This permit does not authorize the injection of drilling fluids, spent oilfield chemicals, other industrial wastes or hazardous wastes in any quantity whatsoever.**
2. There is no limit on the volume of water which may be injected into each well, provided that the pressure of injection is controlled and limited to the fracture pressure of the receiving formation as defined in Chapter 16. The operator is required to report volumes injected and the maximum daily injection volume when applying for coverage under this permit.
3. Within the area covered by this permit, all of the coal bed methane produced water meets only the groundwater standards for Class III groundwater of the state under Chapter 8, Wyoming Water Quality Rules and Regulations. For this reason, this permit covers only those injection zones which can be shown be Class III, IV(a), or IV(b) groundwater of the state. No injection into any aquifer is authorized by this permit if the baseline class of use of the receiving aquifer is Class I or II groundwater of the state.
4. Operators of injection wells within this area which could be covered by this permit, but which cannot meet the standards for this permit may or may not be allowable under an individual permit.

Part II. COVERAGE APPLICATION CONTENT

The applicant shall complete the application form and sign the certification and agreement sections of the application contained in Appendix A and provide any additional supporting information required in this Part II for the department to make a review of the impact associated with the project. Other supporting information shall include:

A. All property boundaries and adjacent property land use within one-half mile of the point of injection.

B. All water wells and surface water bodies and springs within one-half mile of the facility and the use of these wells.

C. A description of the method to be used to do Mechanical Integrity Testing as required by Chapter 16, Section 10(p)(vii).

D. At least one analysis showing the overall quality of the coal bed methane produced water to be disposed of.

E. Describe the peak maximum daily disposal capacity of the coal bed methane injection well. This is the maximum amount to be disposed of and does not require that the operator conduct tests to prove that the well will accept that volume of water.

F. Available information on the lithology, geology, hydrogeology, and groundwater quality of the receiving units. This includes the formation name, member name, and the depth of the perforated interval(s).

G. Analysis of the groundwater sufficient to classify, on a preliminary basis, the groundwater in the injection zone(s). If an analysis of the zone(s) is/are not available at the time when the application is made, then a plan should be submitted showing how these groundwater samples will be obtained during the completion of the well.

H. Proof that notification of the intent to obtain coverage under this general permit has been sent to all surface owners, mineral owners or water rights owners, oil and gas owners and the owners of coal leases within one-half mile of the proposed point of injection. Operators who have sent this notification as part of the approval process for aquifer recharge wells have already met this requirement, all other operators must submit this information as part of the application package.

I. Construction plans for the well itself and all surface facilities to be constructed as part of the coal bed methane injection facility. For the well, this requirement may be met by supplying a detailed cross sectional drawing of the well *and/or* a detailed written procedure for the installation of the well.

The above information shall be shown on maps and in written form. Information previously submitted to the department may be referenced.

Applicants for coverage under this general permit shall submit three (3) copies of the application package. One of these copies will be supplied to the Wyoming Oil and Gas Conservation Commission for their files.

Part III. STANDARD PERMIT CONDITIONS

A. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

B. Right to Access

The permittee shall allow the administrator, or an authorized representative of the administrator, upon the presentation of credentials, during normal working hours, to enter the premises where a regulated facility is located, or where records are kept under the conditions of this permit, and inspect the discharge and related facilities, review and copy reports and records required by the permit, collect fluid samples for analysis, measure and record water levels, and perform any other function authorized by law or regulation.

C. Signatory Requirements

1. All applications, reports, and other information submitted to the administrator shall be signed by a person who meets the following requirements:

   a. For a corporation -- by a principal executive officer of at least the level of vice-president;

   b. For a partnership or sole proprietorship -- by a general partner or the proprietor, respectively;

   c. By a duly authorized representative for any of the above. A person is a duly authorized representative only if:

2. The authorization is made in writing by one of the described principals;

3. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity and the written authorization is submitted to the administrator.

4. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the administrator prior to or together with any reports or information, to be signed by an authorized representative.

D. Certification

Any person signing documents required by this permit shall make 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 gathered and evaluated 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."

E. Advance Notice of Changes or Modifications

1. The permittee shall give advance notice to the administrator as soon as possible of any planned physical alteration or additions, other than authorized operation and maintenance, to the permitted facility and receive authorization prior to implementing the proposed alteration or addition;

2. Any modification which may result in a violation of a permit condition shall be reported to the administrator, and any modification that will result in a violation of a permit condition shall be reported to the administrator through the submission of a new or amended permit application;

3. Any class 5C5 facility which becomes temporarily abandoned because the building in which it is located or attached to becomes vacant shall be abandoned permanently prior to occupancy of the building by a new tenant.

F. Noncompliance

1. Reports of compliance or non-compliance with, or any progress reports on interim and final requirements contained in any compliance schedule, if one is required by the administrator, shall be submitted no later than 30 days following each schedule date;

2. Confirmed noncompliance resulting in the migration of injected fluid into any zone outside of the permitted receiver must be orally reported to the administrator within 24 hours, and a written submission shall be provided within five (5) days of the time the permittee becomes aware of the excursion. 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; and

   c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3. The permittee shall report all instances of noncompliance not already required to be reported under items (P) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in item (P) of this section.

4. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

G. Relevant Facts Omitted in Application

In the situation where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the administrator, the permittee shall promptly submit such facts or information. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in any report to the Administrator, he or she shall promptly submit such facts or information.

H. Construction and Performance Requirements

1. All injection wells covered by this permit shall meet construction requirements outlined in Section 10 of Chapter 16 or the permittee shall furnish certification that the facility has been designed and constructed to meet the requirements of this section. All injection wells covered by this permit shall be constructed to insure that the water injected reaches the intended receiver and only the intended receiver. The intended receiver shall be identified by geologic formation and/or member name as well as the depth of that receiver below ground surface.

2. The permittee shall properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit.

Proper operation and maintenance includes effective performance, adequate funding and operator 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 the permit.

3. All 5C5 facilities covered by this permit shall include a pre-treatment plan to insure that biological, hazardous, toxic or potentially toxic materials or substances are not discharged to the groundwater at concentrations higher than the class of use standards found in Chapter 8, Water Quality Rules and Regulations.

4. All 5C5 facilities covered by this permit shall also submit a spill prevention plan to the department which will prevent biological, hazardous, toxic or potentially toxic materials or substances from entering the waste stream prior to disposal in the subsurface.

5. Each operator shall provide background information showing that the class of use under Chapter 8 for each injection zone will not be violated by the injection of coal bed methane produced water;

6. A valid pressure falloff curve be recorded for each well within one year of the start of injection into that well; and

7. The pressure of injection be continuously recorded and that the pressure of injection be limited to no more than the fracture pressure of the receiving formation. This requirement can be met by assuming that the fracture gradient of the receiver is .70 psi/foot of depth and using the depth of the topmost perforation in making the calculation.

8. All injection wells covered by this general permit must be designed to 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.

I. Abandonment or Conversion to Water Wells

1. The permittee shall notify the administrator at least seven (7) days before conversion or abandonment of the facility;

2. An abandonment report, detailing the compliance with abandonment procedures outlined the original application for coverage under this general permit, or describing any deviations from the original plan, shall be submitted as soon as practicable after abandonment. The abandonment shall include reclamation of the well site.; and

3. In no case shall the abandonment procedure be less stringent than that required at the time of abandonment by the Wyoming Oil and Gas Conservation Commission for the abandonment of producing oil wells at the time of abandonment.

4. Injection wells covered by this permit shall be permanently abandoned or converted to another use within three (3) years after the date when coal bed methane water was last injected unless those wells are converted to water wells.

5. Wells which are to be converted to another use shall be covered by an approved Wyoming State Engineer's permit for the well showing that it has been converted to a water well. A copy of this permit shall be submitted to the department as proof that the well has been converted.

J. Change of Ownership

1. When the operator with responsibility for a permitted project is to change, the new operator shall submit a request to transfer the permit on forms provided by the department at least 48 hours prior to the change, and the preceding operator must sign the request acknowledging that termination of rights under the permit will cease when the department accepts the permit transfer. The new operator

or owner shall sign the transfer form agreeing to be bound by all of the terms and conditions of the permit.

2. Coverage under this general permit is not transferable to any person except after notice to the Administrator. Any transfer of a permit shall 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. The Administrator may require the operator to apply for and obtain an individual permit pursuant to Chapter 16.

K. Duty to Comply

The permittee shall comply with all conditions of the permit. Any permit noncompliance constitutes a violation of these regulations and may be resolved by enforcement action, permit termination, revocation, or modification.

L. Toxic or Hazardous Substances

The permittee shall not discharge any biological, hazardous, toxic or potentially toxic materials or substances in concentrations above allowable standards contained in Chapter 8, Water Quality Rules and Regulations into any coal bed methane injection well covered by this general permit.

M. Continuation of the Expired General Permit

An expired general permit continues in force and effect until a new general permit is issued or this permit is terminated.

N. Need to Halt or Reduce Activity Not a Defense; Stay of Permit Conditions

1. It shall not be a defense for a 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 this permit.

2. The filing of a request by the permittee, or at the instigation of the administrator, for a permit modification, revocation, termination, or notification of planned changes or anticipated non-compliance, shall not stay any permit condition.

O. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. Should groundwater become polluted or affect groundwater uses, the permittee shall take corrective actions to restore polluted groundwater to pre-contamination quality of use.

P. Duty to Provide Information

1. The permittee shall furnish to the Administrator within a reasonable time, any information which the Administrator may request to determine compliance with this permit. The permittee shall also furnish to the Administrator upon request, copies of records required to be kept by this permit.

2. The permittee shall furnish to the administrator, within a specified time, any information which the administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the administrator, upon request, copies of records required to be kept by the permit.

3. The permittee shall furnish any information necessary to make an assessment of the effect of this discharge on the environment as required in this permit.

Q. Penalties for Violations of Permit Conditions

Article 9 of the Wyoming Environmental Quality Act provides significant penalties for any person who violates a permit condition. Any person who violates any condition of this permit is subject to a civil penalty not to exceed $10,000 per day of such violation, as well as any other appropriate sanction provided by the Act. Knowingly or willfully violating the permit may result in criminal penalties of up to $25,000 per day of violation and/or imprisonment for up to one year. Criminal penalties for subsequent knowing or willful violations of the permit may be up to $50,000 per day of violation and/or imprisonment for up to two years. Falsification of any report, data, analysis, reading, recording, or of any information submitted under this permit is a willful and knowing violation of this permit.

R. Severability

The provisions of this permit are severable, and if any provision of this 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 thereby.

S. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

T. 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 also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee when necessary to achieve compliance with the conditions of the permit.

U. Reopener Clause

For good cause the Administrator may, at any time, require a permittee covered under this permit to obtain an individual permit, coverage under an alternative general permit, or this permit may be modified to include different limitations and/or requirements. Permit modification or revocation will be conducted according to Wyoming Water Quality Rules and Regulations, Chapter 16. The administrator shall inform the operator in writing that coverage under this permit will cease six (6) months from the date of receipt of the notice. The notice will also be provided that operation of the facility after that date without an individual permit Chapter 16, Water Quality Rules and Regulations is prohibited.

PART IV. MONITORING PROGRAM; RECORDS AND REPORTS

A. General Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. The permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample measurement, report, or application. This period may be extended by request of the Administrator at any time.

3. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;

b. The initials or name(s) of the individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were initiated;
e. The initials or name(s) of the individual(s) who performed the analyses;
f. References and written procedures for the analytical techniques or methods used; and
g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

4. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

5. The permittee shall retain all records concerning the nature and composition of injected fluids until 5 years after completion of any specified plugging and abandonment procedures. The administrator may require the owner/operator to deliver the records to the administrator at the conclusion of the retention period.

6. The permittee shall report any noncompliance which may endanger health or the environment, orally within 24 hours from the time the operator becomes aware of the circumstances. The report should include:

   a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to a usable groundwater of the state.

   b. Any noncompliance with a permit condition or malfunction of the discharge (injection) system which may cause fluid migration into or between usable ground waters of the state.

   c. A written submission shall be provided within 5 days of the time the operator becomes aware of the circumstances. This written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. The permittee shall report all instances of noncompliance not reported otherwise, at the time monitoring reports are submitted; such reports shall contain the information listed in Part IV(A)(3) above.

8. 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 no later than 30 days following each schedule date.

B. Requirements for Monitoring the Discharge

1. All operators covered by this permit must provide for metering of water injected into each well. On a quarterly basis, the volume injected into each well shall be reported for each month in the quarter.

2. The permittee shall monitor the quality of the injected fluid on an approved schedule. Samples shall be taken from the flow line to each injection well at a point where all pretreatment has taken place. The following parameters shall be analyzed by the listed methods and reported quarterly:

SAMPLING SCHEDULE	ANALYTICAL METHOD	PARAMETER ANALYZED	PERMIT LIMIT (UCL) *
Quarterly	EPA Method 160.1	Total Dissolved Solids	5000
	Calculated from other analysis	Sodium Adsorption Ratio	No Limit
	Standard Methods	Iron Fixing Bacteria	Should be Free of Bacteria
		Sulfate Reducing Bacteria	
		Coliform Bacteria	
	Standard Method 9040	pH	must be between 6.5 to 8.5

*All chemical concentrations in this permit are expressed in mg/l unless otherwise noted. pH is always expressed in standard units.

The above Upper Control Limit (UCL) is not to be exceeded in any sample. Exceedance of this value is a violation of this permit and shall require corrective action.

3. All operators of injection wells covered by this permit shall provide for pressure testing of the casing before injection and at least once every five years thereafter. The casing shall be pressure tested up to an indicated surface pressure of 700 psi and held for 15 minutes. A passing result is indicated if the casing still has 690 psi at the end of the 15 minute shut-in time. Records showing that these tests have been done shall be reported to the Water Quality Division with the next quarterly report.

Part V. DEFINITIONS

A. **"Administrator"** means the Administrator of the Water Quality Division, Wyoming Department of Environmental Quality or his or her authorized agent.

B. **"Coal bed methane produced water" or "CBM water"** means water produced from a coal seam specifically for the purpose of causing that seam to give up methane. It includes all water produced for this purpose regardless of whether the coal seam has begun to produce methane or not.

C. **"Injection well"** means a well, completed in such a way that only the receiving units are open to the well bore and all other units are isolated, which is used to inject fluids into the subsurface.

D. **"Operator"** means the permittee or the party, person, corporation or other entity that has operational control over a class V injection facility. The operator is responsible for ensuring compliance with all conditions of the permit.

E. **"Source Water Protection Area"** means the area delineated for the protection of ground and surface water sources for a public water supply under a department approved plan developed pursuant to Section 1453 of the Safe Drinking Water Act.

F. **"Wyoming Water Quality Standards"** refers to Wyoming Water Quality Rules and Regulations, Chapters 1 (surface water standards) and 8 (ground water standards).

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APPENDIX A: APPLICATION FORM FOR COVERAGE UNDER THIS PERMIT

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
WATER QUALITY RULES AND REGULATIONS, CHAPTER 16 (2001)
Application for Coverage Under General Permit 5C5-1

Coal Bed Methane Disposal

Registration No.:
Date recd:

1. Name of the Injection Well:_____
Location: T__N, R__W, Section ___¼,__¼ which is located in Campbell County, Wyoming. This facility is located _____feet FNL and _____ FEL of Section ____
or (bearing and distance) from the _____ corner of Section _____.
or Latitude: ____° _____' _____" North and
Longitude: ____° _____' _____" West preferably within a (ten) 10 meter accuracy.

Mailing Address: _____
_____
_____
_____
Street address where records will be kept:_____
_____
Telephone Number: ( ) ____ - _____
Name and title of responsible individual, address and telephone number if different from above: _____
Telephone Number: ( ) ____ - _____

2. Name address and telephone number of the operator on site: _____
_____
Telephone Number: ( ) ____ - _____

3. A brief description of the nature of the business and the activities to be conducted that require the applicant to obtain coverage under this chapter: Operator of a coal bed methane disposal well injecting into the Wasatch, Fort Union, Lance and/or Fox Hills Formation(s)

4. Depth of injection zone (perforated interval(s)) below ground surface:
from _____ feet to _____ feet. (_____ Formation)
from _____ feet to _____ feet. (_____ Formation)
from _____ feet to _____ feet. (_____ Formation)
from _____ feet to _____ feet. (_____ Formation)

5. The disposal capacity of the facility in gallons per day: _____

6. Owner of the surface rights where facility is located:_____
_____
Telephone Number: ( ) ____ - _____

7. Copies of access agreement between above owners and the operator if the operator is not the owner shall be attached. This requirement may be met by having the owner of the property write a letter stating that he consents to the construction covered by this application.

8. Map showing the facility and all property lines, water wells, springs, lakes, ponds, streams, rivers, and all points of injection within 1/4 mile of the facility.

9. Ownership Status:
____ Federal ____ State ____ Private ____ Public or other entity

10. Operational Status of Facility:
____ Operating ____ temporarily abandoned ____ permanently abandoned

Note: Permanently abandoned injection facilities are not required to be covered by this general permit. Operators of such facilities which were abandoned prior to April 14, 1998 may file this form to provide a record that the system has been abandoned. Operators of such facilities which were abandoned after April 14, 1998 shall file this form to show that the facility has been abandoned.

11. Additional information required by Part II of this general permit must be attached. This includes a description of the pretreatment plan to be used to insure that toxic materials (substances) are not discharged to the groundwater at concentrations higher that the class of use standards.

12. CERTIFICATION OF THE OPERATOR OF THE FACILITY:

"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 gathered and evaluated 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."

_____ _____
Printed name of person signing Title

_____ _____
Signature of Applicant Date Signed

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APPENDIX B: QUARTERLY REPORT FORM

STATE OF WYOMING
DEPARTMENT OF ENVIRONMENTAL QUALITY
UNDERGROUND INJECTION CONTROL PROGRAM
REPORTING FORM FOR CBM INJECTION WELLS

Date: _____/_____/_____

This form shall accompany the submission of any report, documentation or data required by the UIC permit on a class V CBM injection well.

Company Name:			
Phone Number			
Company Address:			
Facility Name:			
County:			
Permit number:	5C5-1		
Location:	T N,	R W,	Sec.

Injection Volume: (All volumes to be reported in gallons per day. Report volumes under whichever recharge well was in use for each day of the month.)

Month	Volume (in standard 42 gallon barrels)
1	
2	
3	
TOTAL THIS QUARTER:	

FLOW LINE SAMPLE: (This is the quality of water injected after all treatment has occurred. Total Dissolved Solids to be reported in mg/l, SAR is unitless, bacteria are reported in colonies per 100 ml, and pH is reported in standard units)
Date Sampled: _____/_____/_____ Laboratory: _____ Lab #:_____

Parameter	Discharge to the Well	Permit Limit (UCL)
Total Dissolved Solids		5,000
Sodium Adsorption Ratio		No Limit
Iron Fixing Bacteria		Should be Free of Bacteria
Sulfate Reducing Bacteria		
Coliform Bacteria		
pH in standard units		6.5-8.5

PERMIT EXCEEDANCES: All values that exceed the permit limitations on the above tables are circled in red.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Printed name of person signing _____ Title _____

Signature _____ Date signed _____

Submit to: UIC Program Supervisor
Water Quality Division
Herschler Building, 122 West 25th St.
Cheyenne, Wyoming 82002

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