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Jim Ruby, Executive Secretary  
Environmental Quality Council

**BEFORE THE  
ENVIRONMENTAL QUALITY COUNCIL**

**STATE OF WYOMING**

**September 12, 2013**



**IN THE MATTER OF THE )  
PROPOSED REVISION OF )  
LAND QUALITY DIVISION )  
RULES RELATED TO THE )  
REGULATION OF )  
NONCOAL MINING )**

**STATEMENT OF PRINCIPAL  
REASONS (SOPR) FOR ADOPTON**

**DOCKET #: 13-4102**

**Noncoal Rules and Regulations, Chapter 11  
In Situ Mining**

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## **Introduction to Rule Package**

Chapter 11, In Situ Mining, of the Land Quality Division's (LQD), Noncoal Rules and Regulations was last revised on May 3, 2005. That revision was a substantial revision that increased Chapter 11 to forty-six (46) pages from eight (8) pages in length. Since the promulgation of the rules in 2005 the LQD has had time to put the rules into effect and note areas of the rules which may need further revision in order to effectively administer in situ mining operations. The proposed rules presented in this package are intended to reflect current practices and clarify or amend the rules to remain as effective as Federal regulations.

The LQD has also received input on changes that would make the process more efficient to administer through monthly meetings of the Uranium Workgroup. During these meetings areas of the rules were identified which appeared to need further revision in order to clearly state what was required for application materials and other compliance issues related to permitting in situ mining operations.

The proposed changes presented in this package are also intended to address an Environmental Protection Agency (EPA) concern regarding aquifer exemption boundaries and provide greater consistency with the Federal regulations where possible. The proposed rules should allow the LQD to more efficiently process application and permitting materials while maintaining compliance with Federal requirements. Proposed changes in this package also address several inconsistent citations within the rules and remove outdated rule language. The following section provides a brief summary of the proposed rule changes which are discussed more fully in the Statement of Reasons.

## **Summary of Proposed Amendments**

### **Section 1**

Proposed revisions to Section 1 include the addition of definitions for "area permit" and "fact sheet". Section 1 was also revised to remove the definition of "State Decision Document". Additional changes include updating a revision date for Chapter 8 of the Water Quality Division (WQD) Rules and Regulations and update section headers as necessary to account for the addition and removal of definitions within the Chapter.

### **Section 2**

Section 2 was revised to reduce the number of copies an applicant must submit from three copies to two. WQD Chapter 8 citations were updated to the most recent revision date. Section 2 was also revised to include further requirements related to "area permits" and the proposed changes are intended to mirror Federal requirements. Subsection (e) is proposed for deletion as this section contained a one year compliance window which has since elapsed and is no longer necessary in the rules.

#### **Section 4**

Section 4 was revised to clarify the requirements for submitting information related to impoundments for in situ operations. The intent was to clarify that the Nuclear Regulatory Commission (NRC) retains jurisdiction over some impoundments and therefore are subject to review by the NRC. The changes will eliminate this overlap of regulation.

#### **Section 6**

This section was revised to provide consistency with the newly revised LQD Chapter 8. Section 6 now contains a reference to Chapter 8 “sealant materials” which must be used to create annular seals to create consistency between Chapter 8 and Chapter 11. Section 6 was also revised to require operators to make drilling reports available for inspection rather than submitting the reports for each well. Finally, Section 6 was also revised to include language that was apparently not filed correctly with the Secretary of State’s Office during the promulgation of the rules in 2005.

#### **Section 8**

Section 8 was revised to again provide consistency with the LQD’s rules in Chapter 8 as described above. Additional revisions were also made to provide better consistency with the Federal requirements of 40 CFR 146.10 and clean up some of the formatting issues.

#### **Section 10**

Section 10 was revised to update several citations to the WQD rules. Section 10 was also revised to address an EPA concern regarding the delineation of aquifer exemptions by requiring data and descriptions to explain why it is necessary to have the exemption boundary beyond the monitor well ring.

#### **Section 11**

Section 11 is proposed for revision to clarify that the operator need not submit well completion reports of individual well if they have been approved under an area permit. This exception is the equivalent of the Federal regulations.

#### **Sections 13 and 14**

These two sections were revised to correct inaccurate citations.

#### **Section 19**

Section 19 was revised to remove reference to “State Decision Documents” as this term has been proposed for deletion. The proposed term “fact sheet” was used in its place.

#### **Section 21**

Section 21 was revised to reorganize the rules to better match the format of the Federal rules at 40 CFR 124.10 and accurately reflect the requirements of the regulations for public notice. The proposed rules are intended to mirror the Federal requirements.

## Summary of May 20, 2013 Advisory Board

### Recommendation:

Proceed to Environmental Quality Council with rules as revised during the meeting.

### Discussion:

Three revisions to the proposed rules were made during the Advisory Board Meeting held on May 20, 2013. These revisions were minor corrections to the rules as they were initially drafted. First, the rules were amended to remove a typographical error in Section 1(i) definition of “fact sheet” (see page 26, 5/20/2013 Minutes). Second, in Section 4(a)(iv) a correction was made to the strike and underline portion of the proposed rule to correct a grammatical error (see page 30, 5/20/2013 Minutes). Third, Section 21(a)(iii) was revised to change “and” to “or” in the discussion of public notice requirements. No other changes have been made to the proposed rules since the Advisory Board meeting.

### Comments Received:

No comments were received on the proposed rules.

\*\*\*\*\*

*The authority to amend these rules is provided by Wyoming Statute (W.S.) §§ 35-11-112(a)(i), 35-11-114(b), 35-11-402(a), 35-11-427, 35-11-428, 35-11-429 and 35-11-430.*

# Proposed Rule and Statement of Reasons

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### LAND QUALITY DIVISION

#### NONCOAL RULES AND REGULATIONS

##### CHAPTER 11

##### ~~Noncoal~~

##### In Situ Mining

#### Section 1. **Definitions**

(a) “Area permit” means that, for the purposes of this Chapter, the Administrator may issue a permit on an area basis, rather than for each well individually, provided that the permit is for injection wells:

(i) Described and identified by location in permit application(s) if the wells are existing wells, except that the Administrator may accept a single description of wells with substantially the same characteristics;

(ii) Within the same well field, facility site, reservoir, project, or similar unit in the same state;

(iii) Operated by a single owner or operator;

(iv) That are not used to inject hazardous waste; and

(v) Other than Class VI wells.

*The definition of “area permit” is added to Chapter 11. The “area permit” definition above is the Federal counterpart to 40 CFR §144.33(a) for the same term. The proposed addition is intended to eliminate the need to submit individual well information for each well within the permit area provided the wells meet the definition and additional as outline in Section 2 of the proposed rules. The definition has been added to facilitate efficient submission and review of application materials and conform with Federal definitions.*

*Current Subsections (a) through (g) are revised to account for the addition of the “area permit” definition above.*

(b) "Background" means ...

...

(h g) "Exempted aquifer" means ...

(i) "Fact sheet" means that for every in situ class III uranium draft permit a fact sheet must be created that briefly sets forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. The Administrator shall send this fact sheet to the applicant and, on request to any other person. The fact sheet shall include, when applicable:

(i) A brief description of the type of facility or activity which is the subject of the draft permit;

(ii) The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged;

(iii) Reasons why any requested variances or alternatives to required standards do or do not appear justified;

(iv) A description of the procedures for reaching a final decision on the draft permit including:

(A) The beginning and ending dates of the comment period and the address where comments will be received;

(B) Procedures for requesting a hearing and the nature of that hearing;  
and

(C) Any other procedures by which the public may participate in the final decision.

(v) Name and telephone number of a person to contact for additional information.

*The LQD has added the definition for "fact sheet" in order to be consistent with 40 CFR §124.8 of the EPA regulations. This definition will be used in place of the "State Decision Document" which is proposed for deletion. State Decision Documents are used in the LQD's coal program but are not required by the EPA's regulations. The "fact sheet" definition details what information is required in the document. Fact sheets will be created by the LQD as necessary. See the discussion for "State Decision Document" below for a further discussion on the use of these two terms.*

(j h) "Groundwater restoration" means ...

...

(t ƒ) "Research and Development Testing License" means ...

*Subsection headers are revised to reflect the addition of the new definitions.*

~~(s) "State Decision Document" serves as a summary of, or reference to, all terms and conditions within an approved in situ mining permit application, an approved Research and Development Testing License application, or an approved application to revise a permit or Research and Development Testing License. This document is compiled by the Administrator and provides a summary of, or reference to, all UIC related terms and conditions, compliance provisions, and monitoring requirements included in the permit or Research and Development Testing License.~~

*There are not any statutory or Federal requirements to provide a State Decision Document to the Environmental Protection Agency. The term was used to meet requirements related to "draft permits" or "fact sheets". The LQD has found this definition unnecessary to implement the UIC program and is proposing to delete the term in Chapter 11. EPA requirements can be met without using this term. Also the term "fact sheet" was added to this Chapter and will be used as part of the public notice process instead of the State Decision Document in order to provide consistency with the Federal requirements.*

(u ƒ) "Stratum (plural strata)" means (t ƒ) "UIC" means ...

(w ƒ) "Underground Source of Water" (USW) means:

(i) Those aquifers or portions thereof which have a total dissolved solids content of less than 10,000 milligrams per liter (mg/l) and which contain a sufficient quantity of water to supply a public water supply as defined in W.S. § 35-11-103(c)(viii) (2003);

(ii) Those that can be classified as a "known source of supply" pursuant to Chapter 8, Section 4(c), Quality Standards for Wyoming Groundwaters, Water Quality Division Rules and Regulations (as amended ~~March 12, 1993~~ April 27, 2005).

*Updated revision date for Chapter 8, Section 4(c).*

(x ƒ) "Upper Control Limit" (UCL) means ...

...

(z ƒ) "Well field area" means ...

*Subsection headers were revised to reflect the addition of the two new proposed definitions in Chapter 11.*

## Section 2. General Requirements.

(a) In addition to the requirements of this Chapter, Chapter 7 shall apply to in situ mining or Research and Development Testing License operations.

(b) Applicable sections of Chapter 8 of the Water Quality Division Rules and Regulations (as amended ~~March 12, 1993~~ April 27, 2005), regarding groundwater use classification, quality standards, and testing procedures, and, outside the aquifer exemption boundary, applicable Maximum Contaminant Levels from the U.S. Environmental Protection Agency Rules (40 CFR 141 as amended July 1, 2001), shall also apply to in situ mining or Research and Development Testing License operations.

*Subsection (b) was revised to reflect the new revision date for Chapter 8 of the Water Quality Division's rules and regulations.*

(c) No in situ mining shall commence or be conducted unless a valid permit or Research and Development Testing License has been issued to the operator from the Department. Applications for a permit or Research and Development Testing License shall be filed with the Administrator. The applicant shall file ~~three~~ two copies of the application to the Administrator, and the Administrator shall forward ~~one~~ copy of the application to the EPA when the application is determined complete. ~~Applications shall be in a format required by the Administrator.~~

*The number of copies of the application required was reduced to two copies as the EPA has indicated that they do not need a full copy of the application. The two copies are for the LQD office in Cheyenne and district field office. Subsection (b) was also revised for clarity and readability.*

(d) The Administrator shall review the permit or Research and Development Testing License application and determine its suitability for publication in accordance with W.S. § 35-11-406 (2003). A permit or Research and Development Testing License shall be issued by the Director upon the recommendation of the Administrator.

(e) Area permits shall specify the area within which underground injections are authorized and the requirements for construction, monitoring, reporting, operation and abandonment for all wells authorized. The area permit may authorize the permittee to construct and operate, convert, or plug and abandon wells within the area permit provided the permittee notifies the Administrator at such times as the permit requires, the additional well meets the requirements under the definition of "area permit" and this section and the cumulative effects of drilling and operation of additional injection wells are considered by the Administrator during evaluation of the permit application and are acceptable to the Administrator.

*Subsection (e) includes additional requirements related to "area permits". The*



*proposed rule above is a counterpart to 40 CFR §144.33(b) and (c) and is intended to facilitate the permitting process by allowing the applicant to “bundle” information for review by the LQD.*

~~(e) Operators having an in situ mining permit or Research and Development Testing License issued before the effective date of these regulations shall within one year of the effective date of newly promulgated changes to this Chapter, present evidence demonstrating compliance with the requirements of these regulations. The Administrator shall review such evidence and shall advise the operator in writing of such additional information or procedures necessary to satisfy the provisions of this Chapter.~~

~~(i) The evidence must be presented by those operators:~~

~~(A) Who are mining, restoring, or reclaiming, within one year of the effective date of newly promulgated changes to this Chapter; or~~

~~(B) Who have received a permit but have not yet started mining, before mining begins, but no later than one year after the effective date of the newly promulgated changes to this Chapter.~~

~~(ii) For existing wellfields or wellfields that are in the process of installation, the standards for reclamation and restoration in place at the time of the permit approval for these wellfields will apply.~~

*Current Subsection (e) was deleted from the Chapter because it was intended to give operators a chance to get into compliance with the 2005 rule changes and is therefore no longer necessary.*

#### Section 4. **Application Content Requirements – Mine (Operations) Plan**

(a) All applications for a permit shall include, at a minimum, the information and materials related to mine plans required in: W.S. §§ 35-11-428 and 429 (2003); Chapter 1, Chapter 2, Section 1, and Chapter 3, Section 2 (excepting Subsections (b)(ii) and (iii), (c)(iv), and (h) and, with respect to subsection (k)(i), as modified in Section 5(a)(iv) of this Chapter); and

...

(iv) A description of and dimensions ~~design plan~~ for all proposed impoundments, ~~and, A leak detection plan is required for impoundments that are not regulated by the NRC. containing wastes, a leak detection plan.~~ For impoundments holding toxic or acid forming material, contingency plans to control unanticipated leakage shall be provided.

*In order to reduce overlap in regulation Subsection (iv) was revised to clarify that the Nuclear Regulatory Commission (NRC) retains jurisdiction of 11e.(2) by-product materials under the Federal Regulations. Impoundments which are meant to store or contain these materials would be reviewed by the NRC; therefore those that are not regulated by NCR are subject to State review. Applicants must still supply descriptions and dimensions for all impoundments to facilitate application review and inspections.*

## Section 6. Well Construction Requirements

...

(c) Annular seals shall be installed to: protect the casing against corrosion; assure structural integrity of the casing; stabilize the upper formations; protect against contamination or pollution of the well from the surface; and prevent migration of ground water from one aquifer or water-bearing strata to another in accordance with the following requirements:

...

(iv) Annular seals shall be created using one of the approved sealant materials outlined in Chapter 8, Section 6(d), of the Division's Noncoal Rules and Regulations. Sealing material shall consist of neat cement slurry, sand cement grout, or bentonite clay mixtures meeting the following requirements:

~~(A) Neat cement slurry shall be composed of Portland Cement (94 pounds) and clean water in a proportion to yield a slurry weight of approximately 15 pounds per gallon.~~

~~(B) Sand cement grout is a mixture of one sack of Portland Cement (94 pounds), sand, and clean water in a proportion of not more than one part by volume sand to one part by volume cement. No more than 6½ gallons of water per sack of Portland Cement (94 pounds) shall be used in the mixture.~~

~~(C) A bentonite clay slurry shall be composed of bentonite clay and clean water in a proportion to yield a slurry consisting of approximately 25% solids by weight of the slurry.~~

~~(D) The sealing material shall be thoroughly mixed before placement so there are no balls, clods, or other features that could reduce the effectiveness of the seal.~~

~~(E) Special quick-setting cement, retardants to setting, cement accelerators, retarders, fluid loss additives, dispersants, extenders, loss of circulation materials and other additives, including hydrated lime to make the mix more fluid or bentonite to make the mix more fluid and reduce shrinkage, may be used, if approved by the Administrator.~~

~~(F) Used drilling mud or drill cuttings from the borehole shall not be used as sealing material.~~

~~(G) The minimum time that must be allowed for materials containing cement to "set" shall be in accordance with ASTM International (formerly American Society for Testing and Materials, ASTM) C150-00 "Standard Specifications for Portland Cement" (2000) or American Petroleum Institute (API) RP 10B "Recommended Practices for Testing Oil Well Cements and Cement Additives" (22<sup>nd</sup> ed., 12/1997, with Addendums 1 (10/1999) and 2 (11/00). When necessary these times may be reduced by use of accelerators as determined by the well~~

contractor.

*Subsection (c)(iv) above was revised to reference the recently promulgated approved sealant materials found in Chapter 8 of the LQD's Noncoal Rules and Regulations. The above revision provides consistency with the Chapter 8 revisions and provides for adequate annular seals for the wells.*

...

(g) For Class III injection wells, the following construction requirements are in addition to the requirements listed in (a) through (f) of this Section:

(i) Appropriate logs and other tests shall be conducted during the drilling and construction of new Class III wells. A descriptive report prepared by a knowledgeable log analyst interpreting the results of such logs and tests shall be compiled and maintained by the operator at the mine site or local office and made available for inspection by the Division submitted to the Administrator. The logs and tests appropriate to each type of Class III well shall be determined based on...

*The rule has been updated to reflect current practices. The Division does not need the reports to be submitted for all wells due to the large number of wells that are being drilled. It is more appropriate to make these reports and logs available to Division staff as needed at the mine site or local office.*

(ii) All Class III wells shall be constructed to prevent the migration of fluids to unauthorized zones. The casing and annular sealing material used in the construction of each newly drilled well shall be designed for the life expectancy of the well. In determining and specifying casing and annular sealing requirements, the following factors shall be considered:

(A) Depth to the production zone;

(B) Injection pressure, external pressure, internal pressure, axial loading, or other factors as determined by the Administrator;

(C) Drill hole diameter;

(D) Size and grade of all casing strings (wall thickness, diameter, nominal weight, length, joint specification, and construction material);

(E) Corrosiveness of injected fluids, formation fluids, process by-products, and recovery fluids;

(F) Lithology of receiving strata and confining zones; and

(G) Type and grade of sealing material.

*Chapter 11, Section 6(g)(ii) was revised to include the factors which were inadvertently left out of the chapter which was filed with the Secretary of State's Office during the 2005 promulgation of the Chapter. The language above was included in the Statement of Reasons for the rule package, but was left out of the full chapter. The factors listed above have been indicated as new language.*

...

(h) The following monitoring well construction requirements are in addition to the requirements listed in (a) through (f) of this Section:

...

(iv) In determining the number, location, and construction of the monitoring wells and frequency of monitoring, the following criteria shall be considered:

(A) The uses for which the groundwater in the receiving strata is suitable under premining conditions, as determined from Chapter 8, Water Quality Division Rules and Regulations (as amended ~~March 12, 1993~~ April 27, 2005), in any aquifer affected or potentially affected by the injection operation;

*Water Quality reference is updated to reflect most recent revision date. No additional changes are proposed for Section 6.*

**Section 8. Requirements of Plugging of Drill Holes and Repair, Conversion, and Plugging of Wells.**

...

(d) The operator shall notify the Administrator, as required by the permit or Research and Development Testing License, before plugging a well or wells within an wellfield area permit or converting a well to uses other than those defined in Section 1(c) of this Chapter.

*Subsection (d) is revised to reflect the addition of "area permit" definition.*

...

(f) A well shall be plugged to meet the requirements below, using an approved sealant material as outlined in Chapter 8, Section 2(d), to assure that plugging of the well will not allow the movement of fluids into or between unauthorized zones or water-bearing strata:

(i) ~~The well shall be plugged with:~~

(A) ~~Neat cement slurry, sand cement slurry grout, concrete slurry, cement/bentonite slurry, high solids bentonite slurry, nonslurry bentonite or abandonment gel bentonite chips, which when properly placed, will not allow the movement of fluids into or between unauthorized zones or water bearing strata; or~~

(B) ~~Other plugging sealant materials if such materials, when properly placed, will prevent movement of fluids into or between unauthorized zones or water bearing strata and the Administrator approves the use of such materials.~~

(ii) The well shall be plugged using a method which prevents fluid communication and adverse changes in water quality or quantity. Sealant materials shall be emplaced in a manner that provides a water tight seal utilizing one of the approved methods detailed in Chapter 8, Section 2(e) – (g) and shall meet the following requirements: ~~will not allow the movement of fluids either into or between unauthorized zones or water bearing strata. The description of the method will identify:~~

(A) ~~How the entire casing is to be filled with the plugging materials required per Section 8(f)(i); or~~

~~(A)~~ (B) If specific sections of the casing are to be plugged with cement:

(I) The type and number of plugs to be used;

(II) The placement of each plug including the elevation of the top and the bottom;

(III) The method of placement of the plugs, in accordance with

Section 8(f)(iii)(B);

~~(IV) The procedure to be used to meet the requirements of Section 8(f)(iv);~~

(IV) That the well to be plugged shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Administrator, prior to the placement of the cement plug(s); and

(VI) That the placement of the cement plugs shall be accomplished by one of the following:

- (1.) The Balance method;
- (2.) The Dump Bailer method;
- (3.) The Two-Plug method; or

~~(4.)~~ An alternative method approved by the Administrator, which:

a. ~~(I)~~ Includes placement of plugging materials in the interval or intervals to be sealed by methods that prevent free fall, dilution and/or separation of aggregates from sealing materials; and

b. ~~(II)~~ Provides a comparable level of reliable protection to the methods identified in Section 8(f)(iii)(A)-(C).

~~(B iii)~~ When the underground pressure head producing flow (i.e. gassy or artesian) is such that a counter-pressure must be applied to force a sealing material into the annular space, this counter-pressure shall be maintained for the length of time required for the plugging mixture to set or fully hydrate;

~~(C iv)~~ The top of the plugging mixture of any plugged and abandoned well shall be backfilled to the surface with dry nonslurry materials or capped with a concrete cap set at least 2 feet below the ground surface and then backfilled to the surface with native earthen materials to ensure the safety of people, livestock, wildlife, and machinery in the area. a minimum depth of two feet below land surface. ~~The hole above the top of the plugging mixture shall be backfilled surrounding land surface.~~

*Subsection 8(f) was revised to provide consistency with the requirements and standards of Chapter 8 of the Noncoal Rules and Regulations while maintaining compliance with the EPA's Federal requirements of 40 CFR 146.10.*

...

## Section 10. Aquifer Classification and Exemption

(a) Injections from Class III wells shall be restricted to those production zones that:

(i) Have been classified by the Wyoming Department of Environmental Quality as Class V aquifers under Chapter 8 of the Water Quality Division Rules and Regulations (as amended ~~March 12, 1993~~ April 27, 2005); and

*Updated to reflect current revision date for Chapter 8. No further revisions proposed for the rest of Subsection (a).*

...

(b) An aquifer, or a portion thereof, which meets the criteria for an Underground Source of Water as defined in Section 1 of this Chapter may be designated as an “exempted aquifer”:

(i) If it meets the following criteria:

(A) It does not currently serve as a source of water for Class I, II, III, Special (A) or Class IVA use as described in Chapter 8 of the Water Quality Rules and Regulations (as amended April 27, 2005 ~~March 12, 1993~~), and

(B) It cannot now and will not in the future serve as a source of water because:

(I) It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit or Research and Development Testing License applicant or operator to contain minerals or hydrocarbons that, considering their quantity and location, are expected to be commercially producible; or

(II) It is situated at a depth or location which makes recovery of water for Class I, II, III, Special (A) or Class IVA as described in Chapter 8 of the Water Quality Division Rules and Regulations (as amended April 27, 2005 ~~March 12, 1993~~) economically or technologically impractical; or

(III) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or

(IV) It is located over a Class III well mining area subject to subsidence or catastrophic collapse; or

(V) The total dissolved solids content of the groundwater is less than 10,000 mg/l and it is not reasonably expected to supply a public water system as defined by W.S. § 35-11-103(c)(viii) (2003); and



(ii) As demonstrated by information in the permit or Research and Development Testing License application, including:

(A) A map and general description identifying and describing in geographic and/or geometric terms (such as vertical and lateral limits and gradient) all aquifers or parts thereof which the applicant proposes to exempt;

(B) Information to document that the exemption area is commercially producible as demonstrated by:

(I) The permit boundary;

(II) A description and calculations that support the proposed distance beyond the monitor well ring boundary required to mine and to restore groundwater ~~The right to mine, but no more than the area within the monitor well ring plus a distance to the next quarter quarter (1/4 1/4) section boundary that is at least one quarter (1/4) mile from the monitor well ring;~~

(III) General information on the mineralogy and geochemistry of the receiving strata; and

(IV) The type of mining technology used to extract the mineral; and

(C) Analysis of the amenability of the receiving strata to the proposed mining method; and a timetable of planned development of the receiving strata.

...

*Subsection 10(b) was revised to include a new requirement for the delineation of aquifer exemptions to meet Federal requirements. The EPA has stated that the aquifer exemption boundary must not be an arbitrary distance from the monitor well ring. As such the LQD has determined that the applicant shall submit a justification for setting the aquifer exemption boundary beyond the monitor well ring. The proposed revision requires the applicant to submit a description of the distance beyond the monitor well ring which is supported by calculations which show the distance required to mine and restore the groundwater. The revised Subsection 10(b) was also revised to include a current reference to Chapter 8 of the Water Quality Division Rules and Regulations.*

Section 11. **Prohibitions.**

...

(b) Except for all new wells authorized by an area permit under Subsection 2(e) of this Chapter, The operator may not commence injection in a new injection well ~~or wells within a wellfield area~~ until construction is complete, and:

(i) The operator has submitted notice of completion of construction to the Administrator; and

(ii) With respect to inspection and review:

(A) The Administrator has inspected or otherwise reviewed the new injection well ~~or wells within a wellfield area~~ and finds the well is ~~(or wells are)~~ in compliance with the permit or Research and Development Testing License; or

(B) The operator has not received notice from the Administrator of the intent to inspect or otherwise review the new injection well ~~or wells within a wellfield area~~ within 13 days of the date of the notice in paragraph (b)(i) of this subsection, in which case prior inspection or review is waived and the operator may commence injection. If notice is given, the Administrator shall include in the notice a reasonable time period in which he or she shall inspect the well ~~or wells within a wellfield area~~.

*Subsection 11(b) was revised to reflect the addition of the definition of “area permit” and provide consistency with 40 CFR 144.51(m).*

**Section 13. Corrective Actions and Compliance Schedules.**

(a) Corrective actions are:

(i) Needed when a well is improperly sealed, completed, or abandoned, in which case:

(A) Operators shall provide the well information, as required in Sections 3(a)(xi) and (xii) of this Chapter, and the corrective action plan as required in Section 4(a)(xviii) of this Chapter. Where the Administrator's review of the plan indicates that the operator's plan is inadequate (based on the factors presented below), the Director shall require the operator to revise the plan, prescribe a plan for corrective action as a term and condition of the permit, or deny the application.

*Subsection 13(a) is revised to correct the citation to Section 4(a). No changes are proposed for the remainder of the Section.*

**Section 14. Monitoring Requirements.**

(a) A detailed monitoring program shall be approved by the Administrator and included in the permit or Research and Development Testing License application, as required by Section 4(a)(xvi) of this Chapter, and shall constitute a condition of the permit. The program shall describe the procedures for monitoring the quantity and quality of waters that may be affected by the operation before mining through reclamation and shall, at a minimum, specify:

...

*Subsection 14(a) was also revised to correct an inaccurate citation. No additional changes are proposed for Section 14.*

**Section 19. Revisions to Class III Well Portions of an In Situ Mine Permit or Research and Development Testing License.**

...

(b) The occurrence of any of the following with regards to the Class III Well portion of a permit or Research and Development Testing License shall result in the operator being required to revise the permit or Research and Development Testing License. These revisions shall be treated as significant revisions and require public notice as specified in Chapter 7 of these regulations and Section 21 of this Chapter. In addition, the fact sheet ~~State Decision Document~~ will be updated for these revisions:

*Subsection 19(b) was updated to reflect the changes made to the definition section of Chapter 11 where the definition of "State Decision Document" was deleted and a new definition for "fact sheet" was added. See Section 1 discussion for further detail on the changes to the definitions section of the rules.*

Section 21. **Public Notice, Public Hearing, Comment, and Decision Requirements.**

(a) In addition to the requirements of W.S. §§ 35-11-406(g), (j), and (k) (2003) and Chapter 7, public notice for actions related to in situ permits or Research and Development Testing Licenses, except permit or license revocation, shall be given by the following methods. Public notice for permit or license revocation shall be given by the methods in Section 21(d) of this Chapter.

...

(ii) The Administrator shall mail a copy of the notice to the following persons (any person otherwise entitled to receive notice under this paragraph may waive his or her rights to receive notice for any classes or categories of permits):

...

~~(F) Any person otherwise entitled to receive notice under this paragraph may waive his or her rights to receive notice for any classes and categories of permits.~~

*Subsection 21(a)(ii) was revised to include language which was previously Subsection 21(a)(ii)(F). The revised language is more consistent with 40 CFR 124.10(c)(1).*

(iii) In addition to mailing a copy of the public notice, the Administrator shall mail or electronically transfer a copy of the fact sheet, permit application or draft permit State Decision Document to the following persons:

(A) The applicant;

~~(B A)~~ Any other agency (including EPA when the draft permit is prepared by the State) which the Administrator knows has issued or is required to issue a permit for the same facility or activity under the following programs: Resource Conservation and Recovery Act (RCRA); Underground Injection Control (UIC); Prevention of Significant Deterioration (or other permit requirement under the Clean Air Act); National Pollution Discharge Elimination System (including sludge management permits); and Section 404 of the Clean Water Act; and -

~~(C B)~~ Federal and State agencies with jurisdiction over fish, shellfish, and wildlife resources, the Advisory Council on Historic Preservation, State Historic Preservation Officers, including any affected Indian Tribes.

*The proposed revisions to Subsection (iii) above are intended conform to 40 CFR 124.10(e) and provide consistency with the Federal regulations so that the rules are at least as stringent as the Federal counterparts.*

## CONCLUSION

The Environmental Quality Council, in accordance with the authority granted to it by W.S. § 35-11-112 As Amended, and having complied with the provision of the Wyoming Administrative Procedures Act, find as follows:

1. These rules provide for the regulation of noncoal mining and reclamation operations in accordance with the requirements of W.S. § 35-11-101 through W.S. § 35-11-1803, As Amended (Wyoming Environmental Quality Act).
2. The Department of Environmental Quality, Land Quality Division, Noncoal Rules and Regulations are necessary and appropriate to preserve and exercise the primary responsibilities and rights of the State of Wyoming; to retain for the State the control over its air, land, and water resources and secure cooperation between agencies of the State and Federal Government in carrying out the policy and purposes of the Environmental Quality Act.
3. These Land Quality Division Noncoal Rules and Regulations are reasonable and necessary for the effectuation of the Wyoming Environmental Quality Act, W.S. § 35-11-101 through W.S. § 35-11-1803, As Amended.
4. These Land Quality Division Noncoal Rules and Regulations are necessary and appropriate to protect the public health, safety, welfare, and environment of the State of Wyoming.

Dated this 12<sup>th</sup> day of September, 2013.



Environmental Quality Council