

Response to Comments on Proposed Revisions to Coal Chapter 2 – Wind Turbine Rules

Powder River Basin Resource Council

We oppose the inclusion of this paragraph in the proposed rules:

(4.) The approved backfill location shall be designated as an “industrial” post mining land use in the approved reclamation plan. When calculating the reclamation bond, adjustments shall be made to the required bond amount prior to backfill activities and post mining land use designation; and

1. There should be nothing on the surface after reclamation that would necessitate a change in post-mine land use. As such, the coal mine company should comply with the current surface reclamation plan, including all required revegetation requirements, for the land use category currently required in the reclamation plan.

Response: Proposed rules were moved to reclamation plan section. Section 6(b)(ii)(F), page 24.

2. DEQ cannot predetermine the approval of a post-mine land use change. There is a separate and important regulatory process a coal mine company must go through to change the proposed post-mine land use. A company must apply for such a change, and there must be a public comment period afforded on any proposed change.

Response: See above response, Section 6(b)(ii)(F), page 24, and land use change on page 30.

3. Third, we find this provision especially problematic for mines that overlay the Thunder Basin National Grassland. These federal public lands should not have industrial zones remaining after mining, and reclamation should proceed to protect and enrich the long-term multiple uses of the area, including livestock grazing, wildlife habitat, and recreation.

Response: The public land issue has been discussed and noted that very little land would fall in this category.

Wyoming Mining Association

1. Materials are referred to as “repurposed material” throughout the draft rulemaking. This characterization of the material as “repurposed” could potentially misalign with the language utilized throughout Chapter 4 of the Wyoming Solid Waste Management Regulations, which would more appropriately characterize the materials as a waste.

Response: Change has been made. See Section 6(b)(ii)(F), page 24

2. Wyoming Mining Association (WMA) members question the limitation to the final cut for placement of blades as the final pit void may not be the best location for disposal of wind turbine blades and/ or towers. For example, the final voids may not be in close proximity to a public road, voids left along an end wall may be a better location, reducing interactions with mine equipment, etc. may lead to a better option to ensure safety and minimize long term environmental disturbance. WMA members suggest a change in the language to “an approved location;”

Response: Added end wall language, Section 6(b)(ii)(F)(III)(1.), page 25

3. The rule should define which potentiometric surface to use. The predicted postmining potentiometric surface may be a better reference since the coal aquifer will be gone in most cases, and the coal aquifer potentiometric surface is still recovering from coal bed methane development.

Response: Changed to pre-mining potentiometric surface of coal aquifer, Section 6(b)(ii)(F)(III)(2.), page 25

4. The defined postmining land uses in Chapter 1 of the LQD rules and regulations include an “Industrial commercial” use. If this “industrial” use is the same, it would be appropriate to use the Chapter 1 terminology. If it is determined that placement of the turbine materials can occur in other backfill locations of the mine, then the land uses for those areas should remain as permitted. If the location of placement is restricted to only the final voids, with the addition of the Solid Waste Management Division (SWMD) monitoring requirements, then an industrial commercial use is appropriate.

Response: Changed to “may be designated joint or alternative land use”, Section 6(b)(ii)(F)(III)(4.), page 25

5. WMA members question whether post reclamation groundwater monitoring as required through Land Quality Division (LQD) could suffice for compliance, or whether compliance is expected with the entirety of SWMD Chapter 4. This could become quite onerous (surveyed site boundary corners, diversions protecting active sites from the 25-year 24-hr storm, training programs for solid waste managers, compaction/covering logs including names of personnel, annual reports, etc). A defined time limit for monitoring is needed here. It should be through the end of the LQD bond responsibility period.

Response: See Section 6(b)(ii)(F)(IV)(2.), page 25

6. It is assumed that the 1st term “backfill materials” is the wind turbine materials, so it should say “wind turbine” materials. The term “backfill” has its own meaning for mine reclamation, thus the need for clarification. WMA members also question whether this material may be placed in much bigger lifts as long as it is a minimum of 10 feet, or if the intent is to have approximately 10-foot lifts covered by 15 feet of backfill. Under the rule as currently written,

one could have a 100 foot lift as it meets the minimum. Intent of the wording is unclear. Mine operators would also like the flexibility to crush the wind turbine materials with heavy equipment, then cover with less than 15' (maybe 5') of suitable backfill material prior to the next lift. WMA suggest the following language: "The wind turbine materials shall be placed in lifts separated by suitable backfill material as approved in order to minimize potential future surface subsidence." A 10 foot lift of wind turbine blades seems like an inappropriate method of measurement, not to mention this would be hard to enforce. The depths of the blade materials and backfill lifts should be addressed on a permit by permit basis.

Response: See Section 6(b)(ii)(F)(IV)(1.), page 25

7. It appears that the SWMD will need to approve the monitoring plan. WMA members are concerned are about the engagement of an additional agency and question whether this can be handled by the LQD.

Response: Language has been revised, see See Section 6(b)(ii)(F)(IV)(2.), page 25

8. In general, this is vague on the role of SWMD and the interaction with LQD reclamation requirements and clarification is necessary. WMA members question whether final release is based on SWMD release. The site should only carry 1 bond with LQD and a separate bond or escrow should not be required for SWMD, or vice versa. Also, the reclamation monitoring period is only 5 years according to SWMD Chapter 4 Section 11. WMA members question whether release can be obtained if there is no groundwater to monitor at that time; or if monitoring of groundwater wells would be indefinite until such time that no groundwater degradation can be determined; or if LQD hydrologic reclamation and post reclamation monitoring would be required. Chapter 4, Section 11 incorporates recordkeeping and reporting requirements from Sections 9 and 10. WMA members question whether LQD is planning to inspect these records and review annual reports, or whether submission of a separate annual report to SWMD would be required. SWMD rules require the annual report be submitted by March 1, which is not in line with LQD annual reports. It appears the intent is to clarify that the backfill site does not need to meet the closure and post-closure standards for a solid waste facility permitted by the SWMD. WMA requests clarification.

Response: Language has been revised, see See Section 6(b)(ii)(F)(IV)(2.), page 25

9. There is a possibility that agreements or contracts can be executed with wind generation companies that provide for disposal of turbine materials over long periods of time. This can be foreseen as the volume of open pit voids are large and will be able to take large volumes of turbine blades potentially over several decades. This would obviously delay final reclamation and bond release for these disposal sites. These rules should provide for "carving" out these pit areas and operating them as separate industrial areas, under a separate bond and regulatory authority, as disposal activities would continue well past current mine life and reclamation periods as approved under the current LQD mine permit.

Response: See page 25.

10. *(1.) The final reclamation must blend with the surrounding mine reclamations Approximate Original Contour (AOC) and have a permanent vegetative cover in accordance with the Division's Coal Chapter 4, Section 2(d)(F)(I), vegetative reclamation standards;*

WMA suggest the addition of the following language “vegetative reclamation standards for industrial land use;” The makes for consistency with (III)(4.) above. Also, see Comment 9 above.

Response: Language was revised, See page 25-26.

11. *(3.) A legal description of the site must be made as part of the revision package and upon final reclamation a disclosure must be placed on the real property deed for the described lands prior to final bond release.*

Number (3) introduces the phrase “revision package”. More clarification is needed for this phrase and whether it constitutes a revision of the LQD permit to show the location of the placed turbine materials.

Response: Revision package language was removed, see page 25, 6(b)(ii)(F)(III)(3.)

12. *(VI) Fees shall be remitted to the Department by the operator who allows the use of decommissioned wind turbine blades and towers for backfill in the amount of twenty five percent (25%) of any revenues collected by the operator for such use.*

WMA believes a time schedule for remittance of these fees should be provided. Additionally, clarification on the basis for the 25% value is requested, as this percentage seems high to some WMA member companies.

Response: Fee set by statute, quarterly submissions. See page 25, 6(b)(ii)(F)(VI)

13. There have been discussions in media publications with landfills that if a viable recycling industry comes to fruition, then the turbine blades/towers could be dug back up and sent to recycling centers. It should be noted in the rules that the mining company is not responsible for reclamation of in-pit disposal areas if there is a regulatory or other private industry efforts to remove the turbine material at a later date for recycling.

Response: ???

14. WMA members question whether typical “cradle to grave” principles apply which may lead to future liability risks. Mine operators should not carry any liability once reclamation requirements are met.

Response: ???

General Response to PRBRC and WMA – The LQD has reviewed the comments received by these parties during the first Advisory Board meeting and the proposed rules before you today incorporate a combined response to the comments above. That is why the revisions that Craig will walk you through have been relocated to a different section within Chapter 2. We did not receive additional new comments on the proposed rules therefore the package before you were drafted to respond to the comments above. Include page numbers and references in comments above to indicate the response.* LQD did not receive additional written comments. Attorney general also provided comments on proposed rules.

Campbell County, Wyoming

1. Section 6(b)(x)(D)(IV) (2.) requiring the installation of monitoring wells and later in subsection (VI) providing for 25% of any fees collected to be paid to the Department. It seems more equitable if fees are to be collected that those fees be used to offset the cost of the monitoring wells. Private or public landfills that receive decommissioned wind turbine blades will not be required to submit the 25% fee assessment. It is not clear why the Department would need to collect a 25% fee assessment from the operator.

Response: The assessment of fees was established by the legislature.

2. Section 6(b)(x)(D)(III)(1.) allowing placement only in "final pit void". Limiting to "final pit void" will allow disposal of decommissioned wind turbine blades only upon end of the life of the mine and final reclamation is taking place. This is too limiting given that reclamation continually takes place during mining activity.

Response: This has been addressed in the current draft.

3. Section 6(b)(x)(D)(III)(4.) calling for the designation of the reclaimed backfill locations as "industrial". This designation could have significant tax and bonding ramifications making the disposal of decommissioned wind turbine blades not only uneconomical but an added expense that mines will not be able to undertake during the reclamation of mine sites.

Response: This has been addressed in the current draft.

Eldon Strid

1. Why limit waste disposal in PRB type coal mines to wind turbines? There are other wastes that could be disposed in these open pits, which may be subject to reclamation soon, that could turn the air space into assets rather than liabilities. Infrastructure is in place to accept waste by rail and to provide sufficient land area for establishing recycling of some materials, such as battery metal. There is large volume of cover material that is a critical component of all disposal sites. These sites also have substantial baseline environmental resources established to address issues such as groundwater, air quality, etc.

Response: This comment is beyond the scope of this rulemaking and parameters were set by the legislature. LQD lacks statutory authority to make these proposed changes.