# Class V Injection Wells and Facilities Underground Injection Control Program

#### CHAPTER 16

Section 1. Authority and Purpose. These regulations are promulgated pursuant to W.S. 35-11-101 through 1413, specifically 302, and no person shall cause, threaten or allow violations of any provision contained herein. These regulations fulfill Wyoming state obligations under Section 1422 of the Federal Safe Drinking Water Act and Federal Underground Injection Control regulations found in 40 CFR 124 and 40 CFR 144-148 (both as of December 7, 1999).

Section 2. Definitions. The following definitions supplement those definitions contained in Section 35-11-103 of the Wyoming Environmental Quality Act.

- (a) "Aquifer" means a zone, stratum or group of strata that can store and transmit water in sufficient quantities for a specific use.
- (b) "Area of review" means the area for which information and analyses shall be submitted as part of an underground injection control permit application, and reviewed for issuance of a permit. The area of review must include all portions of an aquifer which will be affected in a measurable way within ten (10) years of the granting of a permit, assuming that the permit is complied with.
- (c) "Background" means the constituents or parameters and the concentrations or measurements which describe water quality and water quality variability prior to the subsurface discharge.
- (d) "Cesspool" means a drywell that receives solely untreated domestic sewage, and which sometimes has an open bottom and/or perforated sides.
- (e) "Class V facility" means any property which contains an injection well, drywell, or subsurface fluid distribution system which is not defined as a Class I, II, III, or IV well in Chapter 13, Water Quality Rules and Regulations. The Class V facility includes all systems of collection, treatment, and control which are associated with the subsurface disposal. Appendix A of this chapter contains a list of Class V facilities.
- (f) "Domestic sewage" means liquids or solid wastes obtained from humans and domestic activities including wastewater from activities such as showers, toilets, human washbasins, food preparation, clothes washing, and dishwashers.
- (g) "Draft permit" means a document indicating the tentative decision by the department to issue or deny, modify, revoke and reissue, or terminate a permit. A notice of intent to terminate a permit and a notice of intent to deny a permit are types of draft permits. A

denial of a request for modification, revocation and reissuance, or termination is not a draft permit. A draft permit for issuance shall contain all conditions and content, compliance schedules and monitoring requirements required by this chapter.

- (h) "Drywell" means a well, other than an improved sinkhole or subsurface distribution system, completed above the water table so that its bottom and sides are typically dry, except when receiving fluids.
- (i) "Duly authorized representative" means a specific individual or a position having responsibility for the overall operation of the regulated facility or activity. The authorization shall be made in writing by a responsible corporate officer and shall be submitted to the administrator.
- (j) "Fact sheet" means a document briefly setting forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft-permit. Fact sheets for Class I wells are incorporated into the public notice.
- (k) "Fluid" means any material which flows or moves, whether semisolid, liquid, sludge, gas or any other form or state.
- (l) "General permit" means a permit issued to a class of operators, all of which inject similar types of fluids for similar purposes. General permits require less information to be submitted by the applicant than individual permits and do not require public notice for a facility to be included under the authorization of a general permit.
- (m) "Groundwater" means subsurface water that fills available openings in rock or soil materials such that they may be considered water saturated under hydrostatic pressure.
- (n) "Groundwaters of the state" are all bodies of underground water which are wholly or partially within the boundaries of the state.
- (o) "Hazardous waste" means a hazardous waste as defined in Chapter 2, Section 1-(c), Wyoming Hazardous Waste Rules and Regulations.
- (p) "Improved sinkhole" means a naturally occurring karst depression which has been modified by man for the purpose of directing and emplacing fluids into the subsurface.
- (q) "Individual permit" means a permit issued for a specific facility operated by an individual operator, company, municipality, or agency. An individual permit may be established as an area permit and include multiple points of discharge that are all operated by the same person.
- (r) "Injectate" means the wastewater being disposed of through any underground injection facility after it has received whatever pretreatment is done.

- (s) "Lithology" means the description of rocks on the basis of their physical and chemical characteristics.
- (t) "Permit" means a Wyoming Underground Injection Control permit, unlessotherwise specified.
- (u) "Permit by rule" means an authorization included in these rules which does not require either an individual permit or a general permit. A facility which is permitted by rule must meet the requirements found in this chapter, but is not required to apply for and obtain a permit to construct and operate the facility.
  - (v) "Permittee" means the named permit holder.
- (w) "Point of compliance" means a point at which the permittee shall meet class of use standards for the receiver.
- (x) "Point of injection" means the last accessible sampling point prior to waste fluids being released into the subsurface environment through a Class V injection well. For example the 'point of injection' of a Class V septic system might be the distribution box—the last accessible sampling point before the waste fluids drain into the underlying soils. For a dry well, it is likely to be the well bore itself.
- (y) "Public hearing" means a non-adversary hearing held by the administrator or director of the department. The hearing is conducted pursuant to Chapter 3 of the Wyoming-Department of Environmental Quality Rules of Practice and Procedure.
- (z) "Radioactive waste" means any waste which contains radioactive material in concentrations which exceed those listed in 10 CFR Part 20, Appendix B, Table II, Column 2 as of December 22, 1993.
- (aa) "Receiver" means any zone, interval, formation or unit in the subsurface intowhich fluids and pollutants are discharged.
- (bb) "Responsible corporate officer" means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who-performs similar policy- or decision-making functions for the corporation.
- (cc) "Secondarily affected aquifer" means any aquifer affected by migration of fluidsfrom an injection facility, when the aquifer is not directly discharged into.
- (dd) "Septic system" means a facility that is used solely to emplace domestic sewage below the surface and is comprised of a septic tank and subsurface fluid distribution system.

- (ee) "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 plandeveloped pursuant to Section 1453 of the Safe Drinking Water Act.
- (ff) "Subsurface fluid distribution system" means an assemblage of perforated pipes or drain tiles used to distribute fluids below the surface of the ground. Subsurface fluid distribution systems include but are not limited to drain fields, leach fields, mounded leach fields, leach lines, bed type distribution systems, and gravel less chamber type distribution systems.
- (gg) "Vadose Zone" means the unsaturated zone in the earth, between the land surface and the top of the first saturated aquifer. The vadose zone contains water at less than saturated conditions.
- (hh) "Underground source of drinking water" means those aquifers or portions thereof which have a total dissolved solids content of less than 10,000 mg/l, and are classified as either Class I, II, III, IV (a), or Special (A), pursuant to Chapter 8, Quality Standards for Wyoming Groundwaters, Water Quality Rules and Regulations.
- (ii) "Water quality management area" means the area delineated for the protection of water quality under a department approved plan developed under Sections 303, 208 and/or 201 of the Federal Clean Water Act, as amended.
- (jj) "Well" means a bored, drilled, or driven shaft; a hole dug whose depth is greater than the largest surface dimension; an improved sinkhole; or a subsurface fluid distribution system.
- (kk) "Wellhead protection area" means the area delineated for the protection of a public water supply utilizing a groundwater source under a department approved plan developed pursuant to Section 1428 of the federal Safe Drinking Water Act.
- Section 3. Applicability. These regulations shall apply to any discharge to the subsurface, including the vadose zone, for all of the types of discharges listed in Appendix A of this chapter.
- Section 4. Timing of Compliance with These Regulations. Any Class V permitissued under Chapters 9 or 16, Water Quality Rules and Regulations, prior to the effective date of these regulations shall remain in effect until replaced by an individual permit, a general permitor permit by rule pursuant to this chapter. Existing individual permits issued under Chapters 9 or 16 will be reviewed on a five (5) year basis pursuant to Section 5 (a)(vii) of this chapter. Any individual permit issued pursuant to Chapters 9 or 16 prior to the effective date of these regulations fulfills all of the requirements to obtain a permit under this chapter.
  - (a) All operators of existing systems which are required to obtain an individual

permit under these regulations shall obtain a permit by April 14, 2000.

#### (b) General permits.

(i) Within two (2) years of the effective date of the general permit, all operators of existing facilities which require coverage shall:

- (A) Apply for coverage under the general permit;
- (B) Apply for an individual permit for the facility;
- (C) Retain an existing permit issued under Chapter 9; or
- (D) Cease discharging fluids to the subsurface.
- (ii) All operators of facilities which are required to be covered by a general permit which are constructed after the effective date of these regulations shall apply for and obtain coverage prior to the construction of the facility.
- (iii) Facilities will be covered by general permits as soon as the department has issued a written statement of acceptance to construct and operate the facility under the general permit. The department will issue a statement either accepting the operation for coverage under a general permit, or denying coverage under a general permit within 60 days of the date when the operator has requested coverage.

#### (c) Permit by rule.

- (i) All operators of existing facilities permitted by rule shall submit inventory information to the department within one (1) year of the effective date of this chapter.
- (ii) All operators of facilities permitted by rule which are to be constructed after the effective date of these regulations shall submit inventory information to the department prior to constructing the facility.

Section 5. Permits Required; Processing of Permits; and Requirements Applicable to All Permits.

#### (a) Permits required.

- (i) Construction, installation, modifications or operation of Class V facilities shall be allowed only in accordance with these regulations.
- (ii) Discharges into, or construction of, any Class V facility are prohibited unless permitted pursuant to this chapter.

- (iii) Every facility shall be covered by one of the three types of permitting systems: individual; general; or permit by rule. The following sections of these regulations describe the permitting method for and subclasses of facilities. The owner or operator of a facility which can be covered by a general permit or authorized under permit by rule may apply for and be permitted by an individual permit if the owner or operator desires. Operators who do not meet the requirements for a general permit or permit by rule must obtain an individual permit prior to installation or construction of the Class V facility.
- (iv) Permits may be issued for individual facilities or they may be issued on an area basis for multiple points of discharge operated by the same person.
- (v) A separate permit to construct is not required under Chapter 3, Water-Quality Rules and Regulations for any Class V facility. Requirements of the Chapter 3 permit to construct will be included in the underground injection control permit issued under this chapter.
- (vi) All permits issued under this chapter, whether individual permits, or general permits, shall be for no more than ten (10) years duration.
- (vii) Each permit shall be reviewed by the department at least once every five (5) years for continued validity of all permit conditions and contents. Permits that do not satisfy the requirements of these regulations are subject to modification, revocation and reissuance, or termination pursuant to this chapter.
- (viii) Sections of permit applications filed under this chapter which represent engineering work shall be sealed, signed, and dated by a licensed professional engineer as required by Wyoming Statutes, Title 33, Chapter 29.
- (ix) Sections of permit applications filed under this chapter which represent geologic work shall be sealed, signed, and dated by a licensed professional geologist as required by Wyoming Statutes, Title 33, Chapter 41.
- (b) Permit processing procedures applicable to all Class V facilities, individual and general permits.
  - (i) The director may deny an individual permit for any of the following reasons:
    - (A) The application is incomplete;
- (B) The project, if constructed and/or operated, will cause violation of applicable state surface or groundwater standards;
  - (C) The application contains a proposed construction or operation

which does not meet the requirements of this chapter;

- (D) The permitted facility would be in conflict with or is in conflict with a state approved local wellhead protection plan, state approved local source water protection plan, or state approved water quality management plan; or
- (E) Other justifiable reasons necessary to carry out the provisions of the Environmental Quality Act.
- (ii) If the director intends to deny an individual permit for any reason other than an incomplete or deficient application, a draft permit shall be prepared and public notice issued pursuant to Section 13 of this chapter.
- (iii) Permits may be modified, revoked and reissued, or terminated either in response to a petition from any interested person (including the permittee) or upon the administrator's initiative. However, permits may only be modified, revoked and reissued, or terminated for the reasons specified in Section 5 (b) (vi) of this chapter. All requests shall be inwriting and shall contain facts or reasons supporting the request.

If the administrator decides the petition is not justified, the petitioner shall be sent a brief written response giving the reason for the decision. A request for modification, revocation and reissuance, or termination shall be considered denied if the administrator takes no action within 60 days after receiving the written request. Denials of requests for modification, revocation and reissuance, or termination are not subject to public notice and comment. Denials by the administrator may be appealed for hearing to the Environmental Quality Council by a letter-briefly setting forth the relevant facts.

#### (iv) The administrator may modify a permit when:

- (A) Any material or substantial alterations or additions to the facility occur after permitting or licensing, which justify the application of permit conditions that are different or absent in the existing permit;
- (B) Any modification in the operation of the facility is capable of causing or increasing pollution in excess of applicable standards or permit conditions;
- (C) Information warranting modification is discovered after the operation has begun that would have justified the application of different permit conditions at the time of permit issuance;
- (D) Regulations or standards upon which the permit was based have changed by promulgation of amended standards or regulations, or by judicial decision after the permit was issued;

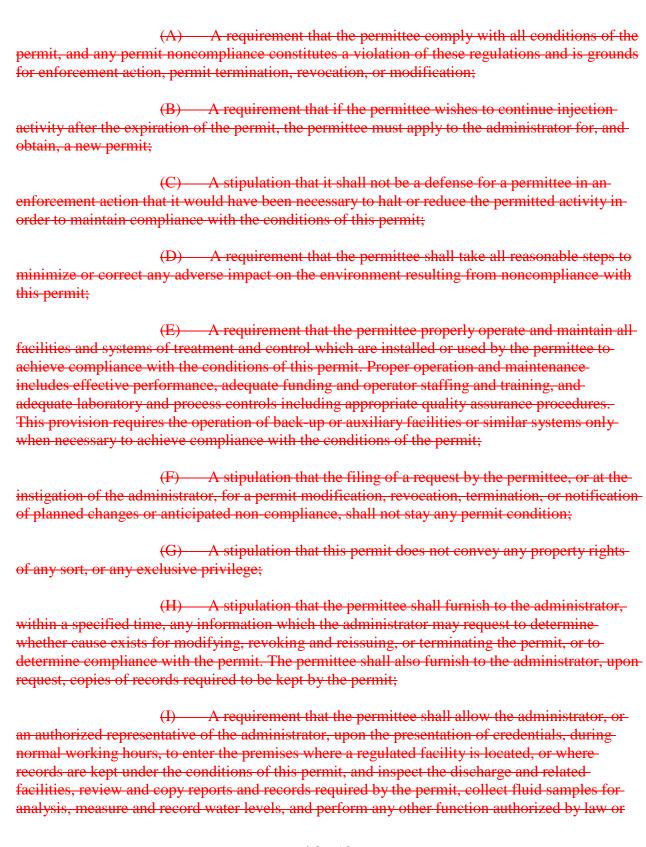
(E) Cause exists for termination, as described in this section, but the department determines that modification is appropriate; or
(F) Modification is necessary to comply with applicable statutes, standards or regulations.
(v) Minor modifications of permits may occur with the consent of the permittee without following the public notice requirements. Minor modifications will become final 20 days from the date of receipt of such notice. For the purposes of this chapter, minor modifications may only:
(A) Correct typographical errors;
(B) Require more frequent monitoring or reporting by the permittee;
(C) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;
(D) Allow for a change in ownership or operational control of a facili where the administrator determines that no other change in the permit is necessary, provided the a written agreement containing a specific date for transfer of permit responsibility, coverage, as liability between the current and new permittees have been submitted to the administrator;
(E) Change quantities or types of fluids injected which are within the capacity of the facility as permitted—and, in the judgment of the administrator, would not interfere with the operation of the facility or its ability to meet conditions described in the permitand would not change its classification;
(F) Change construction requirements approved by the administrator pursuant to department rules and regulations provided that any such alteration shall comply with the requirements of this chapter; or
(G) Amend an abandonment plan.
(vi) The administrator may revoke and reissue or terminate a permit for any o the following reasons:
(A) Noncompliance with terms and conditions of the permit;
(B) Failure in the application or during the issuance process to disclos fully all relevant facts, or misrepresenting any relevant facts at any time; or

(C) A determination that the activity endangers human health or the environment and can only be regulated to acceptable levels by a permit modification or termination.
(vii) The administrator may modify a permit to resolve issues that could lead to the revocation of the permit under Section 5 (b) (vi) of this chapter. The administrator, as part of any notification of intent to terminate a permit, shall order the permittee to proceed with reclamation on a reasonable time period.
If the administrator tentatively decides to modify or revoke and reissue a permit, a draft permit incorporating the proposed changes shall be prepared. The administrator may request additional information and, in the case of a modified permit, may require the submission of an updated application. In the case of revoked and reissued permits, the administrator shall require the submission of a new application.
(viii) In a permit modification under Section 5 (b) (iv) of this chapter, only those conditions to be modified shall be reopened when a new draft permit is prepared. All other aspects of the existing permit shall remain in effect for the duration of the unmodified permit and the modified permit shall expire on the date when the original permit would have expired. When a permit is revoked and reissued under this section, the entire permit is reopened as if the permit has expired and is being reissued. When the entire permit is reopened, the modified permit shall be issued for no more than ten (10) years. During any revocation and reissuance-proceeding, the permittee shall comply with all conditions of the existing permit until a new final permit is issued.
(ix) Permit modifications, revocations or terminations shall be developed as a draft permit and are subject to the public notice and hearing requirements outlined in Section 13.
(x) Transfer of a permit is allowed only upon approval by the administrator. When a permit transfer occurs pursuant to this section, the permit rights of the previous permitted will automatically terminate.
(A) The proposed permit holder shall apply in writing as though—that person was the original applicant for the permit and shall further agree to be bound by all of the terms and conditions of the permit; and
(B) Transfer will not be allowed if the permittee is in noncompliance with any term and conditions of the permit, unless the transferee agrees to bring the facility back into compliance with the permit.

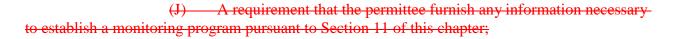
(i) All individual and general permits issued under this chapter shall contain-

(c) Permit conditions.

the following conditions:



regulation;



- (K) A requirement that 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 in Section 11 of this chapter;
- (L) A requirement that all applications, reports, and other information submitted to the administrator contain certifications as required in Section 6 (c) (xii) of this chapter, and be signed by a person who meets the requirements to sign permit applications found in Section 6 (c) (xi), or for routine reports, a duly authorized representative;
- (M) A requirement that the permittee 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;
- (N) A requirement that 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;
- (O) A requirement that any transfer of a permit must first be approved by the administrator, and that 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;
- (P) A requirement that monitoring results shall be reported at the intervals specified elsewhere in the permit;
- (Q) A requirement that 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;
- (R) A requirement that 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:

- (II) A description of the noncompliance and its cause;

  (II) 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

  (III) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

  (S) A requirement that the permittee report all instances of noncompliance not already required to be reported under paragraphs (c) (i) (P) through (R) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (c) (i) (R) of this section;

  (T) A requirement that in the situation where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect
- (U) A requirement that the injection facility meet construction requirements outlined in Section 10 of this chapter, and that the permittee submit notice of completion of construction to the administrator and allow for inspection of the facility upon completion of construction, prior to commencing any injection activity;

information in a permit application or in any report to the administrator, the permittee shall-

promptly submit such facts or information;

- (V) A requirement that the permittee notify the administrator at such times as the permit requires before conversion or abandonment of the facility;
- (W) A requirement that an abandonment report, detailing the compliance abandonment procedures outlined the original permit application, or describing any deviations from the original plan, be submitted as soon as practicable after abandonment; and
- (X) A requirement that injection may not commence until construction is complete.
- (ii) In addition to the conditions required of all permits, the administrator may establish, on a case by case basis, conditions as required for monitoring, schedules of compliance, and such additional conditions as are necessary to prevent the migration of fluids into underground sources of drinking water.
  - (d) Records and reports required for general and individual permits.

(i) 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.
(ii) Routine periodic reports required by the permit shall be submitted to the administrator within 30 days following the end of the period covered in the report. Reports shall include the following information:
(A) If the permit requires, an accounting of the total volume of injectate for the period covered by the report, the year to date, and the life of the facility to date; and
(B) An analysis of the physical, chemical and other relevant characteristics of the injected fluid.
(iii) For any aborted or curtailed operation, in lieu of an annual report, a complete report shall be submitted within 30 days of complete termination of the discharge or associated activity.
(iv) The permittee shall retain all monitoring records required by the permit for a period of three (3) years following facility closure.
Section 6. Individual Permits.
(a) The operator shall submit an application and obtain a permit prior to the construction, installation, modification or operation of any facility in the following subclasses: 5A3; 5B3; 5B5; 5C1; 5C2; 5C3; 5D1; 5D3; 5D4; 5E3, 5E4 and 5F2 unless the facility is covered by a general permit. In addition, any facility not authorized under Sections 7 and 8, and operators directed by the administrator to obtain an individual permit, shall obtain an individual permit under this section.
(b) The operator is responsible to make application for and obtain a permit. Each application must be submitted with all supporting data required in this chapter.
(c) A complete application for a Class V facility individual permit shall include:
(i) A brief description of the nature of the business and the activities to be conducted that require the applicant to obtain a permit under this chapter;
(ii) The name, address and telephone number of the operator, and the operator's ownership status and status as a federal, state, private, public or other entity;
(iii) The name address and telephone number of the facility. Additionally, the location of the facility shall be identified by section, township, range and county.

(iv) A calculation of the area of review, to include:

- (A) A calculation to determine the maximum area affected by the injected waste for all Class V facilities constructed or modified after the effective date of these regulations. This 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 facility.
- (B) A Class V area of review shall never be less than the area of potentially impacted groundwater.
- (C) All areas of review shall be legally described by township, range and section to the nearest ten (10) acres as described under the general land survey system.
  - (v) Information about the proposed facility including:
- (A) A description of the substances proposed to be discharged, including type, source, and chemical, physical, radiological and toxic characteristics; and
- (B) Construction and engineering details in accordance with Section 10 of this chapter and Chapter 11 Water Quality Rules and Regulations.
- (vi) Information, including the name, description, depth, geologic structure, faulting, fracturing, lithology, hydrology, and fluid pressure of the receiver and any relevant confining zones. The fracture pressure of the receiver shall be submitted only if the injection is under pressure into a confined aquifer.
- (vii) Water quality information including background water quality data which will facilitate the classification of any groundwaters which may be affected by the proposed discharge. This must include information necessary for the division to classify the receiver and any secondarily affected aquifers under Chapter 8, Wyoming Water Quality Rules and Regulations.
- (viii) A topographic and other pertinent maps, extending at least one (1) mile beyond the property boundaries of the facility, but never less than the area of review, depicting:
  - (A) The facility and each of its intake and discharge structures;
- (B) Each well, drywell or subsurface fluid distribution system where fluids from the facility are injected underground;
- (C) Other wells, springs, and surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within the area of review; and
  - (D) Bedrock and surficial geology, geologic structure, and

hydrogeology in the area.

- (ix) A list of other relevant permits, whether federal or state, that the facility has been required to obtain, such as construction permits. This includes a statement as to whether or not the facility is within a state approved water quality management plan area, a state approved wellhead protection area or a state approved source water protection area.
- (x) Detailed plans for monitoring the volume and chemistry of the discharge, and water quality of selected water wells within the area of review in accordance with Section 11-of this chapter;
- (xi) All applications for permits, reports, or information to be submitted to the Administrator shall be signed by a responsible officer as follows:
  - (A) For a corporation a responsible corporate officer means:
- (i) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or
- (ii) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (B) For a partnership or sole proprietorship -- by a general partner or the proprietor, respectively;
- (C) For a municipality, state, federal or other public agency by either the principal executive officer or ranking elected official.
- (xii) The application shall contain the following certification by the person-signing the application:

"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."

(d) All data used to complete permit applications shall be kept by the applicant for a minimum of three (3) years from the date of signing.

- (e) The applicant shall submit five (5) copies of the permit application to the division.
- (f) Within 60 days of submission of the application, the administrator shall make an initial determination of completeness. An application shall be determined complete when the administrator receives an application and any supplemental information necessary to determine compliance with these regulations.
- (g) Resubmittal of information by an applicant on an incomplete application will begin the process described in paragraph (f) of this section.
- (h) During any 60 day review period where an application is determined complete, the administrator shall prepare a draft permit for issuance or denial, prepare a fact sheet on the proposed operation, and provide public notice pursuant to Section 13.
- (i) A denial of the application by the department is appealable by the applicant to the Environmental Quality Council in accordance with the Rules of Practice and Procedure. Requests for appeal must be in writing, state the reasons for appeal, and be made to both the director and the chairman of the Environmental Quality Council.

#### Section 7. General Permits.

- (a) The department may develop and issue general permits pursuant to these regulations which cover Class V facilities for the following subclasses: 5A1, 5A2, 5B1, 5C4, 5C5, 5C6, 5D1, 5D2, 5E1, 5E3, and 5E5. The administrator may issue general permits in other categories as the need arises. 5E3 facilities which were permitted as small wastewater systems prior to April 14, 1998 are permitted by rule under Section 8 (c) (v) and are not covered by this section. Facilities in these subclasses which have already been issued individual permits under Chapter 9 or Chapter 16, Water Quality Rules and Regulations may continue under these permits until they are terminated, revoked and reissued, or canceled at the request of the operator. Coverage shall not be extended to any facility if such a facility would be in violation of any state approved source water protection area. Facilities in these subclasses not presently covered by an individual permit will be authorized by permit by rule until the general permit for the specific subclass is issued. The operator of a facility listed in this section shall have two (2) years after the date of issuance of the general permit to:
  - (i) Obtain coverage under the issued general permit;
  - (ii) Submit an application and receive an individual permit under this chapter;
- (iii) Continue to be covered by a permit issued pursuant to Chapter 9 of these regulations; or
  - (iv) Abandon the facility in accordance with Section 12.

- (b) If a general permit has been issued by the department, an operator of a facility must register the facility with the department and sign a statement agreeing to be bound by the conditions of that permit. Failure to register for general permit coverage, when available, is the same as operation of a facility without a permit, unless an individual permit has been obtained.
- (c) In order to be covered by a general permit, an operator must submit all information required in Section 6 (c) (i), (ii), and (iii), plus any additional information required to be submitted or reported in the issued general permit. The submittal requesting coverage by a general permit shall be signed by a person meeting the same signatory requirements of Section 6 (c) (xi) and shall be certified in accordance with Section 6 (c) (xii). Facilities will be covered by general permits as soon as the department has issued a written statement of acceptance to allow the construction and operation of the facility under the general permit. The department will issue an authorization accepting the operation for coverage under the general permit or denying coverage under the general permit, within 60 days of the date when the operator requested coverage. Requests for coverage under a general permit, which do not meet the requirements for general permit pursuant to this chapter, may be denied by the administrator.
- (d) Once issued, general permits must remain the same for all persons covered by the permit. A general permit may be modified in accordance with Section 5 (b) (iv). Any such modification must cover all persons covered by the permit.
  - (e) General permits shall also include:
    - (i) The permit conditions required in Section 5 (c) (i);
- (ii) A requirement to submit information necessary for the department to make an assessment of the vulnerability of the environment and public health to the injection from the Class V well. Such information may include the depth to the groundwater table at the disposal-field, groundwater quality or existing available information on the lithology, geology, hydrogeology and the location of the following items within 1/4 mile of the Class V facility:
  - (A) All water supply wells and the uses of each respective well;
  - (B) All property boundaries and land uses;
  - (C) All surface water bodies or springs; and
  - (D) All known sources of groundwater contamination or pollution.
- (E) All state approved source water protection areas, wellhead protection areas, 201 service areas, or water quality management plan areas.

(iii) Depth below the ground surface for the point of injection and for the well-screening in all wells within the area of review;
(iv) A requirement for facilities constructed after April 14, 1998 that the operator certifies the facility will meet the design, construction, and operational performance requirements in Section 10 for the specific subclass of facility.
(v) A requirement that the operator submit the disposal capacity of the facility in gallons per day as calculated using Table 1, Chapter 25. Some facilities may be required to monitor the volume of injectate actually disposed of, or the volume of water used in the area served by the Class V facility.
(f) The administrator may require any operator covered by a general permit to obtain an individual permit for the facility when a review of the information submitted under this section indicates that the general permit would not be protective of groundwater in that specific case. 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 replace coverage by the general permit for that facility.
(g) General permits will contain the subclass of injection facility covered, the geographic area covered, the general nature of the fluids to be discharged, and the location of the receiver where the discharge will be allowed. General permits will follow the public notice requirements of Section 13 of this chapter. During each five (5) year review of a general permit, a public notice shall be issued by the department stating that a five (5) year review has been done, listing the facilities covered by a general permit, and stating where the public may obtain a copy of the permit.
(h) Operators of new injection facilities who believe that their facility may be covered by a general permit in class 5C6 facilities may apply for coverage under the general permit for that subclass. If not accepted for coverage under this general permit, the operator shall apply for an individual permit under subclass 5C3.
(i) Operators of new injection facilities who believe that their facility may be covered by a general permit in class 5E5 facilities may apply for coverage under the general permit for that subclass. If not accepted for coverage under this general permit, the operator shall apply for an individual permit under subclass 5E3.
(j) In order to obtain coverage under the general permit all operators of class 5C6 and 5E5 shall submit detailed construction drawings and an abbreviated groundwater study showing the approximate depth to groundwater and a list of water wells within one half mile of the facility.

- (k) General permits may be written to require the operator to monitor the water quality of the injected fluid and to submit the information to the department. Existing facilities under this section may be required to monitor injectate quality on a one time basis, on a quarterly basis, a semi-annual basis or annual basis depending on the ability of the facility to cause adverse environmental damage or affect human health.
- (l) General permits for Class 5C5 coal bed methane injection facilities shall require that:
- (i) Each operator 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;
- (ii) A valid pressure falloff curve be recorded for each well within one (1) year of the start of injection into that well; and
- (iii) 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.
- Section 8. Permit by Rule. The types of Class V facilities listed in this section-represent minimal threats to pollute groundwater. The referenced facilities which meet the requirements of this section are permitted by rule. A permit by rule requires the owner or operator to submit information contained in this section before construction, installation or modification of a facility and to meet the performance standards contained in this section and in Section 10 of this Chapter. No facility shall be located within a state approved local wellhead protection area, state approved source water protection area or a state approved water quality management area which is in conflict with any of those plans.
  - (a) A facility permitted by rule under this section shall meet the following conditions:
- (i) In addition to the information listed in Section 6 (c) (i), (ii) and (iii) of this chapter, the operator shall submit the following inventory information to the department prior to construction for facilities constructed after the effective date of these regulations and within one (1) year of the effective date of these regulations for existing facilities: (Facilities which are already registered with the Underground Injection Control Program, or which were issued a permit under Chapters 3, 9 or 16, need not send a new registration, but may be asked for updated information from time to time.)
  - (A) The location of the facility, either a complete legal description or

latitude and longitude preferably within a (ten) 10 meter accuracy;

- (B) Type and general description of the quality of the injected fluid;
- (C) The disposal capacity of the facility in gallons per day;
- (D) Depth of injection zone; and
- (E) Whether or not the facility is operating, temporarily abandoned, or permanently abandoned.
- (ii) The facility shall be designed, constructed and operated to protect groundwater standards contained in Chapter 8, Water Quality Rules and Regulations and performance standards found in this section and in Section 10 of this chapter;
- (iii) Chemical, bacteriological, radiological additives, hazardous substances or toxic substances additives shall not be mixed in the injected fluid at any time during use of the water, prior to injection or during injection; and
- (iv) Any violation of the requirements of these regulations by a Class V facility operator permitted by rule shall be reported to the department by telephone within twenty four (24) hours of the time when the operator becomes aware of the violation. A written report shall be filed by the operator with the department within seven (7) days detailing steps which have been taken and will be taken to eliminate the violation.
- (b) All facilities, referenced in this section, which do not meet the requirements of subsection (a) shall obtain an individual permit under this chapter. For facilities constructed or modified after the effective date of these regulations requiring an individual permit, the owner or operator shall obtain the permit prior to any construction.
  - (c) The following classes of facilities are permitted by rule under this section:
- (i) 5B2 facilities, except any facility which injects wastewater or contains polluted groundwater or surface water in concentrations above the receiver use standards contained in Chapter 8, Water Quality Rules and Regulations;
- (ii) After the effective date of these regulations, coal bed methane operators cannot be covered by 5B2 aquifer recharge rule authorizations. All coal bed methane disposal systems must be covered by a general permit or an individual permit under this chapter if they inject into a USDW, or a Class II permit issued by the Wyoming Oil and Gas Conservation Commission if they inject into a Class VI aquifer;
- (iii) 5B4 facilities, provided that the water injected will not cause a groundwater standards violation under Chapter 8, Water Quality Rules and Regulations;

#### (iv) 5B6 and 5B7 facilities;

- (v) 5D5 facilities, except those facilities receiving water polluted above the receiving groundwater class of use standards contained in Chapter 8, Water Quality Rules and Regulations and facilities injecting swimming pool wastes into a Class I groundwater;
- (vi) 5E3 facilities which were originally permitted under a small wastewater-system permit issued by the Department of Environmental Quality or a local government-delegated the authority to issue small wastewater system permits, located within any five (5) acres of land where the cumulative maximum peak daily wastewater flow injected from other-small wastewater system permitted facilities under the same ownership would exceed 2,000-gallons per day; and
- (vii) 5F1 facilities, provided that information contained in Section 10 (m) of this chapter is submitted.
- (d) A permit by rule where the operator has provided the necessary information shall be valid until the facility is properly closed pursuant to these regulations or until a permit has been issued or denied under this chapter.
- (e) The administrator may request information from the owner or operator of a well-or facility permitted by rule to determine whether the facility may be causing a violation of groundwater use standards in Chapter 8, Water Quality Rules and Regulations, the construction-standards found in this chapter and in Chapter 11, Water Quality Rules and Regulations, or any other requirements of this chapter. Such information may include, but is not limited to:
- (i) Analysis of injected fluids and periodic submission of reports of such monitoring;
- (ii) Groundwater monitoring and periodic submission of reports of such monitoring;
  - (iii) Description of receiving strata; and
  - (iv) Well locations and down gradient use of groundwater.
- (f) Any request for information under this section shall be made in writing and include a brief statement of the reasons for requesting the information. An owner or operator-shall submit the information within the time frames provided in the request for information.
- (g) The administrator may require any operator permitted by rule to obtain an individual permit for the facility when a review of the information submitted under Section 8 (e) of this chapter indicates that the permit by rule would not be protective of groundwater in that

# specific case.

#### Section 9. Prohibitions.

- (a) In addition to the requirements in W.S. 35-11-301 (a), no person shall:
- (i) Conduct any authorized injection activity in a manner that results in a violation of any permit condition or representations made in the application, the request for coverage under the general permit, individual permit, or permit by rule. A permit condition supersedes any application content;
- (ii) Discharge to any zone except the authorized discharge zone as described in the permit; or
- (iii) Construct, install, modify or improve an authorized injection facility except in compliance with the permit requirements.
- (b) The construction of any Class 5C4 facility after the effective date of these regulations is prohibited.
- (c) No person shall inject any hazardous waste which has been banned from land-disposal pursuant to Chapter 13, Wyoming Hazardous Waste Rules and Regulations unless the disposal conforms to that chapter.
- (d) No drainage facility, subclass 5D1 through 5D5 shall be constructed so as todirectly receive any waste other than natural precipitation or natural groundwater unlesspermitted under an individual permit.
- (e) No heating and cooling facility, subclass 5A1 through 5A3, shall be constructed so as to receive any waste other than cooling water. No corrosion inhibitors, scale inhibitors, biocides, antifreeze agents, salts, or refrigerants shall be added to the water prior to injection.
- (f) No abandoned drinking water well shall be used as a disposal well unless it can be demonstrated that the waste being disposed of will leave the class of use of the affected groundwater unchanged. The class of use referred to is determined under Water Quality Rules and Regulations, Chapter 8 Quality Standards for Wyoming Ground Waters.
- (g) No wastewater produced by electric power generation from geothermal fluids-shall be disposed of in any Class V injection facility. Such wells are Class I injection wells and are covered by Chapter 13, Water Quality Rules and Regulations.
- (h) No wastewater produced by recovery of brines and extraction of halogens shall be disposed of in any Class V injection facility. Such wells are Class I injection wells and are covered by Chapter 13, Water Quality Rules and Regulations.

(i) No person shall construct and/or operate any cesspool after April 14, 1998. No Class V facility which receives domestic sewage shall be constructed and/or operated after April 14, 1998 unless the waste is first treated in a septic tank, or other pre treatment device. Prior to closure of any cesspool, the operator shall notify the administrator 30 days in advance.
(j) The operation of any Class V septic system with liquid waste visible on the ground surface shall be considered a failure of the system and a violation of these regulations.
(k) An operator of a facility which is authorized by rule is prohibited from injection into the facility:
(i) Upon failure to submit inventory information prior to construction for facilities constructed after April 14, 1999; and
(ii) Upon failure to comply with a request for information under Section 8 (e) of this chapter.
(l) Pumping domestic sewage out of any Class V facility for any use other than disposal to an approved facility is prohibited.
Section 10. Construction and Operation Standards for Class V Facilities.
(a) All Class V facilities must meet or exceed the design standards of these regulations including Part B of Chapter 11 and Chapter 26, Water Quality Rules and Regulations.
(b) All Class V facilities shall be constructed to permit the use of testing devices, and allow monitoring of injected fluid quality. Class V facilities shall be constructed to provide for metering of the injectate volume if the individual or general permit requires such metering.
(c) All heating and cooling facilities (5A1, 5A2 and 5A3) shall include:
(i) Provision for the use of non-toxic circulating medium in closed loop-systems or an operating system which cannot be made to operate with fluid leaking;
(ii) Provision for operations without the use of corrosion inhibitors, biocides, or other toxic additives in open loop systems;
(iii) Provisions to control the total dissolved solids of waters injected into open loop systems to the class of use standard;

(iv) Provisions for automatic shutdown of the system in the event of a fluid

loss from a closed loop system or a loss of any product to an open loop system; (v) Provisions to ensure that injected water does not come to the surface or flood any subsurface structure in the immediate vicinity of the injection system; and (vi) Provisions to ensure that known groundwater contamination is not spreadby the direct injection of contaminated water or by movement of contamination from one zone toanother caused indirectly by the injection. (d) All mining, sand and backfill facilities (5B1) shall include: (i) Provision for insuring mechanical integrity of any well designed to remain in service for more than 60 days; (ii) Provision for controlling the type of material injected and to insure that no hazardous waste is injected; (iii) Provision for leak detection in all surface piping; (iv) Provision for insuring that the backfill remains within the permitted areaof injection; and (v) Provision to insure that the injection does not cause a groundwater standards violation for the class of use of the receiver-All beneficial use injection facilities (5B2, 5B3, 5B4, 5B5, 5B6, and 5B7) shall include: (i) Plans to insure that contaminants do not enter the injection stream; (ii) Information to show that the injection will accomplish the desired goalstated in the application; and (iii) Target restoration values for the groundwater in the affected area beingremediated for 5B5 facilities. (f) All commercial and industrial Class V facilities (5C1, 5C2, 5C3 and 5C4) shall: (i) Include a pre-treatment plan to insure that toxic materials (substances) are not discharged to the groundwater at concentrations higher than the class of use standards found-

in Chapter 8, Wyoming Water Quality Rules and Regulations or any primary drinking water

standard found in 40 CFR 141 (as of June 6, 2001), whichever is more stringent;

# Wyoming Water Quality Rules and Regulations; and

- (iii) Include, at a minimum, annual sampling of the waste injected as part of the monitoring plan for the facility.
- (g) When a 5C3 facility receiving slaughter house wastes can demonstrate that no violations of groundwater standards will occur, the facility shall be:
  - (i) Designed for the following minimum disposal capacities:
    - (A) 300 gallons per day for plant cleanup plus;
    - (B) 25 gallons per head of cattle slaughter capacity;
    - (C) 40 gallons per head of hog slaughter capacity;
    - (D) 35 gallons per head of sheep slaughter capacity; and
- (E) Appropriate capacity for any other species slaughtered on a per head basis.
- (ii) Designed to prevent the disposal of blood and viscera into the septic system except as a small incidental portion of the total flow. Blood and viscera shall be sent to a rendering plant or other approved disposal or recycling system.
- (iii) A grease trap shall be provided ahead of the septic system with a total capacity equal to one half of the total required capacity of the septic tank.
- (h) All drainage facilities (those with the code number 5D on Appendix A) shall include:
- (i) A plan to preclude the inadvertent introduction of contaminants into the wastewater stream:
- (ii) An operations and maintenance manual detailing maintenance required, reporting requirements for known spills affecting the facility, and steps to be taken to prevent the introduction of contaminants in the event of a spill within the area served by the facility; and
- (iii) Maps showing the area where runoff will be transported to the drainage facility.
- (i) All agricultural drainage facilities (5D1) injecting surface runoff from animal-waste piles, feedlots, or dairy operations for which a demonstration can be made that the groundwater standards can be met, shall be designed for treatment in a septic tank, lagoon, or

other treatment technology prior to injection. The following requirements apply to these systems:

- (i) The treatment facility shall be sized for the strength and solids content of the wastewater to be treated;
- (ii) The flow capacity requirements shall include all runoff from operations within the collection area and all runoff from precipitation up to and including a 25 year, 24 hour-design storm; and
- (iii) The flow capacity requirements for drainage from a fully enclosed dairy or feeding operation shall be as follows:
  - (A) 20 gallons per day per animal up to 50 pounds;
  - (B) 100 gallons per day per animal up to 500 pounds; and
  - (C) 200 gallons per day per animal over 500 pounds.
- (iv) The subsurface fluid distribution system shall be designed in accordance with general design requirements found in Chapter 25.
  - (j) All sewage disposal (5E) facilities shall:
- (i) Conform to applicable construction standards found in Chapter 25, Wyoming Water Quality Rules and Regulations;
- (ii) Comply with applicable sections of Chapter 11, Parts B and C, Water Quality Rules and Regulations for all piping systems or storage facilities feeding existing or Class V facilities constructed after the effective date of these regulations; and
- (iii) Be designed for the maximum daily peak flow determined from Table 1 of Chapter 25, Water Quality Rules and Regulations. In addition, whenever multiple points of discharge under one owner within any five (5) acres of land have a design capacity under Chapter 25 to inject more than a total of 2,000 gallons per day of domestic sewage, they shall be permitted under this chapter in the same manner that they would be permitted if all the wastewere delivered to a single point of discharge.
- (k) All aquiculture return flow facilities (5E1) shall include pretreatment in a lagoon, septic tank, or oxidation ditch sized for the strength and volume of the wastes to be disposed of.
- (l) All domestic wastewater treatment plant disposal facilities (5E4) shall also include:
  - (i) Provisions for filtering of the waste and disinfection of the injectate;

(ii) An anning manufal magnitaring and around in sluding and discharge
(ii) An environmental monitoring program, including pre-discharge, operational monitoring, and post discharge monitoring;
(iii) Monitoring of the injectate on at least a weekly basis for Nitrate as N, Ammonia as N, and coliform bacteria;
(iv) Design to prevent groundwater standards violations as defined by Chapte 8, Water Quality Rules and Regulations;
(v) The points of compliance shall be at down gradient monitor wells installed on land owned by the same utility that operates the treatment plant and injection facilities whenever the point of injection is not the point of compliance; and
(vi) Requirements for the submission, approval and conformance with an operational and maintenance manual.
(m) All cathodic protection facilities (5F1) shall include:
(i) A seal of sodium bentonite or sodium bentonite grout is required from the surface to a minimum depth of three (3) feet. A second sodium bentonite or sodium bentonite grout seal is required for a minimum thickness of three (3) feet, just above the top of the coke-breeze. After the sodium bentonite has been placed in the hole, it shall be hydrated to insure a proper seal. The remainder of the hole between these seals may be backfilled with cuttings. The above seals may be placed directly in the hole or may be placed outside of a surface pipe of sufficient length to reach down to the anodes. If a surface pipe is used, no seals are required inside the pipe except during final abandonment.
(ii) All aquifers encountered while drilling shall be isolated from one another using a bentonite seal of at least two (2) feet in vertical dimension.
(iii) The coke breeze shall be a high quality product containing a minimum of leachable metals or organic pollutants. The coke breeze shall not discharge any pollutant which will cause a groundwater standard violation.
(iv) Surface access to the anode shall be kept sealed and locked at all timeswhen the anode is not actually being serviced.
(v) Each separate aquifer penetrated shall require a separate breather pipe. Each aquifer shall remain in hydrologic isolation from each other if they were isolated prior to installation.
(vi) If it becomes necessary to wet any anode installed under this section, onl water from a public water supply or water meeting all of the standards for Class I groundwater (

the state shall be used unless the division is first supplied with an analyses of the water for approval.

- (vii) Each 5F1 facility shall be marked in the field with a sign showing the name, address, and telephone number of the operator who installed the system. Upon abandonment, such markers shall remain in place.
- (viii) A 5F1 facility shall not be installed within 200 feet of any pipeline, wellhead, storage tank, mud pit or other potential source of pollution unless the operator's surface rights prevent this requirement from being met.
- (n) Except for beneficial use facilities, Class V facilities shall not be located within 200 feet of any active public water supply well, regardless of whether or not the well is completed in the same aquifer. This minimum distance may increase or the existence of a Class-V facility may be prohibited within a state approved wellhead protection area, source water-protection area or water quality management plan area.
- (o) Class 5C6 and 5E5 facilities shall meet the construction standards and separation distances appropriate for the design flow as shown in Chapter 25.
  - (p) Class 5C5 coal bed methane injection facilities shall:
    - (i) Provide for metering of water injected into each well;
- (ii) 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;
- (iii) 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;
- (iv) Provide for injection at a pressure of less than the fracture pressure of the receiver; and
- (v) Provide for monitoring of the quality of the injected water on a periodic basis.
- (vi) Provide notification of the intent to obtain coverage under the general permit 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.
- (vii) Provide for pressure testing of the casing before injection and at least once every five (5) 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.

#### Section 11. Environmental Monitoring Program.

- (a) The monitoring program shall be adequate to ensure knowledge of migration and behavior of the discharge in the receiver.
- (i) Monitoring may be required for any circumstance where groundwaters of the state could be affected by a Class V facility.
- (ii) The extent and design of a monitoring system shall be sufficient to dealwith the pollution potential of the proposed discharge.
- (iii) Before construction or installation of a Class V facility, a monitoring program, when required, shall be adequate to establish baseline conditions of the receiver.
  - (b) The monitoring program shall consist of any or all of the following:
    - (i) Pre discharge or pre operational monitoring;
    - (ii) Operational monitoring;
    - (iii) Post-discharge or post-operational monitoring;
    - (iv) Record keeping and reporting;
- (v) Such additional requirements established by the administrator to meet the purposes of the Environmental Quality Act and these regulations.
- (c) Each monitoring program shall include maps and cross-sections, where appropriate, showing the location, lithology, and screening interval of each monitoring site.
- (d) The operator is responsible for properly installing, operating, maintaining and removing all necessary monitoring equipment.
- (e) The operator shall develop and follow a written waste analysis plan that describes the procedures to be carried out to obtain detailed chemical and physical analyses of a representative samples of the waste, including quality assurance procedures to be used. Once approved by the department, the operator shall not deviate from the plan without filing an amended plan and obtaining department approval for that amended plan. At a minimum, any plan shall include:
  - (i) The parameters for which the waste will be analyzed, the rationale for the

selection of these parameters, and the test methods to be used to test for these parameters; and

(ii) The sampling method that will be used to obtain a representative sample of the waste.

(iii) The operator shall repeat the analysis of the injected wastes in the manner and on the schedule described in the waste analysis plan or when operating changes occur that may significantly alter the characteristics of the waste stream.

- (f) All Class V permits shall contain a point of compliance. The point of compliance shall be the point of injection or specific monitor wells located down gradient of the injection facilities.
- (i) For facilities where the point of compliance is the point of injection, the fluid to be injected shall be limited to the class of use standards for the receiver as found in Chapter 8 of these regulations or any primary drinking water standard found in 40 CFR 141, (as of June 6, 2001) whichever is more stringent. The permittee may be required to maintain monitor wells in the vicinity of the discharge for the purpose of monitoring flow direction and monitoring groundwater quality in the event of non-compliance with the permit.
- (ii) For facilities where the point of compliance is at one or more down gradient monitor wells, the department shall establish permit limitations at the monitor well(s) consistent with the class of use of the receiver or any secondarily affected aquifer or surface water. Where necessary to protect existing or future uses, permit limitations may be established at the point of compliance which are more stringent than the class of use standard.
- (iii) Facilities where subsurface treatment is anticipated may be required tomonitor the injected fluid at the point of injection. Permit limits may be established at the point
  of injection which exceed the class of use standard for the affected aquifer, provided that a
  demonstration is made showing that a class of use standards violation will not occur at a point of
  compliance downgradient from the point of injection. Permit limits of this nature are intended
  to provide early warning of possible non-compliance at the point of compliance.
- (g) Procedures and methods for sample collection and analyses shall be implemented by the permittee to ensure that the samples are representative of the groundwater, water, or wastes being sampled.
- (h) Sample collection of groundwater shall be of such frequency and of such variety (season, time, location, depth, etc.) to properly describe the groundwater, and shall be accomplished by the methods and procedures described in the U.S. Environmental Protection Agencymanual RCRA Groundwater Monitoring Technical Enforcement Guidance Document, September, 1986, unless alternate methods and procedures are approved by the administrator.
  - (i) Analysis of all samples shall be accomplished pursuant to Chapter 8, Water

Quality Rules and Regulations, Sections 7 and 8.

# Section 12. Abandonment of Class V Facilities.

- (a) After the effective date of these regulations, Class V facilities may be abandoned in place if the following conditions are met and if it can be demonstrated to the satisfaction of the administrator that:
  - (i) No hazardous waste has ever been discharged through the facility;
  - (ii) No radioactive waste has ever been discharged through the facility;
- (iii) All piping allowing for the discharge has either been removed or the endsof the piping have been plugged in such a way that the plug is permanent and will not allow for a discharge; and
- (iv) All accumulated sludges are removed from any septic tanks, holding tanks, lift stations, or other waste handling structures prior to abandonment;
- (b) Facilities which cannot demonstrate compliance with subsection (a) (i) or (a) (ii) of this section, may be abandoned in place if:
- (i) Tests are run on sludges accumulated in the septic tanks, holding tanks, lift stations, or other waste handling structures which shows that none of these materials contain characteristic hazardous waste or radioactive waste;
- (ii) Monitoring of the groundwater in the immediate area of the facility shows that there are no toxic materials (substances) present in the groundwater at levels higher than elass of use standards, which are present as a result of the injection; or
- (iii) Some other method is determined to be acceptable to the administrator which demonstrates compliance with Chapter 8 of these regulations and prevents the movement of fluid containing any contaminant into an underground source of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water standard found in 40 CFR 141 (as of June 6, 2001).
- (c) Facilities which cannot make the demonstrations required under either subsection (a) or (b) of this section shall be excavated to the point where contamination is no longer visible in the soil. At that point, samples shall be taken of the soil for all hazardous constituents which may have been discharged through the system. Materials excavated shall be removed from the site for disposal under approval of the Solid and Hazardous Waste Management Division.
- (d) Cathodic protection (5F1) facilities will be considered to have made the demonstrations required under subsections (a) and (b) if no waste has been disposed of into the

facility. After they have fulfilled their useful purpose, they shall be abandoned by filling all-breather pipes with an impervious material and removing all surface installations down to a depth of three (3) feet. All anodes where the construction included a surface casing shall also have the surface casing cut off three (3) feet below grade and a plug or cap shall be installed on the surface casing. It is not necessary to remove the coke breeze, anodes, and seals during abandonment. The administrator may approve other alternatives for abandonment if they provide adequate environmental protection.

(e) Prior to abandoning any class 5C4 automotive waste disposal facility, the operator shall provide 30 days notice to the administrator.

# Section 13. Public Participation, Public Notice and Public Hearing Requirements.

- (a) Public notice is not required for minor modifications as described by Section 5 (b) (v) of this chapter or for a permit denial where the application is determined incomplete.
- (b) Public notice is not required for any facility permitted by rule or for any facility covered under general permit. The department shall issue one public notice creating the general permit and then notice at each subsequent five (5) year review.
- (c) The administrator shall give public notice if a draft permit has been prepared or a hearing has been scheduled.
- (d) Public notice of the preparation of a draft permit shall allow at least 30 days for public comment. Public notice of a public hearing shall be given at least 30 days before the hearing. Public notice of the hearing may be given at the same time as public notice of the draft permit and the two notices may be combined.
  - (e) Public notice shall be given by:
    - (i) Mailing a copy of the notice to the following persons:
- (A) The applicant, by certified or registered mail. For general permitsthis includes all persons registered as operators of facilities which the department believes will be covered by the general permit;
  - (B) The U.S. Environmental Protection Agency;
  - (C) Wyoming Game and Fish Department;
  - (D) Wyoming State Engineer;
  - (E) State Historical Preservation Officer;

request in writi	(F) Persons on the mailing list developed by including those who and to be on the list and soliciting persons for "area lists" from participants in that area; and
where the facil	(G) Any unit of local government having jurisdiction over the areaity is proposed to be located.
	(ii) Publication of the notice in a newspaper of general circulation in the facility or operation; and
expected to giv	(iii) At the discretion of the administrator, any other method reasonably reactual notice of the action in question to the persons potentially affected by it, releases or any other forum or medium to elicit public participation.
(f) information:	All public notices issued under this chapter shall contain the following minimum
	(i) Name and address of the department;
facility or activ	(ii) Name and address of permittee or permit applicant, and, if different, of the rity regulated by the permit. For general permits, this includes a list of existing the location of each facility which will be covered by the general permit. If new the covered under a general permit as they are constructed, then that fact will also
described in the	(iii) A brief description of the business conducted at the facility or activity e permit application or the draft permit. For general permits a generic statement acility to be covered is all that is required;
persons may ol	(iv) Name, address and telephone number of a person from whom interested train further information, including copies of the draft permit, as the case may be, asis or fact sheet, and the application;
	(v) A brief description of comment procedures, procedures to request a her procedures which the public may use to participate in the final permit deci-
	(vi) Any additional information considered necessary and proper.
	In addition to the information required in (f) of this section, any notice for public ontain the following:
	(i) Reference to the date of previous public notices relating to the permit;

- (ii) Date, time and place of hearing; and
- (iii) A brief description of the nature and purpose of the hearing, including applicable rules and procedures.
- (h) The department shall provide an opportunity for the applicant, permittee, or any interested person to submit written comments regarding any aspect of a permit or to request a public hearing.
- (i) All information received on or with the permit application shall be made available to the public for inspection and copying except such information as has been determined to constitute trade secrets or confidential information pursuant to W.S. 35-11-1101.
- (j) During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing. Requests for public hearings must be made in writing to the administrator and shall state the reasons for the request.
- (k) The administrator shall hold a hearing whenever the administrator finds, on the basis of requests, a significant degree of public interest in a draft permit. The administrator has the discretion to hold a hearing whenever such a hearing may clarify issues involved in a permit decision.
- (l) The public comment period shall automatically extend to the close of any public hearing. The administrator may also extend the comment period by so stating at the public hearing.
- (m) The director shall render a decision on the draft permit within 30 days after the completion of the comment period if no hearing is requested. If a hearing is held, the director shall make a decision on any department hearing as soon as practicable after receipt of the transcript or after the expiration of the time set to receive written comments.
- (n) At the time a final decision is issued, the department shall respond, in writing, to those comments received during the public comment period or comments received during the allotted time for a hearing held by the department. This response shall:
  - (i) Specify any changes that have been made to the permit; and
- (ii) Briefly describe and respond to all comments voicing a legitimate regulatory concern that is within the authority of the department to regulate.
  - (o) The response to comments shall also be available to the public.
  - (p) Requests for a contested case hearing on a permit issuance, denial, revocation,

termination, or any other final department action appealable to the Council, shall be made in writing to the chairman of the Environmental Quality Council and the director and state the grounds for the request pursuant to the Wyoming Department of Environmental Quality Rules of Practice and Procedure.

# APPENDIX A SUBCLASSES OF CLASS V FACILITIES

SUBCLASS	DESCRIPTION-		
	HEATING AND COOLING FACILITIES		
5A1	Direct Heat Reinjection Facilities - Reinject geothermal fluids used to provide direct heat for large buildings, developments or aquiculture facilities.		
5A2	Heat Pump/Air Conditioner Return Flow Facilities Reinject groundwater used to heat or cool a building in a ground based heat pump system, or used to inject heat only using a closed loop heat pump system.		
5A3	Cooling Water Return Flow Facilities - Receive non-contact cooling water from industrial processes, both open and closed loop processes.		
	BENEFICIAL USE INJECTION FACILITIES		
5B1	Mining, Sand or Backfill Facilities – Used to inject a fluid mixture of sand, cement, fly ash used as a pozzalin, or mill tailings into mined out portions of underground mines.		
5 <del>B2</del>	Aquifer Recharge Facilities - Receive water specifically for storage of water underground Must be coupled with the ability to withdraw stored water at a later date for beneficial use Coal bed methane operators cannot dispose of their produced water in class 5B2 injection wells after the effective date of these rules.		
5B3	Saline Water Intrusion Barrier Facilities - Receive fresh water to prevent the continued migration of saline water into a fresh water aquifer. Includes projects installed to control contaminant plumes by injection of clean water.		
5B4	Subsidence Control Facilities - Receive fresh water for the purpose of controlling subsidence caused by an overdraft of water, oil or natural gas.		
5B5	Facilities which inject fluids and are used to prevent, control or remediate aquifer pollution, which are not owned or controlled by the Department of Environmental Quality. All 5B5 facilities are covered under Article 16 of the Environmental Quality Act.		

#### SUBCLASS DESCRIPTION

Department Controlled Facilities — Facilities which inject fluids and are used to prevent, control or remediate pollution, remediate subsiding mine sites, or produce other beneficial results which are owned or controlled by the Department of Environmental Quality. — These facilities include but are not limited to, facilities under the supervision of Water Quality Division's Underground Storage Tank Program, facilities under the control and direction of the Abandoned Mined Lands Program, and facilities under the supervision of the Solid and Hazardous Waste Management Division. — Control may be exercised through ownership, operation, or by administrative orders, stipulated settlements, consent decrees or other legal methods which result in control of a facility by the department.

5B7 Air sparging facilities - Facilities used to inject only air for the purpose of either encouraging microbial breakdown of hydrocarbons or removing of volatile chemicals by vapor extraction.

### **COMMERCIAL AND INDUSTRIAL FACILITIES**

- 5C1 Air Scrubber Waste Disposal Facilities Inject wastes from air scrubbers used to remove sulphur, fly ash, or other contaminants.
- 5C2 Water Treatment Brine Disposal Facilities Receive brine from water softening or other water treatment.
- 5C3 Industrial Process Water and Waste Disposal Facilities Receive wastes generated by industrial and commercial processes. Examples include but are not limited to wastes from car washing, taxidermy, metal plating, printing, silk screening, refining, slaughter houses, and chemical manufacturing companies.
- 5C4 Automotive Waste Disposal Facilities Inject waste from floor drains or sinks where repair work is done on machinery of any description.
- 5C5 Coal Bed Methane Injection Facilities Inject groundwater produced in the process of coal bed methane extraction into a receiving aquifer containing water of the same or lower class of use.
- Small Commercial Disposal Systems Inject wastewater which is of similar quality to domestic sewage which does not technically meet the definition of domestic sewage, in quantities of less than 2,000 gallons per day.

SUBCLASS	DESCRIPTION-			
	DRAINAGE FACILITIES			
5D1	Agricultural Drainage Facilities - Receive irrigation tailwaters, other field drainage, animal yard, feedlot, or dairy runoff, and other agricultural wastewater.			
<del>5D2</del>	Storm Water Drainage Facilities - Receive storm water runoff from paved areas, including parking lots, streets, residential subdivisions, building roofs, highways, etc.			
5D3	Improved Sinkholes - Receive storm water runoff from developments located in karst topographic areas.			
5D4	Industrial Drainage Facilities Receive storm runoff from areas- susceptible to spills, leaks, and other chemical discharges.			
<del>5D5</del>	Special Drainage Facilities - Receive water from sources other than direct precipitation. Examples of this—type include landslide control drainage—facilities, potable water tank overflow drainage facilities, swimming pool drainage—facilities, and lake level control drainage facilities.			
	SEWAGE DISPOSAL FACILITIES			
<del>5E1</del>	Aquaculture Return Flow Facilities - Receive injectate from aquaculture operations.			
5E2	Untreated Domestic sewage Disposal Facilities Receive untreated domestic sewage from single or multiple sources. Does not include subsurface fluid distribution systems with septic tanks ahead of the subsurface fluid distribution system. Includes all cesspools, regardless of capacity.			
5E3	Domestic Subsurface Fluid Distribution Systems - Receive more than 2,000 gallons per day of domestic sewage with only primary treatment such as effluent from a septic tank. In addition, any facility injecting domestic sewage within any five (5) acres of land is a class 5E3 facility whenever multiple 5E facilities under one owner inject a cumulative maximum peak design flow of more than 2,000 gallons perday of domestic sewage.			

<del>5E4 ----</del>

standards.

Domestic Wastewater Treatment Plant Disposal Facilities - Dispose of

treated domestic waste after treatment to at least secondary treatment-

#### **SUBCLASS**

#### DESCRIPTION

Small Domestic Subsurface Fluid Distribution Systems—Receive less than 2,000 gallons per day as an average of a typical week, of domestic sewage with only primary treatment in a septic tank.—These systems are designed to accept more than 2,000 gallons per day at a peak and are not small wastewater systems.—No class 5E5 system has a required design capacity in excess of 5,000 gallons per day.

# **MISCELLANEOUS CLASS V FACILITIES**

- 5F1 Cathodic Protection Facilities Facilities constructed with cokebreeze and dust control oil for use as a permanent anode in a cathodicprotection system for a fluid conveyor system or fluid containment system composed of metallic material.
- 5F2 All other facilities that inject fluids into or above an underground source of drinking water which do not fall into Classes I, II, III, or IV injection facilities.

# APPENDIX B TYPES OF PERMITS REQUIRED TIMING OF COMPLIANCE

TYPE	DESCRIPTION	TYPE OF PERMIT	WHEN REQUIRED
5A1	Direct Heat Reinjection Facilities	General Permit	2 years after date of general permit
5A2	Heat Pump/Air Conditioner Return Flow Facilities	General Permit	2 years after date of general permit
5A3	Cooling Water Return Flow Facilities	—Individual Permit	April 14, 2000
<del>5B1</del>	Mining, Sand or Backfill Facilities	General Permit	2 years after date of general permit
<del>5B2</del>	Aquifer Recharge Facilities	Permit by Rule	register by April 14, 1999
5B3	Saline Water Intrusion Barrier Facilities	—Individual <del>Permit</del>	April 14, 2000
5B4	Subsidence Control Facilities	Permit by Rule	register by April 14, 1999
<del>5B5</del> —	Facilities used to prevent, control or remediate aquifer pollution, which are not owned or controlled by the Department of Environmental Quality.	<del>General</del> <del>Permit</del>	2 years after the date of the general permit
<del>5B6</del>	Department Controlled Facilities	Permit by Rule	register by April 14, 1999
5B7	Air Sparging Facilities	Permit by Rule	register by April 14, 1999
<del>5C1</del>	Air Scrubber Waste Disposal Facilities	—Individual <del>Permit</del>	April 14, 2000
<del>5C2</del>	Water Treatment Brine Disposal Facilities	Individual Permit	April 14, 2000
<del>5C3</del>	Industrial Process Water and Waste Disposal Facilities	<del>Individual</del> <del>Permit</del>	April 14, 2000

		Г	
TYPE	<del>DESCRIPTION</del>	TYPE OF PERMIT	WHEN REQUIRED
5C4	Existing Automotive Waste Disposal Facilities	General Permit	2 years after date of general permit
5C4	New Automotive Waste Disposal Facilities	Ban	April 14, 1998
<del>5C5</del>	Coal Bed Methane Injection Facilities	General Permit	within 6 months of the date of issue for the general permit- for existing facilities, and before injection for all new facilities
<del>5C6</del> —	Small Commercial Disposal Systems	General Permit	2 years after the date of the general permit
5D1	Agricultural Drainage Facilities	<del>General</del> <del>Permit</del>	2 years after the date of the general permit
5D2	Storm Water Drainage Facilities	General Permit	2 years after date of general permit
<del>5D3</del>	Improved Sinkholes	Individual Permit	April 14, 2000
5D4	Industrial Drainage Facilities	<del>- Individual</del> <del>Permit</del>	April 14, 2000
5D5	Special Drainage Facilities	Permit by Rule	register by April 14, 1999
5E1	Aquaculture Return Flow Facilities	General Permit	2 years after date of general permit
5E2	Existing Untreated Domestic sewage Disposal Facilities (Cesspools)	Ban	April 14, 1998
5E3—	Existing Domestic Subsurface Fluid Distribution Systems	General Permit	2 years after date of general permit
5E3	Existing Domestic Subsurface Fluid Distribution Systems - Permitted as a small wastewater facility		register by April 14, 1999

TYPE	DESCRIPTION	TYPE OF PERMIT	WHEN REQUIRED
	New Domestic Wastewater Treatment	- Individual	April 14, 2000
<del>5E4</del>	Plant Disposal Facilities	<del>Permit</del>	
5E5	Small Domestic Subsurface Fluid Distribution Systems	General Permit	2 years after the date of the general permit
5F1	Cathodic Protection Facilities	Permit by Rule	register by April 14, 1999
5F2	All other facilities that inject fluids into or above an underground source of drinking water which do not fall into Classes I, II, III, or IV injection facilities.	<del>Individual</del> <del>Permit</del>	April 14, 2000

/glj 12-0945.doc July 31, 2012