

**NONCOAL  
STANDARD OPERATING PROCEDURE NO. 7.1  
Land Quality Division**

**SUBJECT: Final Bond Release and Permit Termination Procedures for Small and Regular Mine Permits When the Total, Cumulative Reclaimed Acreage Does not Exceed 20 Acres**

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I. Foreword

The attached Standard Operating Procedure is the internal policy of the Land Quality Division of the Wyoming Department of Environmental Quality covering the topic of Final Bond Release and Permit Termination for one category of Small or Regular Noncoal Permits. Staff shall make no significant deviations from this policy without the prior approval of the District Supervisor and the Administrator.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 1998.

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Richard A. Chancellor  
Administrator  
Land Quality Division

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II. Introduction and Applicability

- A. This SOP outlines procedures for the Final Bond Release AND Permit Termination for Noncoal Permits (Small Mining or Regular Mining) when the total, cumulative reclaimed acreage does not exceed 20 acres.
- B. This document is NOT intended for:
1. Use at any coal permit;
  2. Use during any partial or incremental bond release at noncoal permits when the life-of-mine, cumulative reclaimed acreage will exceed twenty (20) acres; or
  3. Use at any Limited Mining Operation, a.k.a. Ten Acre Exemption or ET.
- C. The SOP text includes citations to the Wyoming Environmental Quality Act and the LQD Noncoal Rules and Regulations. The citations are included to assist the LQD Staff and the Permittee in understanding the requirement for certain information and procedures.

### III. Bond Release and Permit Termination Procedures

#### A. Secure a Written Bond Release and Permit Termination Request

The District Staff should secure a well organized and written request from the Permittee. The District Staff should receive the request at a point in time when it is still possible to conduct an adequate field evaluation in the same calendar year. Elements of this process and the formal request should include:

1. Conduct all appropriate preliminary meetings with the Permittee in order to secure a written "contract" of procedures and application content and format. This should include all information desired by the specific District Staff.
2. Permittee secures a written surface owner consent for satisfactory reclamation (Attachment A). The written statement should include the following information in the remarks section if appropriate:
  - a. All permanent postmining impoundments and associated SEO permit number;
  - b. All residual materials stockpiles left for surface owner's non-commercial use. There can be no sale of the residual materials *in lieu* of a LQD permit; and
  - c. All haul and access roads which will remain unreclaimed for the surface owner's use.
3. Permittee compiles the known reclamation history from permit, Annual Report records and/or specific information from the Permittee. This information should include:
  - a. Approximate date and nature of backfill and recontouring practices [W.S. § 35-11-415(b)(vi)];
  - b. Nature and approximate volume of and location of any "clean fill" buried in the reclamation;
  - c. Approximate depth of topsoil [W.S. § 35-11-415(b)(iii)];
  - d. Approximate date(s) of topsoil redistribution [W.S. § 35-11-415(b)(iii)];

- e. Seed mix applied and comparability to the approved seed mix; explanation of any differences between approved and applied mix [W.S. § 35-11-415(b)(vii)];
- f. Known date of seed mix application and planting technique; explanation of any differences between approved and applied techniques [W.S. § 35-11-415(b)(vii)]; and
- g. Known grazing history, e.g. (number) of (type of animals) generally from (month) to (month) over (number of years); is the reclaimed unit part of a larger grazing unit? [W.S. § 35-11-415(b)(v) and 35-11-402(a)(i); Noncoal R&R Chapter 3, Section 2(d)(vi)].

B. LQD Preparatory Office Work

- 1. The District Staff should secure a Temporary File Number (TFN) for the Bond Release and Permit Termination Request from the Cheyenne LQD Records Specialist.
- 2. The appropriate LQD Staff should review and confirm the accuracy and completeness of the information contained in the Bond Release and Permit Termination Request. The District Supervisor (or assigned District Coordinator) should ensure that the Request is "complete", wherein complete means that all information is present in an organized fashion such that the District can make a clear, final recommendation for the DEQ Director and LQD Administrator's action.
- 3. The District Staff should also verify that the approved Reclamation Plan and associated commitments have been fulfilled. This is partially an office process and partially a field inspection process.

C. Arrange Field Inspection Date and Procedures

Invite Permittee, surface owner and other interested parties to a field inspection within sixty (60) days of receipt of a final bond release request [W.S. § 35-11-423(c)].

D. Field Reconnaissance

- 1. The field reconnaissance should be conducted at a time of year and stage of phenological development when the major plant species and life form categories

can be readily identified and catalogued. This policy statement envisions only one field exercise.

2. The Field Reconnaissance should be conducted by qualified LQD Staff members and should subjectively:
  - a. Evaluate adequacy of postmining slopes and ties to native land in relation to permit commitments and/or applicable performance standards and/or LQD policy and procedures [W.S. § 35-11-415(a), (b)(ii) and (b)(ix); Noncoal R&R Chapter 3, Section 2(b)(i)];
  - b. Evaluate overall surficial stability including reconstructed drainage channels and inlets and outlets to approved permanent postmining impoundments;
    - (1) LQD field inspectors are encouraged to use the form included as Attachment B.
    - (2) This evaluation should confirm that there is no pollution of the surface waters of the State [W.S. § 35-11-402(a)(vi) and W.S. § 35-11-415(b)(viii); Noncoal R&R Chapter 3, Section 2(b)(i)].
  - c. Confirm that the reclaimed lands have been restored to a condition equal to or greater than the premining conditions [W.S. § 35-11-402(a)(i) and 35-11-415(b)(v); Noncoal R&R Chapter 3, Section 2(a)(i)];
  - d. Confirm that wildlife habitat has been restored on the reclaimed lands [Noncoal R&R Chapter 3, Section 2(a)(ii)];
  - e. Confirm that all permanent postmining impoundments meet the performance standards of the Noncoal R&R Chapter 3, Section 2(g); and
  - f. Confirm that the reclaimed plant community meets the standards of the Noncoal R&R Chapter 3, Section 2(d)(vi). The evaluation procedures outlined below will constitute "an alternative success standard approved by the Administrator" as allowed by Chapter 3, Section 2(d)(vi). This evaluation will also constitute documentation of the "equal to or greater than" performance standard of Noncoal R&R Chapter 3, Section 2(a)(i).

3. Revegetation Evaluation of Reclaimed Lands Unit(s)
  - a. Conduct a Revegetation Evaluation using the forms presented as Attachments C-1, C-2, and C-3.
  - b. Construct species list by life form category and compare to species contained in the seed mix. The number and relative abundance of species on the reclaimed area should be roughly proportionate to the seeding rates of the seed mix.
  - c. Evaluate species diversity and composition in relation to their ability to support land use and grazing pressure. The predominate species should have generally acknowledged forage value.
  - d. Evaluate the self-renewing characteristics of the postmining plant community via the presence of reproductive structures such as grass seed heads, tillers, forb seed structures and the apparent persistence and regularity of such structures.
  - e. Record any unusual number or distribution of Prohibited and Restricted Noxious (Designated) Weeds. Obtain a current copy of the noxious weeds listed for the County the site is located within from the appropriate County Weed and Pest Office.
  - f. Record any unusual type and distribution of barren areas, areas with unusual topsoil conditions, etc.
4. Evaluation of a comparable Native Lands Unit
  - a. Conduct a Vegetation Evaluation using the forms presented as Attachments C-1, C-2, and C-3 on an immediately adjacent, unaffected, native land unit.
  - b. Construct a species list by life form category for the native land.

5. Photo documentation

The overall photo documentation of the reclaimed lands and any postmining features should include any or all of the following, as appropriate:

- a. Panoramic shots to illustrate the general postmining topographic features and the overall characteristics of the plant community.

- b. Perpendicular shots to show the general features of and extent of the vegetation cover, litter and rock cover and bare ground.
- c. Shots to illustrate all unusual features such as barren areas, areas of topsoil quality problems (e.g. salt accumulations), questionable erosional features.
- d. Shots to show specific postmining features such as permanent impoundments, residual material stockpiles for surface owner use.
- e. Shots to record the condition and relative position of postmining features such as ranch roads, permanent impoundments, etc.

E. Complete Final Recommendation

- 1. Complete field inspection report with appropriate attachments from this guidance document and appropriate photo documentation.
- 2. Complete recommendation summary sheet (Attachment D), date and initial.
- 3. Complete appropriate LQD Routing Slip.
- 4. Forward items 1-3 to Administrator for review. If Administrator concurs, Administrator requests Bonding Specialist to complete draft bond release and permit termination letter for DEQ Director's and Administrator's signatures.

## Attachment A

### LANDOWNER STATEMENT OF SATISFACTORY RECLAMATION

I, \_\_\_\_\_, certify that I hold the surface rights on  
(landowner)

the \_\_\_\_\_ Pit located in the \_\_\_\_\_  
(common name of Pit) (¼ Section description)

of Section No. \_\_\_\_\_, T. \_\_\_\_ R. \_\_\_\_ the 6th P.M., in \_\_\_\_\_  
County, Wyoming.

I further state that \_\_\_\_\_ has fulfilled  
(operator)

its commitment to reclaim the above mentioned land to my satisfaction and according to my understanding  
of the Wyoming DEQ/LQD approved Mine and Reclamation Plans under  
\_\_\_\_\_. Permit No. \_\_\_\_\_. I believe the reclaimed lands are capable of  
(type of permit)

supporting the current use of the land for \_\_\_\_\_.  
[list land use(s)]

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_.

\_\_\_\_\_  
(Landowner Signature)

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Date)

Remarks:

## Attachment B

Field Evaluation Form for Surficial Stability on Reclaimed Land at the \_\_\_\_\_ Mine

Permit No. \_\_\_\_\_ Observer \_\_\_\_\_ Date \_\_\_\_\_

Location \_\_\_\_\_

	<b>DESCRIPTION OF CONDITIONS (Circle one category and one numerical rating]</b>					Total
<b>I. Sheetwash erosion</b>  A. Surface Litter	Accumulating in place (0 - 2% translocated)  0 or 1	May show slight movement (between 2% and 10% translocated)  2 or 3	Moderate movement is apparent, deposited against obstacles (between 10 and 25% translocated)  4 or 5	Extreme movement apparent, large and numerous deposits against obstacles (between 23 and 50% translocated)  6 or 7	Very little remaining (greater than 50% translocated)  8 or 9	
B. Soil Scouring	No visual evidence of flow patterns, scouring of soil or soil movement  0 or 1	Some movement of soil particles with evidence of small microterraces or beginning of rock/plant pedestals and noticeable flow patterns  2 or 3	Moderate movement of soil is visible as evidenced by small rock and plant pedestals occurring in flow patterns and slight terracing less than 1" in height  4 or 5	Soil appears to move with each event, with soil and litter deposited against minor obstacles, terracing and rock/plant pedestals generally evident  6 or 7	Most rocks and plants pedestaled and roots exposed, flow patterns are numerous and obvious, terraces are also numerous and higher than 2 inches  8 or 9	
C. Sediment Deposition	No deposition of rock or soil material is evident  0 or 1	Rocks and/or soil appear to be accumulating in flow patterns.  2 or 3	Soil and/or rocks are occasionally accumulating behind minor obstacles and at slope breaks.  4 or 5	Soil and/or rocks are obviously being distributed by wind or water as evidenced by obvious accumulations behind obstacles and the infrequent presence of sediment fans at slope breaks.  6 or 7	Fans of sediment are frequent and in association with most flow patterns. Rock, if present, has been washed away. Area is characterized by rill and gully formation.  8 or 9	
<b>II. Concentrated flow erosion</b>  A. Rills	Rills, if present, are mostly 1-3" deep; Rills generally at infrequent intervals >10 ft. apart (estimate distance)  0 or 1	Rills mostly 3-6" deep; Rills generally at 10 foot intervals.  2 or 3	Rills greater than 6"; Rills generally at intervals of 5 to 10 feet  4 or 5	Rills greater than 6" deep; Rills generally at intervals of <5 ft.  6 or 7		

## Attachment B

Field Evaluation Form for Surficial Stability on Reclaimed Land at the \_\_\_\_\_ Mine

Permit No. \_\_\_\_\_ Observer \_\_\_\_\_ Date \_\_\_\_\_

Location \_\_\_\_\_

	<b>DESCRIPTION OF CONDITIONS (Circle one category and one numerical rating]</b>					Total
B. Gullies	<p>Gullies, if present, generally 6-12" deep with overall width of 6-12" and at infrequent intervals of &gt;200 ft (estimate distance)</p> <p>Gullies, if present, appear to be well stabilized with vegetation cover on 80% of channel bed and sides, appear to be healed.</p> <p style="text-align: center;">0 or 1</p>	<p>Gullies generally 1-2' deep with overall width of 1-2' and at 100 to 200 foot intervals.</p> <p>Gullies appear to be active with vegetation cover on less than 50% of channel bed and sides.</p> <p style="text-align: center;">2 or 3</p>	<p>Gullies generally 2-4' deep with overall width of 204' and at 50 to 100 foot intervals.</p> <p>Gullies are actively eroding with vegetation on less than 25% of the channel bed and sides and bank failure is evident along reach.</p> <p style="text-align: center;">4 or 5</p>	<p>Gullies generally greater than 4' deep (estimate depth) with overall width of 4' (estimate width) at intervals &lt;50 feet (estimate distance).</p> <p>Gully is totally, or nearly totally void of vegetation, headcut is present (mouth, middle or upper portion of reach), bank failure is severe along reach.</p> <p style="text-align: center;">6 or 7</p>		
<b>III. Mass movement</b> A. Backfill Slope Failure	<p>No cracks along the backfilled highwall observed.</p> <p style="text-align: center;">0 or 1</p>	<p>Cracking along the backfilled highwall observed, opening is 80% vegetated and appears to be stabilized.</p> <p style="text-align: center;">2 or 3</p>	<p>Disturbance associated with slope cracking is approximately 50% vegetated and it is uncertain whether this area is actively eroding or is stabilized.</p> <p style="text-align: center;">4 or 5</p>	<p>Severe cracking of backfilled material observed, disturbance is void of vegetation and appears to be actively eroding.</p> <p style="text-align: center;">6 or 7</p>		
B. Subsidence	<p>No subsidence pockets observed</p> <p style="text-align: center;">0 or 1</p>	<p>Subsidence is evident, however the disturbance is 80% vegetated and appears to be stabilized (estimate size of feature)</p> <p style="text-align: center;">2 or 3</p>	<p>Subsidence disturbance is approximately 50% vegetated, it is uncertain whether this area is actively eroding or is stabilized (estimate size of feature).</p> <p style="text-align: center;">4 or 5</p>	<p>Severe subsidence observed, disturbance is void of vegetation and appears to be actively eroding (estimate size of feature).</p> <p style="text-align: center;">6 or 7</p>		

## Attachment C

# FINAL BOND RELEASE FIELD REVEGETATION EVALUATION FOR TOTAL, CUMULATIVE RECLAMATION OF FEWER THAN 20 ACRES

General numerical rating values for life form and community characteristics

RATING VALUE	PERENNIAL GRASS AND GRASS-LIKE SPECIES	FULL AND SUBSHRUBS	PERENNIAL FORBS	NOXIOUS (DESIGNATED) WEEDS*	ANNUAL FORBS AND ANNUAL GRASSES	TOTAL PLANT COMMUNITY
0	Little or no perennial grass cover	No shrubs observed	No perennial forbs observed	Heavy weed cover	Few or none observed	Uniform community structure
1	Slight cover of relatively few individual species	Infrequent encounter of isolated individuals	Few perennial forbs observed	Moderate weed cover	Few observed; infrequent encounter of isolated individuals	Some variability in community structure with some regeneration being observed
2	Moderate cover with a few individual species dominating	Occasional observation of relatively few species	Perennial forbs often observed	Low weed cover	Occasional to frequent encounter of a variety of species	High degree of structure variability with regeneration being frequently observed
3	Good cover with relatively few species dominating	Several species being readily observed	<b>FINAL RATING</b>			
4	Good cover with 4 or more species being co-dominates	Good density with 4 or more species frequently encountered	Sum of Values	Rating		
			0 - 3	Unacceptable		
			4 - 5	Poor		
			6 - 8	Fair		
			9 - 12	Good		
			13	Excellent		

\* Before conducting the field inspection, obtain a current copy (from the appropriate county Weed and Pest Office) of the noxious weeds listed for the county in which the site is located.

## Attachment C

### SUMMARY OF REVEGETATION EVALUATIONS FOR FINAL BOND RELEASE TOTAL, CUMULATIVE RECLAMATION OF FEWER THAN 20 ACRES

PIT/OPERATION NAME \_\_\_\_\_ PERMIT NO. \_\_\_\_\_

DATE \_\_\_\_\_ OBSERVER \_\_\_\_\_ PAGE \_\_\_\_\_ OF \_\_\_\_\_

VALUES FOR \_\_\_\_\_ SURVEY UNIT

PERENNIAL GRASSES	FULL AND SUBSHRUBS	PERENNIAL FORBS	NOXIOUS (DESIGNATED) WEEDS	ANNUAL FORBS AND GRASSES	TOTAL PLANT COMMUNITY	TOTAL SCORE
						FINAL RATING

PHOTO DOCUMENTATION (photo nos., direction, highlights, etc.)

COMMENTS:

VALUES FOR \_\_\_\_\_ SURVEY UNIT

PERENNIAL GRASSES	FULL AND SUBSHRUBS	PERENNIAL FORBS	NOXIOUS (DESIGNATED) WEEDS	ANNUAL FORBS AND GRASSES	TOTAL PLANT COMMUNITY	TOTAL SCORE
						FINAL RATING

PHOTO DOCUMENTATION (photo nos., direction, highlights, etc.)

COMMENTS:

## Attachment C

### FINAL BOND RELEASE FIELD REVEGETATION EVALUATION

PLANT SPECIES LIST FOR THE \_\_\_\_\_ SURVEY UNIT

Perennial and Annual Grass and Grass-like Species	Occur.	Full and Subshrubs	Occur.	Annual and Perennial Forbs	Occur.	Noxious (Designated) Weeds	Occur.

Frequency of Occurrence    1= Rare    2 = Occasional    3 = Frequent    4 = Extensive

## Attachment D

### SUMMARY SHEET FOR RECOMMENDATION OF FINAL BOND RELEASE AND PERMIT TERMINATION

1. Final Bond Release and Permit Termination Request received \_\_\_\_\_  
(date)
2. Field Inspection conducted \_\_\_\_\_  
(date)
3. Field Inspection attended by: (list all parties and affiliation)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- |  | Attached<br>(YES/NO) | Compiled or<br>Reviewed by<br>(Staff Member) | Review Date |
|--|----------------------|--|-------------|
| 4. Surface Owner Consent Statement   |                      |  |             |
| 5. Field Inspection Report   |                      |  |             |
| 6. Subjective confirmation of adequate restoration of postmining wildlife habitat                |                      |  |             |
| 7. Subjective confirmation that all permanent postmining impoundments meet performance standards |                      |  |             |
| 8. Subjective confirmation that reclaimed plant communities meet performance standard            |                      |  |             |
| 9. Photo documentation of reclaimed lands  |                      |  |             |
| 10. LQD Routing Slip   |                      |  |             |
| 11. Draft Permit Termination and Bond Release Letter   |                      |  |             |