

DEPARTMENT OF ENVIRONMENTAL QUALITY

LAND QUALITY DIVISION

Draft Proposed Rules and Statement of Reasons

Noncoal Rules and Regulations, Chapter 8, 9 and 10

Exploration by Drilling, Small Mines and Limited Mining Operations



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Introduction to Rule Package

Chapter 8

Chapter 8 currently contains regulations on exploratory drilling, and provides requirements for plugging and abandonment (sealing) of drill holes after obtaining exploratory data. One of the main areas that these new rules seek to address is drill hole plugging and sealing requirements. Chapter 8 does not conform to current best management practices and standards. It allows the use of drilling mud to seal drill holes and does not require plugging to the surface. On April 5, 2010 the Wyoming State Engineers Office (SEO) adopted revised Ground Water Division Part III regulations (Water Well Minimum Construction Standards), which included specifications for well plugging and abandonment. These changes brought the SEO’s Rules and Regulations into conformance with accepted practices as set forth by the American Society for Testing and Materials (ASTM), the American Water Works Association (AWWA), and the WDEQ-WQD Chapter 11, Part G, Well Construction Standards, among others. These standards do not allow the use of drilling mud as an acceptable sealant. The SEO’s list of approved methods has been copied verbatim in these proposed rules.

Another issue that the proposed revisions rules seek to correct is that the current LQD rules do not require plugging the entire hole. The DEQ/WQD and SEO rules make no distinction between an exploration test well (e.g., an exploration hole) and a constructed water well in terms of plugging and sealing requirements. The DEQ/WQD and SEO both require that the hole be plugged or sealed by filling the entire hole from the bottom to the

ground surface to preclude the well, borehole, or drill hole from acting as a vertical conduit and to prevent contamination of ground water.

LQD Noncoal Chapter 8 does not currently require the submittal of a drilling notification prior to conducting exploration drilling. The LQD has been utilizing the drilling notification process and forms to authorize exploration drilling since 1978. These revised rules codify that requirement.

A provision has been added from the statute [W.S. § 35-11-404(h)] requiring that drill holes be capped immediately after the hole is probed. Another provision has been added to require that drill holes be marked with an identification number.

Surface reclamation requirements have been split out as a separate section from the plugging and abandonment requirements for the sake of clarity. Some minor additions have been made to address the disposal of drilling wastes and contaminated materials and reclamation of access routes.

Chapter 8 currently states that a bond in the amount of \$10,000 will be posted for each exploration area. This amount is generally insufficient to cover current abandonment and reclamation costs for medium to large scale exploration programs. Therefore, the specific value of the bond has been deleted from the proposed rules to allow for establishing bond amounts to cover actual costs. The types of allowable bonding instruments have also been specified. Other proposed changes include a provision that the bond may be reduced following proper drill hole abandonment and a requirement that the federal land managing agency be listed as a co-payee on the bond.

A provision has been added to the section on reporting of abandoned drill holes to specify that the reports will be held confidential for a five year period after bond is released. This will make the records public and allow other interested parties to have access to the information.

Chapter 8 currently contains an exception that allows drill holes on permitted mine to be left unplugged. This provision has historically been interpreted as applying only to surface mines where the drill holes will be mined through within a short time frame. Unplugged holes are certainly not desirable in proximity to underground mines or in situ mines. Appropriate clarifications have been added.

Currently Chapter 8 contains no specific provisions for installation or plugging of wells. The LQD has historically authorized wells, typically monitoring wells installed to gather baseline information in support of a mine permit application, under Drilling Notifications. However, under this approach there are no standards regarding well completion, bonding or plugging and sealing. The intent of the proposed revisions is to provide this regulatory framework for installation of baseline monitor wells.

In summary, the purpose of this Rules package is to update Chapter 8 to meets today's

best management practices related to plugging and sealing exploration drill holes, to be consistent with other State Regulatory agencies, to clarify bonding procedures, to codify provisions for authorizing the construction of baseline ground water monitoring and test wells under Chapter 8.

Chapter 9

Chapter 9 is proposed for revision mainly to make it more readable. The chapter as currently written contains numerous citations to the Environmental Quality Act to indicate what is required for small mine permit application. To make the chapter more readable these citations have been replaced with the actual requirements contained in the statute. This eliminates the need to continually flip back and forth between regulation and statute to determine what is required for a small mine permit application.

Additionally a proposed revision is necessary to incorporate the requirements of Chapter 2 of the Noncoal Rules and Regulations. Chapter 9 is proposed to include the requirements of Chapter 2, Section 2(a)(i)(J), which requires that studies may be required for cultural resource information.

Chapter 10

Proposed changes to Chapter 10 are intended to clarify the proximity limitations on ten acre exemptions that have been applied through policy. Establishment of multiple ten acre exemptions in nearby areas is an ‘end run’ around the statutory requirements for environmental protections achieved with a mining permit. Therefore, it was necessary for LQD to establish reasonable limits to the number of Ten Acre Exemptions an operator may have in near proximity to each other. LQD implemented a policy stating that an operator may not establish a Ten Acre Exemption within six miles of another ten acre exemption held by the same operator and extracting the same material. This policy has been in place for years but has not been codified. The proposed rule codifies this policy, and also establishes the level of reclamation required for one Ten Acre Exemption before another may be approved within the six-mile limit. Once a Ten Acre Exemption is reclaimed to final seeding, an operator may obtain a new Ten Acre Exemption within six miles of the reclaimed one. This has not been specified before, and requirements in the past have been that the reclaimed vegetation be established before a new ten acre exemption could be approved. Allowing operators to open a new Ten Acre Exemption as soon as final seeding is completed encourages prompt reclamation and benefits the operator by eliminating the uncertainty of when a new pit may be opened based on when the plants will establish in a reclaimed pit.

Summary of Proposed Amendments

Chapter 8 Proposed Changes

The proposed revisions to Chapter 8 primarily affect Section 2. The intent of the revision is to bring this chapter up to date, reflect industry standards as described in ASTM International D-5299, and generally eliminate conflicts between DEQ/LQD and DEQ/WQD and SEO Rules and Regulations. To accomplish this Section 2 was modified to eliminate any reference to the use of drilling mud as an acceptable sealant material and to require the entire drill hole be completely filled from bottom to ground surface.

Section 2 was also revised to allow for the installation of baseline ground water monitoring and testing wells. Construction standards relate back to those currently approved under Chapter 11 and plugging and sealing relates back to the proposed procedural rewrite of Sections 2(a) and 2(b) as described above.

Section 3 was updated because the existing Rule and Regulation citations are no longer valid, and for operations on federal land, the Federal land management agency must be listed as a joint payee. The option of self-bonding was also removed because it is not an acceptable bonding mechanism to the federal government for locatable minerals and the potential for forfeiture when dealing with small companies places too much risk to the State.

Section 4 was rewritten to include the option of requiring additional reclamation of a hole(s) rather than just bond release or forfeiture. A confidentiality provision was added to limit the time the data remains confidential to five years after final bond release unless the permittee can justify a longer period to be consistent with W.S. §35-11-404(e) .

Section 5 was revised to indicate that Section 2 of Chapter 8 is applicable to all exploratory drilling operations regulated by the DEQ/LQD, in part because Chapter 11 references Chapter 8 regarding exploration drill hole plugging and sealing. The exclusion clause regarding oil and gas exploration remains in force.

Chapter 9 Proposed Changes

Section 1 was revised to remove statutory references which were not very clear on what is required for permit applicants. Section 1 as proposed contains the actual requirements for a permit application. Section 1 was also revised to include the requirements of Chapter 2, Section 1(a)(i)(J).

Chapter 10 Proposed Changes

Section 6 was revised to indicate that transfers must meet the limitations on operations that are included in Section 8 and requires operators to have a Form 10 and bond in place. Section 8 was revised to incorporate policy regarding “nearby” operations to include a specific spatial limitation and thereby create greater consistency in the implementation of this section.

Proposed Rule and Statement of Reasons

DEPARTMENT OF ENVIRONMENTAL QUALITY

LAND QUALITY DIVISION

NONCOAL RULES AND REGULATIONS

CHAPTER 8

EXPLORATION BY DRILLING

Section 1. **Conducting of Exploration by Drilling.**

(a) Any discoverer conducting exploration by drilling within this State, shall do so in strict compliance with all the provisions of W.S. § 35-11-404 (1977 2007) ~~and Sections 2, 3, and 4 of this Chapter.~~ Prior to conducting any exploration by drilling the discoverer shall provide notification (Drilling Notification) and a reclamation bond acceptable to the Administrator for the proposed exploration activity.

Section 2. **General ~~Completion and Restoration~~ Drill Hole Abandonment Requirements.**

(a) ~~All drill holes sunk for the purpose of conducting exploration by drilling exploration drill holes~~ shall be capped, sealed or plugged in the manner described hereinafter.

(b) (i) Drill holes that have artesian flow of groundwater to the surface shall be plugged in the manner described in W.S. § 35-11- 404(c)(i) to prevent adverse changes in water quality or quantity.

(ii) ~~To prevent adverse changes in water quality or quantity, drill holes shall be sealed in the manner described in W.S. § 35-11-404(c)(ii) which shall include but not limited to:~~

(A) ~~Drilling muds used to seal exploration drill holes shall meet the following specifications, when using procedures provided in the latest current edition of the American Petroleum Institute Standard Procedures for Testing Drilling Fluids:~~

(I) ~~Ten minute gel strength of at least 20 lbs/100 sq. ft.~~

(II) ~~Filtrate volume not to exceed 13.5 cc.~~

(B) ~~For drill holes in gravel, scoria (clinker) or other materials resulting in lost circulation (drilling fluids cannot be circulated to the surface), the discoverer may use drill cuttings or other earthen materials to adequately backfill the~~

hole.

(c) Drill holes that have encountered any ground water or saturated stratum shall be sealed utilizing sealant materials (grout) and emplacement methods as prescribed hereinafter to prevent fluid communication and adverse changes in water quality or quantity.

(d) Sealant materials (grout) shall meet the technical requirements for making a proper seal. Grout products shall meet applicable ASTM, API, NSF, AWWA, or other recognized industry standards. Grout shall be prepared according to manufacturer's directions and shall be mixed as specified for specific site requirements. The following are approved grout materials:

(i) Neat Cement Grout Slurry must consist of a mixture of Portland Cement and not more than 6 gallons of clean water per bag (1 cubic foot or 94 pounds) of cement;

(ii) Sand Cement Grout Slurry must consist of a mixture of Portland Cement, sand, and water in the proportion of not more than 1 part by weight of sand to 1 part of cement with not more than 6 gallons of clean water per bag of cement (1 cubic foot or 94 pounds);

(iii) Concrete Grout Slurry must consist of a mixture of Portland Cement, sand and gravel aggregate, and water in the proportion of not more than 1 part by weight of aggregate to 1 part of cement with not more than 6 gallons of clean water per bag of cement;

(iv) Cement/Bentonite Grout Slurry must consist of a mixture of cement and bentonite in the proportion of not more than 6.5 gallons of water and 3 to 5 pounds of powdered bentonite per 94-pound sack of Portland cement;

(v) Bentonite Grout Slurry means an inorganic mixture with a slurry density of 9.4 lbs./gal. minimum (20%) by weight of solids bentonite, with polymers, water, or other additives for the yield/rate control, which forms a low permeability seal (not greater than 1×10^{-7} cm/sec), and is mixed to the manufacturer's specifications; and

(vi) Nonslurry Bentonite Grout must consist of chipped or pelletized bentonite varieties that are hydrated to manufacturer's specifications.

(e) Sealant materials (grout) shall be emplaced in a manner that provides a water tight seal utilizing one of the following approved methods:

(i) By placing a sealant material by drill pipe, tremie pipe, or similar device in an upward direction from the bottom of the drill hole to within five (5) feet of the ground surface; or

(ii) By placing sodium bentonite chips or pellets specifically designed to be used to seal drill holes from the bottom of the drill hole to within five (5) feet of the ground surface; or

(iii) By placing any of the sealant materials described above in this subsection from the bottom of the drill hole to 50 feet above the uppermost saturated groundwater stratum to within five (5) feet of the surface.

(f) If the sealant material is not brought to within five (5) feet of the ground surface, the discoverer responsible for sealing the drill hole shall:

(i) Measure the depth of the top of the sealant column with the appropriate equipment after sufficient time (minimum 24 hours) has been allowed for the sealant column to set up;

(ii) Continue to install sealant material until the top of the sealant column remains at least 50 feet above the top of the uppermost saturated groundwater stratum;

(iii) Install uncontaminated fill material, drill cuttings, or one of the sealant materials described in Section 2 (d) from the top of the sealant column to within five (5) feet of the ground surface; and

(iv) If sodium bentonite chips or pellets (nonslurry grout), drill cuttings, or uncontaminated earthen material are placed in the drill hole, the drill hole must be four inches or greater in diameter and less than 500 feet in depth and the material must be placed in such a manner that a bridge does not occur. Nonslurry grout may not be placed in more than 300 feet of standing liquid.

(g) If the drill hole is a dry hole, that is the hole was drilled without the use of drilling fluids and the bottom of the hole is above the preexisting natural elevation of the uppermost saturated groundwater stratum, the drill hole may be abandoned by completely backfilling from the bottom of the drill hole to the surface with uncontaminated earthen material or drill cuttings or approved sealant materials described in Section 2(d). When using uncontaminated earthen material or drill cuttings as a backfill material, this material should be tamped frequently during the backfill operation to promote settling and compaction and to verify that bridging has not occurred.

(h) The Administrator and Director may approve other drill hole abandonment procedures at the request of the discoverer.

(i) Drill holes shall be capped in the manner described in W.S. § 35-11-404(c)(iii) to ensure the safety of people, livestock, wildlife, and machinery in the area.

(j) Drill holes shall be capped immediately after drilling and probing in accordance with W.S. 35-11-404(h). If it is necessary to temporarily delay the capping or keep the drill hole open for any reason, the drill hole must be securely covered in a manner which will prevent injury to persons or animals.

(k) Each drill hole shall be marked with a metal or plastic tag or washer that clearly identifies the name of the discoverer and the hole number. For drill holes with a concrete cap, the tag or washer should be attached by wire or cable to the surface cap. For dry holes that have been backfilled to the surface, the tag may be attached to a durable wooden stake driven into the ground or other method acceptable to LQD.

Section 2 was rewritten to be consistent with the test hole plugging and sealing requirements contained in DEQ/WQD Rules and Regulations Chapter 11, Part G, Section 70; the recently approved SEO Rules and Regulations Part III and standards contained in American Society for Testing and Materials (ASTM) D-5299. In so doing any reference to the term “drilling mud” has been removed and acceptable plugging and sealing materials have been defined consistent with the SEO Part III regulations.

The proposed regulations also require that holes be plugged and sealed bottom to top. The purpose for this requirement is three-fold: (1) to minimize the potential for any future settlement of the surface cap which could cause injury to humans, livestock, or wildlife, (2) to eliminate a vertical conduit that could allow contamination of ground water or at the very least soils deep within the profile, and (3) as described above, to be in conformance with DEQ/WQD and SEO standards. While the proposed changes were intended to address all exploration drilling in general, care was taken to differentiate between drilling operations that did and those that did not penetrate an aquifer. As such, the abandonment practices used for shallow auger type drilling in dry formations, such as in bentonite exploration, where drill cuttings are used for backfill, remain in effect.

Language was added to Section 2 concerning drill hole identification, which is a practice required under Chapter 11 for abandoned wells within in situ mine permit areas and is currently employed by bentonite and in situ uranium operators in their exploration programs.

Section 3. Bond Reclamation of Drill Sites and Affected Lands.

(a) ~~Each drill site as defined in Chapter 1, and associated access routes, shall be restored as nearly as possible to its their original condition, ~~including:~~~~

(b) All drilling fluids, drill cuttings and geologic samples shall be confined

and buried below grade to the extent possible. Excess drilling mud and drill cuttings or any acid-forming or toxic materials uncovered during or created by exploration by drilling, including petroleum contaminated soils, shall be properly disposed of so as not to constitute a fire, health, or safety hazard during or after the exploration by drilling;

(c ~~ii~~) To the extent possible, any surface preparation of the drill site shall be accomplished in a manner consistent with Chapter 3, Section 2(b), Land Quality Noncoal Rules and Regulations;

(d ~~iii~~) To the extent possible, topsoil removal and stockpiling shall precede any excavation within the drill site and associated improved access routes in a manner consistent with Chapter 3, Section 2(c), Land Quality Noncoal Rules and Regulations; and

(e ~~iv~~) To the extent possible, the discoverer shall reestablish the vegetative cover where vegetation has been removed or destroyed within the drill site and access routes by seeding, planting, transplanting, or by other adequate methods in a manner consistent with Chapter 3, Section 2(d), Land Quality Noncoal Rules and Regulations.

(f ~~v~~) All lands, including access roads or terrain damaged in gaining access to or clearing the site, or lands whose natural state has been substantially disturbed as a result of the exploration by drilling, shall be restored as nearly as possible to their original condition, including reseeding if grass or other crop was destroyed.

This section on surface reclamation was broken out as a separate section from the drill hole abandonment requirements for the sake of clarity. Minor additions were made to address several ubiquitous problems associated with exploration drilling operations: containment of drilling mud, disposal of petroleum contaminated soils, and reclamation of access routes.

Section 4. ~~Termination and Report of Operations~~ Bond.

(a) In order to assure and secure performance of the discoverer's obligations, each discoverer shall agree to post ~~and keep posted~~ a bond ~~in the amount of \$10,000~~ for each exploration area. ~~This amount may be reduced when the discoverer demonstrates to the satisfaction of the Administrator, a lesser estimate,~~ The amount of the bond shall be computed in accordance with established engineering principles, for accomplishing proper ~~drill hole completion~~ abandonment and surface restoration in accordance with the standards set out in this Chapter. The bond amount may be reduced when the discoverer demonstrates to the satisfaction of the Administrator that drill hole abandonment has been accomplished in accordance with the standards set out in this Chapter.

(b) All bonds ~~shall be signed by the discoverer as principal~~ must originate from ~~by~~ a good and sufficient corporate surety licensed to do business in the State, shall

be signed by the discoverer as principal, and be made payable to the State of Wyoming and the Federal land management agency as appropriate.

(c) In lieu of a Surety Bond, the discoverer may ~~deposit Federally insured certificates of deposit payable to the Department of Environmental Quality, cash or government securities or all three.~~ submit cash, Certificate(s) of Deposit, Letter(s) of Credit, Treasury Bill(s), Money Market Account(s), or any combination thereof to meet reclamation bond obligations.

(d) The Administrator may accept the bond of the discoverer itself without separate surety when the discoverer demonstrates to the satisfaction of the Administrator substantial compliance with the applicable provisions of Chapter ~~11~~ 6, Land Quality Noncoal Rules and Regulations.

This section was modified to eliminate the reference to a flat \$10,000.00 bond as it is inadequate to address the large scale exploratory drilling performed by interests contemplating in situ operations or other major exploration projects. A provision has been added to allow for the bond to be reduced following proper abandonment of the drill holes. The reference to Chapter 11 on self-bonding has been corrected and reference to the deposit being payable to the DEQ has been removed. Provision has been made for including the Federal land managing agency as a joint payee on the bond. This is required by MOU's between WDEQ-LQD and several Federal agencies.

Section 4 5. Termination and Report of Operations.

(a) Within 12 months after ~~compliance with 2(a) and sufficient compliance with 2(b) and (c) so that full compliance can be predicted by the Administrator~~ the completion and proper abandonment of any exploration drill hole, the discoverer shall comply with the reporting requirements of W.S. § 35-11-404(e) or (f). After receipt of such report, the Administrator shall have one year to inspect and evaluate the ~~hole completion and surface restoration work~~ abandoned drill holes, drill sites, and access routes and make a determination of whether to release the bond to the discoverer, require additional reclamation, or institute forfeiture proceedings. The abandoned drill hole reports shall be held as confidential information for a period of five years following full bond release unless the discoverer justifies an additional five-year period.

(b) Forfeiture proceedings and release of bonds shall be according to the procedure set forth in W.S. §§ 35-11-421 through 35-11-423; substituting therein “discoverer” for “operator;” “surface restoration” for “reclamation,” and “exploration by drilling” for “surface mining.”

(c) Failure to so inspect and evaluate abandoned drill holes shall constitute a decision by the Administrator that the discoverer has complied with this Chapter for

release of bond purposes only. This one year limitation shall not be construed to alter or affect W.S. § 35-11-404(k)-(n), or any other rights of action against the discoverer granted pursuant to the statutory provisions of the Wyoming Environmental Quality Act.

Section 4 (a) was revised to include an option for the Administrator to require additional reclamation of a hole(s) rather than just bond release or forfeiture. A confidentiality provision was added because many of the areas currently considered for exploration have already been subject to extensive drilling activity. By allowing the abandoned drill hole information to remain confidential ad infinitum, the department may be encouraging additional drilling, which only increases the potential for impacts to ground water. It is thought that making the information available after five years may result in a reduced amount of drilling in the future.

Section 5 6. Exceptions.

Sections 2 and 3 of this Chapter, relating to drill hole abandonment and site reclamation, shall not apply to holes drilled in conjunction with open-pit development within an existing permitted surface mine operation that are projected to be mined through within 12 months of drilling. ~~or This Chapter shall not apply to holes drilled for the purpose of conducting oil and gas exploration operations.~~ Specific exceptions from certain requirements of this Chapter shall also be preserved in accordance with W.S. § 35-11-404(g) and (h).

Section 5 was rewritten primarily because DEQ/LQD Noncoal Rules and Regulations Chapter 11, In Situ Mining, references Chapter 8 for plugging and sealing of exploratory drill holes. Section 5 as currently written, waives the requirement for plugging and sealing of drill holes within any mine permit area. To resolve this contradiction, this Section was revised to clarify that only drill holes that will be mined through within 12 months by an advancing open-pit mine will be allowed to remain open and unplugged. The exemption for oil and gas exploration is also retained.

Section 7. Installation of Wells for Collection of Baseline Information.

(a) Construction of wells may be authorized by the Administrator under a Drilling Notification for the purpose of collecting ground water baseline data in preparation of a mine permit application.

(b) Prior to installation, a plan shall be submitted and approved by the Administrator that describes the location and completion details of each proposed well.

(c) Wells shall be constructed and permitted in accordance with requirements

of the State Engineer's Office, in accordance with W.S. 35-11-404 (c)(iv).

(d) Wells that do not require a permit from the State Engineer's Office shall be constructed according to the standards contained in Chapter 11, Sections 6(b), 6(c), 6(d), 6(e), and 6(f), Land Quality Noncoal Rules and Regulations.

(e) Provisions shall be made such that each well is secured to prevent contaminant entry.

(f) Adequate bond shall be provided to assure that all wells are properly plugged and sealed and the sites restored.

(g) Well drilling, plugging and sealing and site reclamation shall follow the procedures outlined in Section 2. Well casing shall be cut off two (2) feet below ground surface and any pump and associated appurtenances removed, as applicable, before the well is plugged and sealed.

(h) Abandonment reports as described in Section 5 of this Chapter shall be filed with the Administrator and the State Engineer's Office within 12 months.

Current LQD Rules and Regulations do not provide a formal permitting mechanism for the installation of baseline ground water monitoring and test wells that are needed in order to prepare a mine permit or R&D application. The DEQ/LQD has allowed for well installation under Drilling Notifications, but there are currently no regulatory standards for well construction or abandonment under a Drilling Notification. Assuming the operator proceeds with a mine permit application, the majority of such wells will be utilized in the proposed operation. Thus, it stands to reason that they should be constructed according to the standards established for an operating facility, hence the reference to Chapter 11. Well plugging and sealing requirements utilize the same procedures outlined in the Section 2 rewrite.

DEPARTMENT OF ENVIRONMENTAL QUALITY

LAND QUALITY DIVISION

NONCOAL RULES AND REGULATIONS

CHAPTER 9

SMALL MINING OPERATIONS

Section 1. **Mining Permit Requirements.**

(a) Prior to the commencement of a small surface mining operation involving not more than 10,000 cubic yards of overburden plus topsoil and subsoil and ten acres of affected land in any one year, an application shall be submitted to the Administrator in duplicate on forms supplied by the Division. Each application shall contain:

The revision presented above is the result of a court decision stating that the definition of “overburden” as provided in W.S. § 35-11-103(e)(iv) clearly and unambiguously included topsoil. And that gravel mine operators include topsoil in calculating the amount of overburden disturbed each year at each small mining operation. (Reference the footnotes to W.S. § 35-11-104 for the court’s decision.) The definition of “overburden” in the statutes “means all of the earth and other materials which lie above the mineral deposit...” Therefore subsoil is also included in the volume of material removed above the mineral deposit.

The revisions presented below are intended to clarify the permitting requirements for small mining operations. Chapter 9 of the Land Quality Noncoal Rules and Regulations as currently written contains a large number of statutory references which are modified for small mine operations. This makes the chapter difficult to follow since an interested party must reference back to the statutes and then follow the modification instructions in the Chapter.

In the proposed rules below, most of the statutory references have been struck and replaced with the requirements found in statute that are applicable in light of any modifying language. Underlined text denotes what is actually required if the instructions contained in the struck language are followed.

(i) All information required in W.S. § 35-11-406(a) except: The name and address of the applicant, and, if the applicant is a partnership, association, or corporation, the names and addresses of all managers, partners and executives directly responsible for operations in this state;

(ii) A sworn statement stating that the applicant has the right and power by legal estate owned to mine from the land for which the permit is desired;

(iii) A sworn statement that the applicant has not forfeited a bond posted for reclamation purposes and that all statements contained in the permit application are true and correct to the best knowledge of the applicant;

(iv) The names and last known addresses of the owners of record of the surface and mineral rights on the land to be covered by the proposed permit;

(v) The names and last known addresses for the owners of record of the surface rights of the lands immediately adjacent to the proposed permit area;

(vi) An identification of the land to be included in the permit area to include:

~~(A) W.S. § 35-11-406(a)(vi)(A) is modified to require~~ the location of the proposed permit area by legal subdivision, section, township and range. If there is no other survey, give the location by protracted survey and map, metes and bounds, claim number and mining district.

~~(B) W.S. § 35-11-406(a)(vi)(D) is suspended.~~ The name, if any, by which such lands or any part thereof are known;

(C) The approximate number of acres to be affected, including the total number of acres in the area covered by the permit application;

~~(vii) W.S. § 35-11-406(a)(vii) is modified to require only~~ A general description of the land which shall include as nearly as possible the following:

~~(A) I~~ A map of vegetation types and a range site-range condition survey on the proposed permit area along with a list of species and a ranking of their relative abundance in each vegetation type. The applicant is encouraged to submit labeled photographs to demonstrate each vegetation type and to document areas of sparse vegetation. Locations photographed should be shown on the vegetation map;

~~(B) H~~ A description of the present land use within the permit boundary including a map at the same scale as the postmining map showing the contours of the proposed permit area and the surrounding lands;

~~(C) H~~ A description of any surface waters within the proposed permit area including estimated average flow rates, storage volume of any reservoirs and associated water rights within the permit area of any stream, reservoir, or lake. Depth to the groundwater shall be indicated; and

~~(D IV)~~ A soil map which identifies the soil types, location, their suitability for reclamation and depths and volume of suitable topsoil present on the proposed affected lands. Also, a description of the subsoil and/or overburden material existing between the topsoil and mineral seams.

(viii) A United States Geological Survey map, if available, of the permit area;

~~(ix D) W.S. § 35-11-406(a)(ix) is modified to require only:~~ A map based upon public records showing the boundaries of the land to be affected that also includes the following:

~~(I) A map based upon public records showing the boundaries of the land to be affected.~~

(A H) The names of any surface waters within the proposed permit area;

(B H) Water wells on and within one-half mile of the permit area shall be located on a map where the maximum expected depth of disturbance is within 20 feet of or below the water table; and

~~(C IV) A map to show a~~An outline of all areas previously disturbed by underground mining or which will be affected by future underground mining as a guide to potential subsidence problems.

(x) The mineral or minerals to be mined;

(xi) The estimated dates of commencement and termination of the proposed permit;

(xii) A minimum fee of one hundred dollars (\$100.00) plus ten dollars (\$10.00) for each acre in the requested permit, but the maximum fee for any single permit shall not exceed two thousand dollars (\$2,000.00). The permit is amendable without public notice or hearing if the area sought to be included by amendment does not exceed twenty percent (20%) of the total permit acreage, is contiguous to the permit area and if the operator includes all of the information necessary in the application to amend that is required in this section including a mining and reclamation plan acceptable to the Administrator. The fee for a permit amendment shall be two hundred dollars (\$200) plus ten dollars (\$10.00) for each acre not to exceed two thousand dollars (\$2,000);

(xiii) A description of any significant artifacts, fossil or other article of cultural, historical, archeological or paleontological value. Upon recommendation by a qualified archeologist or a qualified paleontologist, the Administrator may require an evaluation of the proposed permit area prior to the time that a permit or license is issued;

Subsection (xiii) above was added to remain consistent with the requirements of the Land Quality Division, Noncoal Rules and Regulations at Chapter 2, Section 2(a)(i)(J).

(xiv) A written statement from the appropriate city and/or county agency documenting that the proposed mining operation does not conflict with existing city regulations/ordinances or county zoning/planning provisions; and

Subsection (xiv) above was added based on counties in Wyoming having adopted Special Use Permits for mining to ensure the mine operations meet specific city or county regulations that are outside of the scope of Article 4 of the Wyoming Environmental Quality Act. Often these requirements relate to specific local concerns such as noise, traffic, hours of operation and other potential public nuisance issues. This permit requirement would document that the city or county requirements have been met and will help to alleviate potential public concerns that might otherwise result in objections to the mine permit application.

(xv) Such other information as the Administrator deems necessary or as good faith compliance with the provisions of the Environmental Quality Act require.

~~(ii) In addition to a description of the mining technique and method of operation to be used, each operator shall supply all information required in W.S. § 35-11-406(b) except:~~

(b) The application shall include a mining plan and reclamation plan dealing with the extent to which the mining operation will disturb or change the lands to be affected, the proposed future land use or uses and a plan whereby the operator will reclaim the affected lands to proposed future use or uses. The mining plan and reclamation plan shall include the following:

(i) A statement of the present and proposed use of the land after reclamation;

(ii A) W.S. § 35-11-406(b)(ii) is modified to also Plans for surface gradient to a contour suitable for proposed use after reclamation is completed and a proposed method of accomplishment and shall include statements as to the maximum slope that will be created and a plan to reestablish the original surface drainage;

(iii B) W.S. § 35-11-406(b)(iii) is modified to Type of vegetation and manner of proposed revegetation or other surface treatment of the affected area and shall also include a description of the methods and schedule of seedbed preparation and seeding, the amounts of plants to be used, and protective measures against grazing animals;

~~(C) W.S. § 35-11-406(b)(iv) is suspended.~~

~~(iv D) W.S. § 35-11-406(b)(v) is modified to require only a A map showing the location of all activities associated with the operation including roads, temporary drainage diversions, ponds, stockpiles for topsoil, overburden, ore product and waste, plant site and other processing facilities;~~

(v) An estimate of the total cost of reclaiming the affected lands as outlined in the written proposal computed in accordance with established engineering principles;

~~(vi E) W.S. § 35-11-406(b)(vii) is modified to allow A contour map on the same scale as the reclamation map showing to the extent possible the proposed contours of the affected area after completion of proposed reclamation. ~~€~~The Administrator ~~to~~ may waive this requirement if requested by the operator and the degree of surface disturbance is small;~~

~~(vii F) W.S. § 35-11-406(b)(viii) is modified to require only a A description of how topsoil and subsoil will be salvaged, stockpiled, and replaced during reclamation;~~

Subsoil was included in Subsection (vii) above as W.S. § 35-11-406(b)(viii) includes the preservation of subsoil in addition to topsoil.

(viii) A plan for ensuring that all acid forming, or toxic material, or materials constituting a fire, health or safety hazard uncovered during or created by the mining process in a manner designed to prevent pollution of surface or subsurface water or threats to human or animal health and safety. Such method may include, but not limited to covering, burying, impounding or otherwise containing or disposing of the acid, toxic, radioactive or otherwise dangerous material;

~~(G) W.S. § 35-11-406(b)(x) is suspended.~~

(ix) If surface owner consent cannot be obtained, the options contained in W.S. § 35-11-406(b)(xi) and (xii) shall apply;

(x) The procedures proposed to avoid constituting a public nuisance, endangering the public safety, human or animal life, property, wildlife and plant life I or adjacent to the permit area including a program of fencing all stockpiles, roadways, pits and refuse or waste areas to protect the surface owner's ongoing operations;

(xi) The operation shall not lie within three hundred (300) feet of any existing occupied dwelling, home, public building, school, church, community or institutional building, park or cemetery, unless the landowner's consent has been obtained;

Subsection (xi) was included to address the requirements of W.S. § 35-11-406(m)(viii) to help with clarification on the requirements for a small mining operation.

(xii) The methods of diverting surface water around the affected lands where necessary to effectively control pollution or unnecessary erosion;

(xiii) The methods of reclamation for effective control of erosion, siltation and pollution of affected stream channels and stream banks by the mining operations;

(xiv) A statement of the source, quality and quantity of water, if any, to be used in the mining and reclamation operations; and

(xv) A projected timetable for accomplishment of the reclamation plan.

(c) The applicant may have the local conservation district, assist in preparation of, provide data for, perform research, review and comment upon the proposed reclamation plan.

(d) Notification and publication requirement. Upon written notification by the Division that the application is complete, the following procedure shall be followed: procedures contained in W.S. § 35-11-406(d) through (p) shall apply as applicable except the notice to be placed in a newspaper of general circulation in the location of the proposed operation for W.S. § 35-11-406(j) shall be two consecutive weeks instead of four consecutive weeks.

~~(i) W.S. § 35-11-406(d) shall be met.~~

~~(ii) All requirements of W.S. § 35-11-406(j) shall be met except the applicant shall cause notice of the application to be published once a week for only two consecutive weeks in a newspaper of general circulation in the location of the proposed operation.~~

~~(e) All requirements of W.S. § 35-11-406(k) shall be met.~~

Section 2. Conversion of Small Mine Permit to Standard Mine.

If an operator, holding a valid mining permit under W.S. § 35-11-401(j) for a small mining operation, intends to expand his operation to remove more than 10,000 cubic yards of overburden per year or affect more than ten acres of land per year, the operator shall submit revised mining and reclamation plans, revised maps and an appropriate reclamation bond to the Land Quality Division, and obtain approval for the expansion prior to the time when he intends to exceed the established limits. The

provisions of W.S. § 35-11-406(d), (j) and (k) will be required. Any public hearing shall apply only to the request of the operator to expand his operation, and the valid mining permit already held by the operator will not be affected.

DEPARTMENT OF ENVIRONMENTAL QUALITY

LAND QUALITY DIVISION

NONCOAL RULES AND REGULATIONS

CHAPTER 10

LIMITED MINING OPERATIONS

FOR TEN ACRES OR LESS OF AFFECTED LAND

No changes are proposed for Sections 1 – 5 of Chapter 10.

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Section 6. **Transfers and ~~Other Authorized Operators~~**

~~(a)~~ The right to operate under a limited mining exemption may be transferred to a new operator with written approval of the existing operator and written acceptance by the Administrator, provided the new operator submits a new Form 10 and bond required for the new operation, ~~and~~ assumes the reclamation liability of the existing operator and does not violate the limitations provided in Section 8 below.

~~(b) The operator may allow contractors to operate within its limited mining area provided notice is given to the Division and the contractor meets the other requirements of the Division, including the filing of Form 10.~~

The revision is proposed above to clarify that an operator must also comply with the limitations found in Section 8 below. Section (b) is proposed for deletion because the requirements in (a) make it necessary for any “operators” of a limited mining exemption must submit a new Form 10. The revision in (b) also clarifies rule language which is undefined in the regulations (“contractors”), by requiring that all “operators” must have a Form 10 and bond in place prior to mining activities.

...

No changes are proposed for Section 7 of Chapter 10.

Section 8. **Limitation of Operations.**

(a) The operator will not be allowed to:

(i) Conduct more than one operation under W.S. § 35-11-401(e)(vi) within adjacent areas when the operations are to mine the same minerals, or

(ii) Conduct ~~nearly~~ more than one operations of ten acres or less within any

six-mile radius when the two operations are to mine the same mineral, so as to circumvent the general requirements of the Environmental Quality Act. The Administrator may allow two operations for the same mineral within the six-mile radius if one of the operations has completed reclamation work and is awaiting bond release. Complete reclamation for the purposes of this section means backfilling, grading, topsoil application and final seeding activities have been completed.

The proposed revision above is intended to clarify that the Land Quality Division interprets “nearby” to mean a six mile radius in connection with multiple operations mining the same mineral by the same operator. The proposed revision also allows for an operator to operate a second operation if the first operation has been reclaimed and is awaiting bond release.