



**VIRGINIA COAL SURFACE MINING AND RECLAMATION
PERMANENT REGULATORY PROGRAM**

A GUIDE TO BOND REDUCTION/RELEASE

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GENERAL BOND RELEASE REQUIREMENTS FOR BOTH COST AND POOL BONDING

In order to conduct coal surface mining and reclamation operations in Virginia, a company must submit a comprehensive permit application package that sets forth the company's proposed mining and reclamation plans.

The application must be reviewed and approved by the Department of Mines, Minerals and Energy's Division of Mined Land Reclamation.

In addition to the proposed mining and reclamation operations plans, the application package also includes a section that addresses the company's preferred performance bonding method¹. Under the "Virginia Coal Surface Mining Control and Reclamation Act of 1979", as amended, the company may choose one of two bonding methods:

Cost estimate² - the company would post a performance bond that would be equivalent to the actual reclamation cost that would be needed to reclaim the disturbed areas of the permit.

Coal Surface Mining Reclamation Fund³ (also known as the "Pool Bond" fund) - if the company is eligible to enter the Pool Bond fund, the company would post a bond which is usually less than that calculated under the "cost estimate" method. The proceeds of Pool Bond fund⁴, would serve to support the permittee's bond in the event bond forfeiture occurred.

The following terms need defining:

"Ground cover" means the area of ground covered by the combined aerial parts of vegetation and the litter that is produced naturally on-site, expressed as a percentage of the total area of ground.

"Growing season" means the period of year when climatic conditions are favorable for plant growth, common to a place or area. The period between April 15 and October 15 is the normal growing season.

¹ Each permit requires a performance bond of sufficient amount so as to ensure the Commonwealth has adequate funds to reclaim the permit area in the event the permit holder fails or is unable to fulfill the reclamation obligations of the permit.

² See Part 4 VAC 25-130-800 of the **Virginia Coal Surface Mining Reclamation Regulations** and 45.1-241 of the **Code of Virginia**.

³ See Part 4 VAC 25-130-801 of the **Virginia Coal Surface Mining Reclamation Regulations** and 45.1-270.1 et seq., of the **Code of Virginia**.

⁴ The Pool Bond fund receives entrance and renewal fees from participants and reclamation taxes required under 45.1-270.4 of the **Code of Virginia**. The reclamation taxes are not assessed when the fund balance exceeds \$1,750,000.

“**Remining**” means conducting surface coal mining and reclamation operations which affect previously mined lands affected by surface coal mining operations prior to August 3, 1977, and were not reclaimed to the standards of Chapter 19, Title 45.1 of the Code of Virginia, as amended.

“**Previously mined area**” means land affected by a surface coal mining operation prior to August 3, 1977, that has not been reclaimed to the standards of this chapter.

LIABILITY PERIOD

Each coal surface mining and reclamation permit requires a period of extended responsibility or “liability period” to ensure revegetation efforts meet the approved plans requirements. The liability period begins after the last year of augmented seeding, fertilizing, irrigation, or tree planting or other work (excluding select husbandry practices that are approved by the Division), or once the postmining land use is implemented. If an area is seeded in the spring, but trees are not planted until the following spring, the liability period would not commence until the date the trees were planted. The liability period could be extended if the vegetation, tree count, or productivity set forth in the approved reclamation plan falls below the minimum standards. Additional reclamation work may be required to meet the postmining land use standards. Depending on the extent of augmenting seeding or tree planting required, the liability period could begin anew once the necessary work was completed.

The liability period lasts 2 years for remining permits (4 VAC 25-130-816.116 (c)(2)(ii) and 4 VAC 25-130-817.116(c)(2)(ii) and a minimum of 5 years for all others.

In order to be classified as a remining site, the permit application must demonstrate that the disturbed area was mined prior to August 3, 1977. Revegetation of the remined areas must have, as a minimum, a vegetative ground cover that is equal to the pre-remining ground cover and be adequate to control erosion.

The permit application must include a pre-mining vegetation survey that demonstrates the ground cover before remining. If the company chooses not to submit the pre-mining survey, the vegetation standards set under Section **4 VAC 25-130-816.116** or **4 VAC 25-130-817.116** of the regulations will apply.

During the liability period, the permittee is required to maintain the performance standards applicable to the approved postmining land use. Implementing the postmining land use as soon as possible and monitoring the land use success would minimize the likelihood of an extension of the liability period.

Third Party Responsibility: Reclamation bonds on industrial, commercial, or residential areas of permits may be released under **4 VAC 25-130-800.13 (d)(2)** prior to the five-year period of responsibility for revegetation under Parts **4 VAC 25-130-816** and **4 VAC 25-130-817**, provided a demonstration is made that:

- There has been compliance with all applicable performance standards;
- The implementation of the approved alternate postmining land use is beyond the control of the permittee;
- The plans accurately reflect the alternate postmining land use on the site;
- Only the portions of the permit that are approved under the third party criteria may be released; and
- The proposed land use has been achieved.

BOND RELEASE PROCEDURES

The permittee may file an application for total or partial bond release after the required reclamation, restoration, and abatement work has been completed on the subject area (which may be the entire permit area or increment(s)).

Bond release on specific areas of the permit may be considered if the permittee's approved plans:

- Calculated the bond for the areas, and
- Such amount was posted with the Division.

The permittee may submit an application for a **Phase I, II, or III** release of bond for the entire permit or increment(s). The permittee does not have to request a Phase I or II bond reduction before requesting a Phase III release.

Phase I

After completion of the required backfilling, regrading (which may include the replacement of topsoil depending upon the weather), and drainage control of the subject area, including stream reconstruction, up to **60%** percent of the bond or collateral for the area may be released. **However, the minimum bond of not less than \$10,000 must be retained through Phase II.**

Requesting a Phase I release is at the option of the permittee.

When requesting a Phase I release the permittee will be required to submit a cost estimate and should include, but not be limited to, the cost of::

1. Reseeding (any seeding or tree planting at this phase must be verified by the inspector)
 - Phase I Release—\$950/acre if no seeding or tree planting has taken place on unmanaged forest PMLU
 - Phase I Release—\$600/acre if no seeding has taken place on grazing/hayland pasture PMLU
 - Phase I Release—\$400/acre if seeding and tree planting has taken place on an managed or unmanaged forest PMLU.
 - Phase I Release—\$400/acre if seeding has taken place on a grazing/hayland pasture PMLU
 - Phase I Release—\$600/acre if seeding has taken place but trees have not been planted on an unmanaged forest PMLU.
2. Structure removal (ponds, buildings, roads, etc.).
3. Equipment removal.
4. Discharge(s) treatment.
5. Re-eliminating highwalls that have been re-exposed due to backfill settlement.
6. Mobilizing the equipment needed to perform reclamation.

Phase II

After 2 growing seasons and the required re-establishment of vegetation on the regraded mine lands, an additional amount of bond may be released. The Division must ensure that any reduction will leave a sufficient amount to cover any remaining reclamation work, such as structure removal, grouting of wells, and so forth. For future revegetation costs the Division requires an amount of \$125 for each disturbed acre or **\$10,000**, whichever is greater.

A vegetative survey should be conducted by the permittee at this time to serve as a record to determine if the standards of success are being met during the applicable liability period. The information obtained from the survey would alert the permittee if replanting of the woody plants (20%) and follow-up seeding are necessary to avoid an extension of the liability period.

The permittee could request a phase II reduction without first requesting a phase I release.

Phase III

The permittee must address and obtain approval of the PHC assessment application prior to receiving a data download for, and submittal of, a request for Phase III bond release on any area of the permit. Six months of surface water and groundwater analyses is required as part of the submittal of the PHC assessment.

Before the permittee can proceed with the 1) discontinuation of environmental monitoring and 2) with any phase III release of liability bonds, the Division will confirm that the approved PHC predictions made, and planned, were valid or, if significantly different from original predictions, that the current conditions do not reflect material damage to the hydrologic balance outside the permit area based on the available water quantity and water chemistry information. If the predictions made do not appear to be accurate, or if a finding of no material damage to the hydrologic balance cannot be made at the time of application, then this may indicate that reclamation has not yet been satisfactorily completed and/or other unanticipated environmental impacts have been created by the mining which will need to be addressed in further detail prior to approval.

Once the permittee has successfully implemented the reclamation plan, met the applicable liability obligation and obtained approval of a PHC assessment application, for the entire permit or an increment, an application for the release of the remaining bond may be submitted to the Division. The bond may not be fully released until the reclamation requirements of the Act and the permit have been fully met.

The permittee's bond release application must include a final vegetative survey to document that the standards of success have been and are being met.

After Liability Period Met Once the permittee has successfully implemented the reclamation plan and met the liability obligation, an application for the release of the remaining bond may be submitted to the Division. The bond may not be fully released until the reclamation requirements of the Act and the permit have been fully met.

The permittee's bond release application must include a final vegetative survey to document that the standards of success have been and are being met.

For incremental bonding permits, the permittee may request that the bond eligible for release be moved forward to apply to other increments.

Bond Release for Pollution Abatement Areas: Virginia's regulations include requirements for pre-existing pollutional discharges. Section 4 VAC 25-130-825.14, "Criteria and Schedule for Release of Bonds on Pollution Abatement Areas", addresses certain bond release requirements, and applies to both cost bond and Pool Bond fund permits.

This regulation allows bond release or reductions on pollution abatement areas to occur independently of the release requirements for the other areas of the permit. Besides establishing a productive postmining land use, the permittee is also required to improve or maintain the existing pollution load without chemical treatment. The sequence and requirements of each reduction:

FIRST REDUCTION Up to 50% of the bond on the pollution abatement area can be released provided:

- 1) The surface coal mining activities were conducted in accordance with the approved plans.
- 2) The permittee has satisfactorily completed backfilling, regrading, and drainage control as required by the approved plans. This includes any required stream reconstruction.
- 3) The permittee has properly implemented the pollution abatement plan.
- 4) The permittee has not caused degradation of the baseline pollution load. This will be evaluated for the period of time running from a minimum of 6 months prior to the submittal of the bond reduction application through the Division's review of the application. The evaluation will use the results of the ground and surface water monitoring conducted by the permittee or the Division.
- 5) The permittee has not caused or contributed to additional surface water pollution by re-affecting or mining the pollution abatement areas.

SECOND REDUCTION Up to 35% of the remaining bond amount for the pollution abatement area can be released, provided:

- 1) The permittee has replaced the topsoil or topsoil substitute, completed final grading, planting and established revegetation under the approved reclamation plan. If the area is “cost estimate” bonded, 2 growing seasons are required in order to establish vegetation. However, a permit bonded under the Pool Bond fund requires only one year or one growing season. The determination concerning the establishment of vegetation is contingent upon the vegetative survey results or the area’s productivity.
- 2) The permittee has not caused or contributed to additional surface water pollution by reaffected or mining the pollution abatement area.
- 3) The permittee has either:
 - a) Achieved the actual improvement of the baseline pollution load as described in the approved abatement plan, and shown by all ground and surface water monitoring conducted by the permittee or the Division (for the period of time provided in the abatement plan after completion of backfilling, final grading, drainage control, topsoiling, and establishment of revegetation have been completed) or:
 - b) Achieved all of the following -
 - i. Has not caused degradation of the baseline pollution load as shown by all ground and surface water monitoring conducted by the permittee or the Division for a period of 12 months from the discontinuance of chemical treatment, if backfilling, final grading, drainage control, topsoiling, and establishment of revegetation have been completed;
 - ii. Conducted all measures in accordance with the approved abatement plan and any additional measures specified by the Division in writing at the time of the first reduction;
 - iii. Caused aesthetic or other environmental improvements or the elimination of public health and safety problems by remining and reaffected the pollution abatement area; and,
 - iv. Stabilized the pollution abatement area.

**FINAL
RELEASE**

The remainder of the bond may be released provided:

- 1) The permittee has successfully completed all the approved abatement and reclamation plans, and the abatement area is capable of supporting the postmining land use;
- 2) The permittee has complied with the permit requirements;

- 3) The permittee has not caused the degradation of the baseline pollution load from the time of the previous bond release; and,
- 4) The permittee has not caused the degradation of the baseline pollution load for a period of 5 years from the discontinuance of chemical treatment. Please note, the reinitiation of chemical treatment for the loading based limits would restart the 5 year liability period.

The administrative procedures, bond reduction/release applications, public notices, and reporting forms common to cost estimate bond and Pool Bond fund permits, as previously described, are also relevant to bond release on pollution abatement areas.

In addition to the information provided by the bond release application form, the Division will also require necessary water monitoring data for the pollution abatement areas that are subject to the bond release request.

VEGETATIVE SURVEY

The vegetative survey must be completed for Phase II and III bond reduction requests.

The vegetative survey measures certain **success standards**, which must be achieved and maintained throughout the applicable liability period. If the standards are not met, then the area would not qualify for a bond reduction or release.

Examples of the success standards affiliated with forest and hayland/pasture land use are provided below, along with their relationship to bond release. The 90% ground cover is common to both the forest and hayland land uses. Except for areas that were remined, the vegetative ground cover must be:

- not less than the ground cover existing before re-disturbance, and
- adequate to control erosion.

Success Standards After Implementation of Post Mine Land Use

Success Standards for Remining Areas: For a forestry land use, the trees do not have to achieve the one foot height limit to be eligible for release. Ground cover to control erosion will be established at 90% similar to other mining areas and trees or shrubs at an average of 400 per acre as outlined in **4 VAC 25-130-816.116** and **4 VAC 25-130-817.116**.

The applicant may elect to have an existing reference area that shows the tree or shrub count using approved transect methods outlined in other sections of this guide. If the success standard on the reference area is less than the standard outlined in **4 VAC 25-130-816.116** and **4 VAC 25-130-817.116**, then these numbers will be the stocking rate for trees or shrubs on the remining area.

Unmanaged Forest: (for uses other than commercial forest land, such as areas where woody plants are used for wildlife management, recreation, or shelter belts.)

Year 1: There must be a minimum of 90% ground cover and an average of 400 woody plants per acre (90% of the success standard), which includes at least 40 wildlife food-producing shrubs, which may be distributed or clustered. The trees do not have to be a foot tall at this time.

Year 2 or growing season #2: There must be a minimum of 90% ground cover and an average of 400 woody plants per acre (90% of the success standard). The trees again do not have to be a foot tall at this time.

- Participants of the Pool Bond fund may request their bond be reduced to below the minimum after the second growing season, as provided by 4 VAC 25-130-801.12(b).
- Participants of the cost bond may request their bond be reduced to the minimum after the second growing season.

Years 3, 4, 5: There must be a minimum of 90% ground cover and an average of 400 woody plants per acre (90% of the success standard), and 80% of the trees must have been in place at least 3 years. All trees must be at least one foot tall for the last year.

Commercial Forest: The establishment of commercial forest requires the same success standards as for unmanaged forest (90% of the success standard), except:

- a) The areas must have a minimum stocking of 400 trees per acre.
- b) All countable trees must be commercial species and be well distributed over each acre stocked.
- c) Additionally, the area must have at least 40 wildlife food-producing shrubs per acre, which may be distributed or clustered.

Hayland / Pasture:

- Year 1: There must be a minimum 90% ground cover and an acceptable measure of the land's productivity. Productivity can be measured through the dry unit weight procedure, the number of hay bales produced, or the animal unit months of grazing the permit can support. Meeting these standards would allow a bond reduction after 12 months, if the permit is bonded through the Pool Bond fund.
- Year 2, or growing season #2: There must be a minimum 90% ground cover and an acceptable measure of the land's productivity. Participants may request their bond be reduced to the minimum after the second growing season.
- Years 3, 4, 5: There must be a minimum 90% ground cover and an acceptable level of productivity. Maintaining these standards for any 2 years after the first year allows the permittee to submit a request for final bond release. The permittee must conduct one vegetative survey and submit the "Analysis - Premining vs. Postmining Productivity Comparison" form (**DMLR-PT-012**) for each of the 2 years for which he is demonstrating the approved success standards. The "Line Transect-Forest Land Count" form (**DMLR-PT-224**) must also accompany the bond release application for hayland/pasture postmining land use.

Conducting a Vegetative Survey:

The permittee must randomly establish survey lines and then randomly identify sample points from these lines. The number of sample points selected depends on the permit's size. For small permits (5 acres or less), 50 plots are acceptable. For all other permits (greater than 5 acres), 100 to 200 plots are recommended.

After selecting the number of points, the operator should then divide this number into the total amount of feet contained in the survey lines to determine the number of feet between sample points. Once the number of points and distance between them is established, the operator can proceed with the vegetative survey by using the "cross-wire sighting tube", and if trees are counted, a "mil-acre plot stick".

In using the cross-wire sighting tube, the operator places the tube on the sample points, and if living vegetation is identified, the point is documented as a + on the tally sheet. Seventy-four plusses⁵ from 100 points would be acceptable ground cover. The mil-acre plot stick is placed at a right angle to the cross-wire sighting tube and moved in a circular motion to locate any living trees. Only 2 trees can be counted in this plot since only 2 trees with 4-foot centers can be located in a mil-acre plot.

Detailed instructions, mathematical equations, and a tally sheet are provided on the Vegetative Survey form (**DMLR-PT-224**). The form will be required for each request for partial

⁵ Measurement of Plant Cover to Evaluate Revegetation Success: J. V. Raelson and G. W. McKee January 1982
Agronomy Series 67

or total bond release (except for a phase I reduction of a “cost estimate” bond). Additional surveys are left to the permittee’s discretion. The chances of extending the permit’s liability period are reduced by increasing the number of surveys, since the information can identify areas where corrective action is needed.

APPLICATION FOR BOND REDUCTION/RELEASE

An application for bond reduction or release, except for a Phase I reduction should be submitted to the Division between April 15th and October 15th. The application request must include the following:

- 1) “Application for Performance Bond Release” form **DMLR-PT-212** and applicable portions of E-forms **DMLR-PT-034E**.
- 2) Copies of all available seeding and reseeded reports
- 3) The “Line Transect-Forest Land Count” form(s) (DMLR-PT-224) and “Analysis - Premining vs. Postmining Productivity Comparison” form(s) (DMLR-PT-012), if applicable.
- 4) Copy of the letters to:
 - a) adjoining property owners
 - b) surface owners
 - c) planning agencies
 - d) *local government bodies
 - e) *sewage and water treatment facilities or water companies

* The relationship between the coal field counties, sewage and water treatment authorities, and the water companies located within the counties is specific for each county. Therefore, notification of the counties, the applicable sewage and water treatment facilities, and water companies must be handled in accordance with the relationship approved within each county. Use the following as a guideline to comply with this requirement:

Wise, Tazewell, Russell and Scott Counties: The sewage and water treatment facilities and water companies located in these counties are independent entities from the county governments. Therefore, separate letters of notification should be sent to the county administrator/board of supervisors and the applicable sewage and water treatment facilities and water companies.

Buchanan, Dickenson and Lee Counties: The county administrator acts on behalf of the sewage and water treatment facilities and water companies in these counties. Therefore, one letter of notification should be sent to the county administrator/board of supervisors. The letter should also be addressed to the applicable sewage and water treatment facilities and water companies in order to document proper notice.

- 5) Maps, unless the request concerns the entire permit area.
- 6) Public Notice (see Example public notices)
 - a) Public notice requirements may vary for each phase and increment.
 - b) Proof of Publication - must be submitted within 30 days after filing the application.
- 7) Vegetative survey or other data supporting the bond release request.
- 8) Water monitoring data, if the request pertains to a pollution abatement area.
- 9) Certification by notarized statement that all applicable reclamation requirements per the approved plans have been accomplished.

The bond reduction/release application will be submitted to the DMLR, using the DMLR E-forms application. Upon notification the field inspector will review and approve or reject the materials upon determining if the application contains all applicable materials. The inspector will then notify the permittee of the assigned publication number and to proceed with publishing the required public notice.

Once informed that the application has been submitted the field inspector will:

- schedule an on-site inspection date to evaluate the reclamation work, and
- notify the surface land owners of the permit area requesting reduction/release, their agent, or lessee(s), and OSM of such date.

PUBLIC PARTICIPATION

During the bond reduction/release process, the permittee is required by regulation to notify the public of the intention to seek total or partial bond release. The public participation process is initiated once the permittee publishes notice in the local newspaper of the intent to apply for bond reduction or release.

By the first date of publication of the public notice, the permittee must file a copy of the bond reduction/release application for public inspection at the Division's Big Stone Gap office. The public notice must be published once a week for 4 consecutive weeks.

Division of Mined Land Reclamation
A Guide to Bond Reduction/Release

The public will have from the initial publication up to 30 days after the last publication date to submit written comments, objections, or requests for public hearings or informal conferences on the application to the Division.

The Division's Review Inspector shall notify in writing (by certified mail) the -

- permittee within 60 days of receipt of the complete application (must include proof of publication), or 30 days from a public hearing⁶, of the decision to approve or disapprove the bond reduction/release application. The notice shall identify whether any additional information or corrective action(s) are necessary, and shall inform the permittee of the process to seek administrative review of the agency's decision.
- town, city or other municipality nearest the operation, and the county in which the mining operation is located. This notification shall be made at least 30 days prior to the release of all or a portion of the bond.

⁶ See 4 VAC 25-130-800.40(f) and 4 VAC 25-130-801.17(f) of the regulations.



COMMONWEALTH OF VIRGINIA
 DEPARTMENT OF MINES, MINERALS AND ENERGY
 DIVISION OF MINED LAND RECLAMATION
 P. O. DRAWER 900; BIG STONE GAP, VA 24219
 TELEPHONE: (276) 523-8100

LINE TRANSECT - FOREST LAND COUNT

COMPANY				Permit No.	
Sampled by				Date	
No. Acres		Tree or Shrub Species		Date Planted	

Transect	MIL - ACRE PLOT										COUNTABLE TREES		
	1	2	3	4	5	6	7	8	9	10	SUM x	(x-0)	(x-0)□
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

$ss = 3(x-0) \square$ # plots for s_0 of $0.50 = 10(s/.50) \square$

$s_0 = \frac{ss}{\rho n (\bar{n}-1)}$ $s = \frac{ss}{\rho (\bar{n}-1)}$

STOCKING: Total _____ ± _____/acre

Recommendation:	
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Instructions For Line Transect

1. The Mil-acre plot form may be used separately for ground cover and tree count. **If you are using this form for ground cover, complete only to the sum.**
2. Use uniformly spaced circular Mil-acre plots for most sampling - transects are acceptable.
3. Run sample lines across seedling rows.
4. Divide length of sample line by the number of plots desired to obtain distance between plots.
5. Use permit maps to indicate direction of seedling rows, lay out sample lines, and calculate distance between plots.
6. Tally up to 2 seedlings per plot if the 2 seedlings are at least 4 feet apart. (Mil-acre stick is 3.725 feet long, which is close enough to use.)
7. **Minimum sample size:** 50 plots up to 5 acres. 100 plots for all tracts in excess of 5 acres.
8. **Maximum sample size:** 200 plots (or 20 transects).
9. **Acceptable standard error:** Estimate of the number of seedlings per acre minus 400, or 50 seedlings per acre; whichever is larger. For example -
 - a) If the estimate is 750/acre, the standard error can be anything up to $\pm 350/\text{acre}$ (750-400).
 - b) If the estimate is 200/acre, the standard error can be anything up to $\pm 200/\text{acre}$ (200-400).
 - c) If the estimate is 430/acre, the standard error can be anything up to $\pm 50/\text{acre}$ (430-400 is less than 50, the smallest standard error required.)

Definitions:

\bar{x} = Mean or average

ss = sum of squares = sum of squared deviations from the mean = $\sum (x - \bar{x})^2$

s_0 = Standard error = $\sqrt{\frac{ss}{n-1}}$

s = Standard Deviation = $\sqrt{\frac{ss}{n-1}}$

Number of plots needed for a standard error of .50 = $10(s/.50)^2 = 10(2s)^2$



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**ANALYSIS - Premining vs Postmining Productivity Comparison
 (Hayland/Pasture Land Use)**

Company: _____ **Permit Number:** _____

PREMINING PRODUCTIVITY (Projected)		
U.S. Natural Resources Conservation Service -		
Soil Series: _____		
Productivity Levels:	<input type="text"/> animal unit months	<input type="text"/> tons of hay per acre
		<input type="text"/> level of management. (low, medium, or high)

POSTMINING PRODUCTIVITY (Demonstrated by one or more of the practices listed below.)			
Grazing Record			
Total Acreage Grazed:		Number of Months Grazed per Year:	
Date Grazing Began:		Date Grazing Ended:	
Number of Animals:		Type of Animals:	
Hay Production			
Total Acreage Harvested:		Date(s) of Harvesting:	
Number of Round Bales:			
Weight per Round Bale:			
Number of Square Bales:			
Weight per Square Bale:			
Test Plot Results			
Number of Plots:		Size of Plots Sampled:	
Results:		dry weight in tons.	

Comments:

Person Conducting Analysis _____ **Date:** _____

DMLR Reviewer _____ **Date:** _____

Standards for Premining Productivity

The following table provides the recommended standards for premining productivity. These standards were developed in a cooperative effort by the Department of Mines, Minerals and Energy, Maxim Engineering, and the Natural Resources Conservation Service. Questions concerning this list should be directed to the Division's Agronomist (276) 523-8155.

Soil Series	Animal Units Months	Tons/Hay/Acre*	Level/Management
Allegheny	4	2	Low to Medium
Atkins	4	2	Low to Medium
Berks Silt Loam	3	1.5	Low to Medium
Cedarcreek	2	1	Low to Medium
Cloverlick	3	1.5	Low to Medium
Cotaco	3	1.5	Low to Medium
Craigsville Cobbly Loam	2	1	Low to Medium
Dekalb Sandy Loam	2	1	Low to Medium
Dismal	1	0.5	Low to Medium
Fiveblock	2	1	Low to Medium
Gilpin Silt Loam	4	2	Low to Medium
Grigsby	5	2.5	Low to Medium
Highsplint	3	1.5	Low to Medium
Itman	1	0.5	Low to Medium
Jefferson Loam	3	1.5	Low to Medium
Kaymine	2	1	Low to Medium
Laidig Loam	2	1	Low to Medium
Lily Loam	3	1.5	Low to Medium
Lindsay-Newark	4	1.5	Low to Medium
Marrowbone	3	1.5	Low to Medium
Matewan	2	1	Low to Medium
Philo	5	2.5	Low to Medium
Pineville	4	2	Low to Medium
Pope Gravelly Loam	6	2.5	Low to Medium
Purdy Silty Loam	2	1	Low to Medium
Ramsey	1	0.5	Low to Medium
Sewell	2	1	Low to Medium
Shelocta Silt Loam	4	2	Low to Medium
Stonecoal	1	0.5	Low to Medium
Weikert	2	1	Low to Medium
Westmoreland	4	2	Low to Medium
Wharton	4	2	Low to Medium
Zoar Silt Loam	4	2	Low to Medium

* Project the second cutting for forage at 35% of the initial cutting.



APPLICATION FOR PERFORMANCE BOND RELEASE

COMPANY		PERMIT NO.	
Total Permitted Acres		Total Disturbed Acres	
Current Bond Amount		Amount of Bond Release Requested	
Bonding Method - enter "C" if Cost Estimate or "R" if under the Reclamation Fund			

Release of Performance Bond (4 VAC 25-130-800.40 VCSMRR)			
<input type="checkbox"/>	Reduction of Increment(s), if applicable – Reclamation standards completed for the following Increment(s) - list the specific number(s)		
<input type="checkbox"/>	Phase I release request - Entire permit (or designated areas if applicable). Up to 60% reduction for completed regrading - attach justification for amount of release requested.	Acreage Amount	
	✓ Indicate the date of completion of backfilling, topsoil replacement, regrading, and drainage control.		
<input type="checkbox"/>	Phase II release request - Entire permit (or designated area if applicable). Revegetation completed	Acreage Amount	
	✓ Indicate the date revegetation success standards met.		
<input type="checkbox"/>	Phase III release request - Total Release for entire permit (or designated area if applicable).	Acreage Amount	
	✓ Indicate the date reclamation standards completed .		
	Indicate the date of last augmented seeding , fertilizing, irrigation, or other reclamation work.		

Supporting Information - Page 2 lists the other information and documentation which must be submitted with this Application

CERTIFICATION:

I certify that the information provided in this application and any attachments thereto are true and correct to the best of my knowledge and belief.

Signature			
Title/Position		Date	

SUPPORTING INFORMATION

Include the following documents and information with this bond release application:

1. Copy of the public notice required by the **Virginia Coal Surface Mining Reclamation Regulations**.
2. Copies of the bond release notification letters sent to:
 - a) adjoining property owners.
 - b) surface owners.
 - c) local governmental bodies.
 - d) planning agencies.
 - e) sewage and water treatment facilities or water companies.
3. Copies of applicable vegetative surveys, productivity comparisons, and any other data supporting the bond release request.
4. **For bond release -**
 - a) If the application requests a **Phase II** release, calculate the amount of bond which must be retained to cover any follow-up reclamation, restoration, or abatement work such as reseeding, structural removal, drainage control, and required monitoring. The remaining bond needs to include the administrative and inflationary costs for the remaining liability period.
 - b) If this application concerns only a portion of the permit area, attach a map (with certified and notarized legend) that delineates the areas for which bond release is requested.
5. **For bond release of increment(s)-** If the application concerns incremental areas, attach a map (with certified and notarized legend) that delineates the areas for which bond release or reduction is requested. Also include on the map, the date of last seeding for each applicable increment.

Example Publication for Phase I

Public Notice
Application for Bond Reduction
Under Chapter 19, Title 45.1
Code of Virginia

_____ (**Company Name**) _____ is applying for bond reduction on Permit No. _____ located in _____ County _____ (**Precise Location**) _____. This permit consists of _____ acres. As provided by § 4 VAC 25-130-800.40 of the **Virginia Coal Surface Mining Reclamation Regulations**, the Applicant is requesting that the current total bond amount of \$ _____ in the form of (**Specify bond type: cash, certificate of deposit, and/or insurance surety**) posted for this permit be reduced by \$ _____.

This bond reduction request is based on the following Phase I reclamation:

1. **Types of Reclamation Work Performed**
2. **Appropriate Date(s) of Reclamation Work Performed**
3. **Description of Reclamation Results Achieved**
4. **Description of the Post-Mining Land Use**

Any person with a valid legal interest which might be adversely affected by this proposal, or an officer or head of any federal, state or local government agency or authority, may within 30 days of (**Date of Last Publication**) submit written comments or objections concerning this bond reduction, and may also request, in writing, that the Division of Mined Land Reclamation hold a public hearing or an informal conference. A copy of materials concerning this request will be available for public inspection at the Division of Mined Land Reclamation's office in Big Stone Gap, Virginia.

All correspondence concerning this bond reduction application should be submitted to the Division of Mined Land Reclamation (**Attention: Permit Section**), P. O. Drawer 900, Big Stone Gap, Virginia 24219. Telephone (276) 523-8100. Written comments and a request for informal conference may be e-mailed to the Division at DmlrPublicNotice@dmme.virginia.gov.

Example Publication for Phase II

Public Notice
Application for Bond Reduction
Under Chapter 19, Title 45.1
Code of Virginia

_____ (**Company Name**) _____ is applying for bond reduction on Permit No. _____ located in _____ County _____ (**Precise Location**) _____.

This permit consists of _____ acres. As provided by § 4 VAC 25-130-800.40 of the **Virginia Coal Surface Mining Reclamation Regulations**, the Applicant is requesting that the current total bond amount of \$ _____ in the form of (**Specify bond type: cash, certificate of deposit, and/or insurance surety**) posted for this permit be reduced by \$ _____.

This bond reduction request is based on the following Phase II reclamation:

1. **Types of Reclamation Work Performed**
2. **Appropriate Date(s) of Reclamation Work Performed**
3. **Description of Reclamation Results Achieved**
4. **Description of the Post-Mining Land Use**

Any person with a valid legal interest which might be adversely affected by this proposal, or an officer or head of any federal, state or local government agency or authority, may within 30 days of (**Date of Last Publication**) submit written comments or objections concerning this bond reduction, and may also request, in writing, that the Division of Mined Land Reclamation hold a public hearing or an informal conference. A copy of materials concerning this request will be available for public inspection at the Division of Mined Land Reclamation's office in Big Stone Gap, Virginia.

All correspondence concerning this bond reduction application should be submitted to the Division of Mined Land Reclamation (**Attention: Permit Section**), P. O. Drawer 900, Big Stone Gap, Virginia 24219. Telephone (276) 523-8100. Written comments and a request for informal conference may be e-mailed to the Division at DmlrPublicNotice@dmme.virginia.gov.

Example Publication for Phase III

Public Notice
Application for Bond Release
Under Chapter 19, Title 45.1
Code of Virginia

_____ (**Company Name**) _____ is applying for bond release on Permit No. _____ located in _____ County _____ (**Precise Location**) _____ . This permit consists of _____ acres. As provided by § 4 VAC 25-130-800.40 of the **Virginia Coal Surface Mining Reclamation Regulations**, the Applicant is requesting that the current total bond amount of \$ _____ in the form of (**Specify bond type: cash, certificate of deposit, and/or insurance surety**) posted for this permit be released.

This bond release request is based on the following Phase III reclamation:

1. **Types of Reclamation Work Performed**
2. **Appropriate Date(s) of Reclamation Work Performed**
3. **Description of Reclamation Results Achieved**
4. **Description of the Post-Mining Land Use**

Any person with a valid legal interest which might be adversely affected by this proposal, or an officer or head of any federal, state or local government agency or authority, may within 30 days of (**Date of Last Publication**) submit written comments or objections concerning this bond release, and may also request, in writing, that the Division of Mined Land Reclamation hold a public hearing or an informal conference. A copy of materials concerning this request will be available for public inspection at the Division of Mined Land Reclamation's office in Big Stone Gap, Virginia.

All correspondence concerning this bond release application should be submitted to the Division of Mined Land Reclamation (**Attention: Permit Section**), P. O. Drawer 900, Big Stone Gap, Virginia 24219. Telephone (276) 523-8100. Written comments and a request for informal conference may be e-mailed to the Division at DmlrPublicNotice@dmme.virginia.gov.

Example Publication for Incremental Bond Reduction

Public Notice
Application for Bond Reduction
Under Chapter 19, Title 45.1
Code of Virginia

_____ (**Company Name**) _____ is applying for bond reduction on Permit No. _____ located in _____ County _____ (**Precise Location**) _____. This permit consists of _____ acres which are bonded for \$ _____ in the form of (**Specify bond type: cash, certificate of deposit, and/or insurance surety**). As provided by §§ 4 VAC 25-130-800.40 and 4 VAC 25-130-801.17 of the **Virginia Coal Surface Mining Reclamation Regulations**, the Applicant is requesting a bond reduction of \$ _____ on increment number(s) _____, consisting of _____ acres.

This bond reduction request is based on completion of (number) full growing season(s) and the following reclamation:

1. **Types of Reclamation Work Performed**
2. **Appropriate Date(s) of Reclamation Work Performed**
3. **Description of Reclamation Results Achieved**
4. **Description of the Post-Mining Land Use**

Any person with a valid legal interest which might be adversely affected by this proposal; or an officer or head of any federal, state or local government agency or authority may within 30 days of **Date of Last Publication** submit written comments or objections concerning this bond reduction, and may also request, in writing, that the Division of Mined Land Reclamation hold a public hearing or an informal conference. A copy of materials concerning this request will be available for public inspection at the Division of Mined Land Reclamation's office in Big Stone Gap, Virginia.

All correspondence should be submitted to the Division of Mined Land Reclamation (**Attention: Permit Section**), P. O. Drawer 900, Big Stone Gap, Virginia, 24219. Telephone (276) 523-8100. Written comments and a request for informal conference may be e-mailed to the Division at DmlrPublicNotice@dmme.virginia.gov.