



WEST VIRGINIA LEGISLATURE
Legislative Rule-Making Review Committee

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December 10, 1999

NOTICE OF ACTION TAKEN BY LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

TO: Ken Hechler, Secretary of State, State Register

TO: Carrie Chambers
DEP
10 McJunkin Road
Nitro, WV 25143

FROM: Legislative Rule-Making Review Committee

Proposed Rule: **West Virginia Surface Mining Reclamation Rule, 38CSR2**

The Legislative Rule-Making Review Committee recommends that the West Virginia Legislature:

1. Authorize the agency to promulgate the Legislative Rule
 - (a) as originally filed
 - (b) as modified by the agency
2. Authorize the agency to promulgate part of the Legislative rule; a statement of reasons for such recommendation is attached.
3. Authorize the agency to promulgate the Legislative rule with certain amendments; amendments and a statement of reasons for such recommendation is attached.
4. Authorize the agency to promulgate the Legislative rule as modified with certain amendments; amendments and a statement of reasons for such recommendation is attached.
5. Recommends that the rule be withdrawn; a statement of reasons for such recommendation is attached.



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SECRETARY OF STATE

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TO: Ken Hechler, Secretary of State, State Register

TO: Charlic Sturey
Mining and Reclamation
10 McJunkin Road
Nitro, WV 25143

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ANALYSIS OF PROPOSED LEGISLATIVE RULE

Agency: Division of Environmental Protection

Subject: Surface Mining and Reclamation Rule

CSR Cite: 38CSR2

Counsel: JAA

PERTINENT DATES

Filed for public comment: June 17, 1999
Public comment period ended: July 20, 1999
Filed following public comment period: July 30, 1999
Filed LRMRC: July 30, 1999
Filed as emergency: n/a

OFFICE OF THE ATTORNEY GENERAL
SECRETARY OF STATE

DEC 21 9 42 AM '99

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Fiscal Impact: None.

ABSTRACT

Summary

This rule is being updated to comply with new federal requirements.

Section 2.44 definition of "downslope" is amended to remove the exemption, from the definition of downslope, for the portion of an operation where the entire upper horizon above the lowest coal seam is partly or entirely removed. This change was done at the behest of the EPA.

Section 2.136 definition of "woodlands" is amended to strike the language which allows land restoration to slopes be flat or gently rolling to promote the operation of mechanical harvesting equipment. The proposed change provides that woodlands restoration be allowed when it has been demonstrated that gently rolling land configuration will promote production, minimize erosion and sediment

II. IS THE PROPOSED LEGISLATIVE RULE IN CONFORMITY WITH THE INTENT OF THE STATUTE WHICH THE RULE IS INTENDED TO IMPLEMENT, EXTEND, APPLY, INTERPRET OR MAKE SPECIFIC?

Yes.

III. DOES THE PROPOSED LEGISLATIVE RULE CONFLICT WITH OTHER CODE PROVISIONS OR WITH ANY OTHER RULE ADOPTED BY THE SAME OR A DIFFERENT AGENCY?

No.

IV. IS THE PROPOSED LEGISLATIVE RULE NECESSARY TO FULLY ACCOMPLISH THE OBJECTIVES OF THE STATUTE UNDER WHICH THE PROPOSED RULE WAS PROMULGATED?

Yes.

V. IS THE PROPOSED LEGISLATIVE RULE REASONABLE, ESPECIALLY AS IT AFFECTS THE CONVENIENCE OF THE GENERAL PUBLIC OR OF PERSONS AFFECTED BY IT?

Yes.

VI. CAN THE PROPOSED LEGISLATIVE RULE BE MADE LESS COMPLEX OR MORE READILY UNDERSTANDABLE BY THE GENERAL PUBLIC?

No.

VII. WAS THE PROPOSED LEGISLATIVE RULE PROMULGATED IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 29A, ARTICLE 3 AND WITH ANY REQUIREMENTS IMPOSED BY ANY OTHER PROVISION OF THE CODE?

Yes.

VIII. OTHER.

Counsel has technical modifications to suggest.

§§64-3-1. Division of environmental protection.

(u) The legislative rule filed in the state register on the thirtieth day of July, one thousand nine hundred ninety-nine, authorized under the authority of section three, article one, chapter twenty-two of this code, modified by the division of environmental protection to meet the objections of the legislative rule-making review committee and refiled in the state register on the twenty-first of January, two thousand, relating to the division of environmental protection (surface mining and reclamation rule, 38 CSR 2), is authorized with the following amendments:

On page 4, by inserting a new subsection 2.31 to read as followings:

“2.31. Commercial Forestry And Forestry.

2.31.a. Commercial Forestry, as used in Subsection 7.4 of this rule, means a long-term postmining land use designed to accomplish the following: (1) Achieve greater forest productivity than that found on the mine site before mining; (2) Minimize erosion and/or sediment yield and serve the hydrologic functions of infiltrating, holding, and yielding water commonly found in undisturbed forests; (3) Result in biodiversity by facilitating rapid recruitment of native species of plants and animals via the process of natural succession; (4) Result in a premium forest that will thrive under stressful conditions; and (5) Result in landscape, vegetation and water resources that create habitat for forest-dwelling wildlife.

2.31.b. Forestry, as used in Subsection 7.4 of this rule, means a long-term postmining land use designed to accomplish the following: (1) Achieve forest productivity equal to that found on the mine site before mining; (2) Minimize erosion and/or sediment yield and serve the hydrologic functions of infiltrating, holding, and yielding water commonly found in undisturbed forests; (3) Result in biodiversity by facilitating rapid recruitment of native species of plants and animals via the process of natural succession; and (4) Result in landscape, vegetation and water resources that create habitat for forest-dwelling wildlife.”

and renumber the subsequent subsections;

On page twelve, by striking subsection 2.136, the definition of “woodlands” in its entirety and renumber the subsequent subsections;

On page 68, section 7.2.i, by striking the word “Woodland” and inserting in lieu thereof the word “Forestry.”

On page 68, following section 7.3.c., by inserting the following:

“7.3.c. A change in postmining land use to grassland uses such as rangeland and/or hayland or pasture is prohibited on operations that obtain an approximate original contour variance described in WV Code §§22-3-13(b)(25)(c). Provided, however, That this subdivision is not effective until Sections 7.4 and 7.5 of this rule are approved by the federal Office of Surface Mining.

7.4. Standards Applicable to Approximate Original Contour Variance Operations With a Postmining Land Use of Commercial Forestry and Forestry.

7.4.a. Applicability.

7.4.a.1. Commercial Forestry and forestry may be approved as a post mining land use for surface mining operations that receive variances from the general requirement to restore the postmining site to its approximate original contour. An applicant may request AOC variance for purposes of this section for the entire permit area or any segment thereof. Either commercial forestry or forestry shall be established on all portions of the permit area. Provided, that the faces of valley fills shall be reclaimed as described in 7.4.b.1.J of this rule.

7.4.b. Requirements.

7.4.b.1. The Director may authorize commercial forestry and forestry as a postmining use only if the following conditions have been satisfied.

7.4.b.1.A. Planting and Management Plan Development.

7.4.b.1.A.1. A registered professional forester shall develop a planting plan and long-term management plan for the permitted area that meets the requirements of the West Virginia Surface Coal Mining and Reclamation Act. These plans shall be made a part of the surface mining permit application and shall be the basis for determining the capability of the applicant to meet the requirements of this rule. The plans shall be in sufficient detail to demonstrate that the requirements of the commercial forestry and forestry uses can be met. The plans shall contain a signed statement of intent from the landowner demonstrating its commitment to long-term implementation and management in accordance with the plan. Once final bond release is authorized, the permittee's responsibility for implementing the long-term management plan ceases. Upon final bond release, the jurisdiction of the Director over the permittee, the operator, the landowner or any other responsible party shall cease. The minimum required content of these plans shall be as follows:

7.4.b.1.A.2. The landowner or other responsible party shall submit their objectives for achieving commercial forestry and forestry postmining land uses. The Director may approve the uses only when the planting plan and long term management plan demonstrate that the forest will be managed only for long term forest products, such as sawlogs or veneer, that take 50 to 80 years to mature.

7.4.b.1.A.3. A commercial species planting plan and prescription shall be developed by the registered professional forester to achieve the commercial forestry and forestry use. The plan shall include the following:

7.4.b.1.A.3.(a) A topographic map of the permit area, 1:12000 or finer, showing the mapped location of premining native soil. A description of each soil mapping unit that includes, at minimum, total depth and volume to bedrock, soil horizons, including the O, A, E, B, C, and Cr horizon depths, soil texture, structure, color, reaction and bedrock type and a site index for common native tree species. An approved certified professional soil scientist shall conduct a detailed on-site survey, create the maps, and provide the written description of the soils. As part of the field survey, the soil scientist shall map and certify the slopes that are 50% or less with a confidence level of $\pm 2\%$.

7.4.b.1.A.3.(b) An approved geologist shall create a certified geology map showing the location, depth, and volume of all strata in the mined area, the physical and chemical properties of each stratum to include rock texture, pH, potential acidity and alkalinity, total soluble salts, degree of weathering, extractable levels of phosphorus, potassium, calcium, magnesium, manganese, and iron and other properties required by the director to select best available materials for minesoils.

7.4.b.1.A.3.(c) A description of the present soils and soil substitutes to be used as the plant medium and the proposed handling, and placement of these materials. The handling plan shall include procedures to:

7.4.b.1.A.3.(c)(1) protect native soil organisms and the native seed pool;

7.4.b.1.A.3.(c)(2) include organic debris such as litter, branches, small logs, roots, and stumps in the soil;

7.4.b.1.A.3.(c)(3) inoculate the minesoil with native soil organisms;

7.4.b.1.A.3.(c)(4) increase soil fertility; and

7.4.b.1.A.3.(c)(5) encourage plant succession.

7.4.b.1.A.3.(d) A surface preparation plan which includes a description of the methods for replacing and grading the soil and other soil substitutes and their preparation for seeding and tree planting.

7.4.b.1.A.3.(e) Liming and fertilization plans.

7.4.b.1.A.3.(f) Mulching type, rates and procedures.

7.4.b.1.A.3.(g) Species seeding rates and procedures for application of perennial and annual herbaceous, shrub, and vine plant materials for ground cover.

7.4.b.1.A.3.(h) A tree planting prescription to establish commercial forestry and forestry, to include species, stems per acre, planting mixes, and site-specific planting arrangements to maximize productivity.

7.4.b.1.A.4. A long-term management plan shall be developed by a registered professional forester. The plan shall include:

7.4.b.1.A.4.(a) A topographic map, with a minimum scale of 1:12000 shall be used to show the boundaries and extent of the proposed surface mining operation, the boundaries of areas being planned for commercial forestry and forestry land uses, and the proposed postmining surface configuration, stream drainages and wetlands, and the plant species mix that will be planted in each area.

7.4.b.1.A.4.(b) A proposed schedule of all silvicultural activities necessary to develop the forest resources for commercial forestry and forestry.

7.4.b.1.A.4.(c) A description of activities necessary to protect the forest resources from vandalism, wildfire, insects, diseases, exotic organisms and herbivory detrimental to long-term success.

7.4.b.1.A.4.(d) A plan to assure forest access for future management, protection, and eventual utilization of the forest resources. The plan shall be developed to minimize adverse environmental impacts, including additional road building and other land disturbances. Forestry best management practices shall be followed.

7.4.b.1.A.4.(e) A plan for using forestry best management practices to minimize silvicultural and harvesting impacts on the permit area and on waters of the State. Best Management Practices shall be sufficient to assure compliance with applicable State and Federal water quality standards.

7.4.b.1.A.5. A signed statement from the permittee containing financial information and data sufficient to demonstrate:

7.4.b.1.A.5.(a) That achieving the commercial forestry use is practicable with respect to the private financial capability necessary to achieve the use; and

7.4.b.1.A.5.(b) That the commercial forestry use will be obtainable according to data regarding expected need and market.

7.4.b.1.A.6. Two copies of the planting plan, management plan, pertinent maps and statement of intent shall be submitted to the appropriate Division of Forestry District Forester and two copies of each plan shall be submitted to the Director of the Division of Environmental Protection.

7.4.b.1.B. Oversight Procedures for Achieving Commercial Forestry and Forestry.

7.4.b.1.B.1. Before approving a commercial forestry and forestry reclamation plan, the Director shall assure that the planting plan, long-term management plan, and statement of intent are reviewed and approved by a registered professional forester employed either by the West Virginia Division of Forestry or the Director of the Division of Environmental Protection and that a certified professional soil scientist employed by the Director reviews and field verifies the soil slope and sandstone mapping. Before approving the reclamation plan, the Director shall assure that the reviewing forester has made site-specific written findings adequately addressing each of the elements of the plans and statements. The reviewing forester and soil scientist shall make these findings within 45 days of receipt of the plans and maps.

7.4.b.1.B.2. If after reviewing the plans, the reviewing forester and soil scientist find that the plans and statements comply with the requirements of this land use, they shall prepare written findings stating the basis of approval. A copy of the findings shall be sent to the Director and to the surface mining permit supervisor for the region in which the permit is located. The written findings shall be made part of the facts and findings section of the surface mining permit application file. The Director shall assure that the plans and statements comply with the requirements of this rule and other provisions of the approved State surface mining program.

7.4.b.1.B.3. If the reviewing forester finds the plans to be insufficient, the forester shall either:

7.4.b.1.B.3.(a) Contact the preparing forester or the permittee and provide the permittee with an opportunity to make the changes necessary to bring the reclamation plan into compliance with the regulations, or

7.4.b.1.B.3.(b) Notify the Director that the reclamation plan does not meet the requirements of the regulations. The Director may not approve the surface mining permit until finding that the reclamation plans satisfy all of the requirements of the regulations.

7.4.b.1.C. Landscape Criteria

7.4.b.1.C.1. For commercial forestry, the Director shall assure that the postmining landscape is rolling, and diverse. The backfill on the mine bench shall be configured to create a postmining topography that includes the principles of landforming (e.g. the creation of swales) to reflect the premining irregularities in the land. Postmining landform shall provide a rolling topography with slopes of both 5% and 15% with an average slope of 10% to 12.5%. The elevation change between the ridgeline and the valleys shall be varied. The slope lengths shall not exceed 500 feet. The minimum thickness of backfill, including minesoil, placed on the pavement of the basal seam mined in any particular area shall be ten (10) feet.

7.4.b.1.C.2. For commercial forestry, the surface drainage pattern shall contain watersheds of various sizes shall exhibit a dendritic drainage pattern that simulates the premining pattern, and shall include the drainage channels, sediment control or other water retention surfaces, which shall remain on the site after bond release.

7.4.b.1.C.3. For commercial forestry, in areas where drainage channel design criteria do not mandate erosion control materials, and in other drainage areas where applicable, bioengineering techniques such as fascines, branch packings, live crib walls, and plantings of native herbs and shrubs appropriate for the site shall be used, to the extent possible, to increase the site biodiversity. Only native stone shall be used for erosion control.

7.4.b.1.C.4. For commercial forestry, at least 3 ponds, permanent impoundments or wetlands totaling at least 3.0 acres shall be created on each 200 acres of permitted area. They shall be dispersed throughout the landscape and each water body shall be no smaller than 0.20 acres. All ponds, permanent impoundments or wetlands shall be subject to the requirements of subsection 5.5 of this rule, and shall be left in place after final bond release. The substrate of the ponds and wetlands must be capable of retaining water to support aquatic and littoral vegetation.

7.4.b.1.C.5. For forestry, all ponds and impoundments created during mining shall be left in place after bond release and shall be subject to the requirements of section 5.5 of the Rules, except for ponds and impoundments located below the valley fills. The substrate of the ponds and wetlands must be capable of retaining water to support aquatic and littoral vegetation.

7.4.b.1.C.6. Before Phase III bond release may be approved, the ponds, permanent impoundments or wetlands used to satisfy parts 7.4.d.1.C.4. and 5. of this rule shall be vegetated on the perimeter with at least six native herbaceous species typical of the region at a density of not less than 1 plant per linear foot of edge, and at least 4 native shrub species at a density of not

less than 1 shrub per 6 linear feet of edge. No species of herbaceous or shrub species shall be less than 15% of the total for its life form. This requirement may be met by planted vegetation or that which naturally colonizes the site.

7.4.b.1.C.7. The landscape criteria in parts 7.4.d.1.C.1., 2., 3., 4., 5., and 6. above, do not apply to valley fills.

7.4.b.1.D. Soil and Soil Substitutes.

7.4.b.1.D.1. Soil is defined as and shall consist of the O, A, E, B, C and Cr horizons.

7.4.b.1.D.2. The Director shall require the operator to recover and use the soil volume equal to the total soil volume on the mined area, as shown on the soil maps and survey except for those areas with a slope of at least 50%. The Director shall assure that all saved soil includes all of the material from the O through Cr horizons.

7.4.b.1.D.3. When the soil volume recovered in 7.4.b.1.D.2. above, is insufficient to meet the depth requirements, selected overburden materials may be used as soil substitutes. In such cases, the Director shall require the operator to recover and use all of the weathered, slightly acid brown sandstone from within ten (10) feet of the soil surface on the mined area. This weathered, slightly acid, brown sandstone material may contain or be supplemented with up to 25% by-volume weathered, slightly acid brown shale or siltstone from within ten (10) feet of the soil surface. Material from this layer may be removed with the soil and mixed with the soil in order to meet the depth requirement. Provided, that once the operator has recovered material sufficient to meet the depth requirements, it may cease recovering such material.

7.4.b.1.D.4. When the materials described in 7.4.b.1.D.2. and 3. of this rule are insufficient to meet the depth requirements, then the Director shall require the operator to recover and use all of the weathered, slightly acid, brown sandstone from below ten feet of the soil surface on the mined area. Provided, that once the operator has recovered material sufficient to meet the depth requirements, it may cease recovering such material.

7.4.b.1.D.5. If the applicant affirmatively demonstrates that the materials described in 7.4.b.1.D.2., 3., and 4. of this rule within the mined area are insufficient to meet the depth requirements, then up to 2/3 of the minesoil may consist of the best available material or mix of materials.

7.4.b.1.D.6. Before approving the use of soil substitutes, the Director shall require the permittee to demonstrate that the selected overburden material is suitable for restoring land capability and productivity. This will be demonstrated by the results of chemical and physical analyses that show that this material is at least 75% sandstone, has at least 15% fines (<2mm), has a net acid-base accounting between -3 and +3 calcium carbonate equivalent per 1000 tons of material excluding siderite effects, a soluble salt level less than 1.0 mmhos/cm, to result in a long-term equilibrium pH of between 5.0 and 6.5 and additional analyses as the Director deems necessary. If this spoil is made up of strongly contrasting materials with respect to acid/base accounting these materials shall be blended.

7.4.b.1.D.7. The minesoils shall be distributed across the disturbed areas, except the faces of valley fills, in a uniform and consistent mix.

7.4.b.1.D.8. For commercial forestry, the final surface material used as the planting and growth medium (hereinafter referred to as commercial forestry minesoil) shall consist of a minimum of four feet, and an average of at least five feet, of soil or a mixture of materials consisting of no less than one-third soil and two-thirds of the materials described in 7.4.b.1.D.3. and 4. of this rule.

7.4.b.1.D.9. For forestry, the final surface material used as the planting and growth medium (forestry minesoil) shall consist of a minimum of 4 feet of soil, or a mixture of soil and suitable

soil substitutes described in 7.4.b.1.D.4 through 6 of this rule.

7.4.b.1.D.10. Commercial forestry minesoil shall be placed on that portion of the mined area which receives an AOC variance. For a proposed mine permit area or any specifically defined segment of the proposed permit area that does not satisfy the volumetric criteria for AOC, an AOC variance shall be required. In order to define the portion of the permit classified as AOC-compliant or AOC-variant, the permit may be divided into segments. The number of segments shall not exceed the number of excess spoil disposal areas proposed and each segment shall include at least one associated fill. In no event will there be more variance segments than there are excess spoil disposal areas on the permit area. For each segment, the AOC status shall be defined as complying with AOC if that segment meets the backfill volume, valley fill design, backfill inflection point tests and other criteria as described in the AOC policy adopted by the Director.

7.4.b.1.D.11. Forestry minesoil shall, at a minimum, be placed on all areas achieving AOC.

7.4.b.1.D.12. If the applicant does not demonstrate that there is sufficient material available on the permit area to satisfy the requirements of 7.4.d.1.D., then the Director may not authorize this post mining land use.

7.4.b.1.D.13. The Director shall require the operator to include, as part of the commercial forestry and forestry minesoil mix, organic debris such as forest litter, branches, small logs, roots and stumps in the soil to help re-seed and resprout the native vegetation, inoculate the minesoil with native soil organisms, increase soil fertility, and encourage plant succession.

7.4.b.1.D.14. The Director shall require that soil be removed and re-applied in a manner that minimizes stockpiling to protect seed pools and soil organisms. Only soil removed from the mined area during the one-year period immediately following commencement of soil removal may be placed in a long-term stockpile. Except for soil in a long-term stockpile, soil redistribution shall be done within six months of soil removal. Except for soil in a long-term stockpile, soil shall be stored for less than six months in piles less than six feet high and 24 feet wide in a stable area within the permit area where it will not be disturbed and will be protected from water or wind erosion or contaminants that lessen its capability to support vegetation. Long-term stockpiles shall be seeded with the legumes specified in the ground cover mixes used for reforestation (7.4.d.1.G.1. of this rule).

7.4.b.1.E. Soil Placement and Grading.

7.4.b.1.E.1. The Director shall require the permittee to place minesoil loosely and in a non-compacted manner while meeting static safety factor requirements. Minesoil shall be graded only when necessary to maintain stability or on slopes greater than 20% unless otherwise approved by the Director. Grading shall be minimized to reduce compaction. When grading is approved by the Director, only light grading equipment may be used to grade the tops off the piles, roughly leveling the area with no more than one or two passes. Tracking in and rubber-tired equipment shall not be used. Non-permanent roads, equipment yards, and other trafficked areas shall be deep-ripped (24" to 36") to mitigate compaction and to allow these areas to be restored to productive commercial forestry. Soil physical quality shall be inadequate if it inhibits water infiltration or prevents root penetration or if their physical properties or water-supplying capacities cause them to restrict root growth of trees common to the area. Slopes greater than 50% shall be compacted no more than is necessary to achieve stability and non-erodability.

7.4.b.1.E.2. The Director shall require the permittee to leave soil surfaces rough with random depressions across the entire surface to catch seed and sediment, conserve soil water, and promote revegetation. Organic debris such as forest litter, logs, and stumps shall be left on and in

the soil.

7.4.b.1.F. Liming and Fertilizing

7.4.b.1.F.1. The Director shall require the permittee to apply lime where the average soil pH is less than 5.5. Lime rates will be used to achieve a uniform soil pH of 6.0. An alternate maximum or minimum soil pH may be approved, however, based on the optimum pH for the forest revegetation species. Soil pH may vary from 4.5 to a maximum of 7.0 from place to place across the reclaimed area with no more than 10% of the site below pH 5.0 and/or no more than 10% of the site above pH 6.5. Low and high pH levels may be approved only when tree species tolerant of the pH range have been approved for planting.

7.4.b.1.F.2. The Director shall require the permittee to fertilize based on the needs of trees and ground cover vegetation. The permittee shall apply up to 300 pounds/acre of diammonium phosphate (18-46-0) and up to 100 pounds/acre potassium sulfate (0-0-52) with the ground cover seeding. Other fertilizer materials and rates may be used only if the Director finds that the substitutions are appropriate based on soil tests performed by state certified laboratories.

7.4.b.1.G. Ground Cover Vegetation.

7.4.b.1.G.1. The Director shall require the permittee to establish a temporary erosion control vegetative cover as contemporaneously as practicable with backfilling and grading until a permanent tree cover can be established. This cover shall consist of a combination of native and domesticated non-competitive and non-invasive cool and warm season grasses and other herbaceous vine or shrub species including legume species and ericaceous shrubs. All species shall be slow growing, tolerant of low pH, and compatible with tree establishment and growth. The ground cover vegetation shall be capable of stabilizing the soil from excessive erosion, but it should be minimized to control tree-damaging rodent population, and allow the establishment and unrestricted growth of native herbaceous plants and trees. Seeding rates and composition must be in the planting plan. The following ground cover mix and seeding rates (pounds/acre) shall be used: winter wheat (15 lbs/acre, fall seeding), foxtail millet (5 lbs/acre, summer seeding), redtop (2 lbs/acre), perennial ryegrass (2 lbs/acre), orchardgrass (5 lbs/acre), weeping lovegrass (2 lbs/acre) kobe lespedeza (5 lbs/acre), birdsfoot trefoil (10 lbs/acre), and white clover (3 lbs/acre). Kentucky-31 fescue, sericia lespedeza, all vetches, clovers (except ladino and white clover) and other aggressive or invasive species shall not be used. South- and west-facing slopes with a soil pH of 6.0 or greater, the four grasses in the mixture shall be replaced with 20 lbs/acre of warm-season grasses consisting of the following species: Niagara big bluestem (5 lbs/acre), Camper little bluestem (2 lbs/acre), Indian grass (2 lbs/acre), and Shelter switch grass (1 lb/acre), or other varieties of these species approved by the Director. Also, a selection of at least 3 native shrub species native of the area shall be included in the ground cover mix. Provided, that on slopes less than 20%, the Director may approve lesser or no vegetative cover when tree growth and productivity will be enhanced and excessive sedimentation will not result.

7.4.b.1.G.2. All mixes shall be compatible with the plant and animal species of the region and the commercial forestry use. The Director shall require the use of a variety of site-specific ground cover treatments so that different ground cover treatments are used on different parts of the reclamation area to add biodiversity and landscape mosaic to the overall plan.

7.4.b.1.G.3. The permittee may regrade and reseed only those rills and gullies that are unstable.

7.4.b.1.H. Tree Species and Compositions.

7.4.b.1.H.1. Commercial tree and nurse tree species selection shall be based on site-specific characteristics and long-term goals outlined in the forest management plan and approved by a registered professional forester. For commercial forestry, the Director shall assure that all areas

suitable for hardwoods are planted with native hardwoods at a rate of 500 seedlings per acre in continuous mixtures across the permitted area with at least six (6) species from the following list: white and red oaks, other native oaks, white ash, yellow-poplar, black walnut, sugar maple, black cherry, or native hickories. For forestry, the Director shall assure that all areas suitable for hardwoods are planted with native hardwoods at a rate of 450 seedlings per acre in continuous mixtures across the permitted area with at least three (3) or four (4) species from the following list: white and red oaks, other native oaks, white ash, yellow-poplar, black walnut, sugar maple, black cherry, or native hickories.

7.4.b.1.H.2. For commercial forestry, each of the species shall be not less than 10% of the total planted composition and at least 75% of the total planted woody plant composition shall be from the list of species in part 7.4.d.1.G.1. Species shall be selected based on their compatibility and expected site-specific long-term dynamics. For forestry, if only three species from the above list are planted, then each of the species shall be not less than 20% of the total planted composition. If four species from the list in part 7.4.d.1.G.1. are planted, then each of the species shall be not less than 15% of the total planted composition. Species shall be selected based on their compatibility and expected site-specific long-term dynamics.

7.4.b.1.H.3. Between 5% and 10% of the required number of woody plants shall be a planted in a continuous mix of three or more nurse tree and shrub species that improve soil quality and habitat for wildlife. They shall consist of black alder, black locust, bristley locust, redbud, or bi-color lespedeza or other non-invasive, native nurse tree or shrub species, approved by the Director. One to five acres within each 100 acres of the permit area shall be left unplanted with trees, but left with ponds, wetlands or ground cover vegetation only. These areas may be continuous or divided into 2-4 separate parcels, each at least 0.25 acres large.

7.4.b.1.H.4. On areas unsuitable for hardwoods, the Director may authorize the following conifers: Virginia pine, red pine, white pine, pitch pine, or pitch x loblolly hybrid pine. Areas unsuitable for hardwoods shall be limited to southwest-facing slopes greater than 10% or areas where the soil pH is less than 5.5. These conifers shall be planted as single-species stands less than 10 acres in size at the same rate as the hardwood requirements in 7.4.b.1.H.1 of this rule. The Director shall assure that no reclaimed area of the permit area contains a total of more than 15% conifers.

7.4.b.1.H.5. The Director shall assure that the specific species and selection of trees and shrubs shall be based on the suitability of the planting site for each species' site requirements based on soil type, degree of compaction, ground cover, competition, topographic position, and aspect.

7.4.b.1.H.6. For commercial forestry only, in addition to the trees and shrubs required in the sections above, 2-0 white pine seedlings shall be planted across all sites at a rate of 5 to 10 trees per acre. These trees will be used for the productivity check required for Phase III bond release.

7.4.b.1.I. Standards of Success

7.4.b.1.I.1. The Director shall assure the ability of the commercial forestry and forestry areas to produce a high-quality commercial forest by confirming, after on-site soil testing, that the minesoil selection, placement, and preparation criteria in 7.4.d.1.D.7 through 11 of this rule are met before Phase I bond release may occur. Before approving Phase I bond release, a certified soil scientist shall certify, and the Director shall make a written finding that the minesoil meets these criteria.

7.4.b.1.I.2. The Director shall not authorize Phase II bond release for commercial forestry before the end of the fifth tree growing season. The Director may approve Phase II bond release only if the tree survival is equal to or greater than 300 commercial trees per acre (80% of which must be

commercial hardwood species listed in 7.4.b.1.H.1 of this rule) or the rate specified in the forest management plan, whichever is greater. For forestry, Phase II bond release may be granted by the Director at the end of the second growing season only if the tree survival is equal to or greater than 300 trees per acre, 60% of which must be commercial hardwood species listed in part 7.4.d.1.G.1. of this rule, or the rate specified in the forest management plan, whichever is greater. Furthermore, for both commercial forestry and forestry, where there is potential for excessive erosion on slopes greater than 20%, there shall be 70% ground cover where ground cover includes tree canopy, shrub and herbaceous cover, organic litter, and rock cover, and at least 80% of all trees and shrubs used to determine re-vegetation success must have been in place for at least 60% of the applicable minimum period of responsibility. Trees and shrubs counted in determining such success shall be healthy and shall have been in place for not less than two growing seasons with no evidence of die back.

7.4.b.1.I.3. The Director may approve Phase III bond release for commercial forestry and forestry only if all criteria for Phase II bond release in 7.4.b.1.I.2 of this rule are still being met at the time Phase III bond release is considered. For forestry, Phase III bond release may not be authorized until at least five growing seasons have passed since the trees were planted. Additionally, for commercial forestry, phase III bond release may not be authorized unless commercial forest productivity has been achieved by the end of the twelfth growing season or, if such productivity has not been achieved, if a commercial forestry mitigation plan is submitted to the Director, approved and completed. Commercial forest productivity is achieved only when annual height increments of the white pine indicator species, based on the average of four or more consecutive annual height increments, is equal to or greater than 1.5 feet. The Director shall measure the average four-year growth increment of all trees along two perpendicular transects across the site that will achieve a tree sample size of no less than two trees per acre.

7.4.b.1.I.4. A commercial forestry mitigation plan shall require a permittee who has not achieved commercial forestry productivity requirements by the end of the twelfth growing season to either pay to the Special Reclamation Fund an amount equal to twice the remaining bond amount or to perform an equivalent amount of in-kind mitigation. The Director shall use any money collected under this plan to establish forests on bond forfeiture sites. In-kind mitigation requires establishing forests on AML or bond forfeiture sites. After completion of the mitigation plan, Phase III bond release may be approved if the Director finds that the failure to achieve productivity did not result from a failure to follow the provisions of this rule and did not result in environmental damage.

7.4.b.1.I.5. The Director may release all or part of the bond for the commercial forestry and forestry variance or increment thereof in accordance with this subsection and 38-2-12.2.d. and 12.2.e. of this rule. The Director may release the variance portion if all appropriate standards have been met without regard to the bonding scheme selected for the permit.

7.4.b.1.J. Front Faces of Valley Fills

7.4.b.1.J.1. Front faces of valley fills shall be exempt from the requirements of this rule except that:

7.4.b.1.J.1.(a) They shall be graded and compacted no more than is necessary to achieve stability and non-erodability;

7.4.b.1.J.1.(b) No unweathered shales may be present in the upper four feet of surface material;

7.4.b.1.J.1.(c) The upper four feet of surface material shall be composed of soil and the materials described in 7.4.b.1.D. of this rule, when available, unless the Director determines other material is necessary to achieve stability;

7.4.b.1.J.1.(d) The groundcover mixes described in subparagraph 7.4.d.1.G. shall be used unless

the Director requires a different mixture;

7.4.b.1.J.1.(e) Kentucky 31 fescue, sericea lespedeza, vetches, clovers (except ladino and white clover) or other invasive species may not be used; and

7.4.b.1.J.2. Although not required by this rule, native, non-invasive trees may be planted on the faces of fills.

7.4.b.1.K. Long-term Monitoring and Adaptive Management. The Director shall under-take, with the assistance of the Division of Forestry or other forestry research units, a performance assessment of all Commercial Forestland permits within 10 years of Phase III bond release. Species composition, biodiversity, productivity, carbon capture, wildlife habitat, stream and wetland biota, and hydrologic function will be assessed. Results will be reported, analyzed, interpreted and used as part of an adaptive management program to improve the regulations and guidelines for Commercial Forestland.

7.5. The Homestead land use meets the requirements for a variance from the AOC requirements of the Act (W.Va. Code 22-3-13(c)). An appropriately planned Homestead will promote sustainable settlement patterns that protect the environment and support the region's economic development.

7.5.a. Operations receiving a variance from AOC for this use shall establish homesteading on at least one-half ($\frac{1}{2}$) of the permit area. The remainder of the permit area shall support an alternate AOC variance use.

7.5.b. The following terms are applicable only to this subsection of this rule.

7.5.b.1. Building Pad means an accessible, designated, and properly drained area where the soil and/or mine-spoil has been specially placed and compacted to minimize post-mining surface settlement. After the building pad is completed, a registered professional engineer shall certify that the building pad was constructed as designed. This certification shall accompany the deed of conveyance.

7.5.b.2. Civic Parcel means a parcel designated in the Land Plan for public use.

7.5.b.3. Commercial Parcel means a parcel retained by the Landowner of record and incorporated within the Homestead Area on which the landowner or its designee may develop commercial uses. The size and location of commercial parcels shall comply with the requirements of this regulation.

7.5.b.4. Community Association means an association of all the homesteaders. This association shall receive title to the civic parcels, conservation easements and nurseries at the time of final bond release.

7.5.b.5. Conservation Easement means an area, typically a strip no less than 200 feet wide, designated in the land plan for the purpose of establishing a natural habitat for the development and migration of native species of fauna and flora. These easements shall extend through the mined areas of the land, starting and ending in natural, undisturbed land. These areas shall be permanent easements maintained for conservation and not commercial purposes.

7.5.b.6. Entity Administering The Civic Parcels means the Community Association or its designee shall administer the civic parcels.

7.5.b.7. Escrow Agent means the Attorney General of the State of West Virginia shall be the Escrow Agent.

7.5.b.8. Homesteader means a citizen of the State that fulfills the requirements of this regulation and who is selected by lottery to reside on a designated homestead parcel.

7.5.b.9. Homestead Area means the entire area designated for homestead use, including roads.

7.5.b.10. Homestead Infrastructure means the facilities necessary to sustain residential use, including roads, electricity, telephone, water and sewage or septic systems.

7.5.b.11. Homestead Parcel means an individual segment of a homestead area designated as either a rural or village parcel. The permittee shall assure that each parcel has been surveyed by a

licensed land surveyor before Phase I bond release.

7.5.b.12. Homestead Plan means all the required documentation, engineered drawings, authorizations, agreements and schedules which are to be submitted and approved by the Director.

7.5.b.13. Homestead Selection Lottery means a lottery sanctioned by the State, operated under rules established and administered by the Director or the Director's designee as soon as practicable after Phase I bond release.

7.5.b.14. Landowner Of Record means the surface estate owner at the time the mining permit is submitted to the Director. More than one Landowner of Record may be involved in a Homestead Plan. The Landowner of Record shall transfer the title to the surface estate of the Homestead Area to the Escrow Agent prior to the beginning of mining. The cost of transfer shall be paid by the Landowner of Record.

7.5.b.15. Land Plan means the depiction, with supporting documentation, including surveys and narratives, of the homestead parcels, building pads, roads, easements, civic parcels, commercial parcels, and other features of the Homestead Area.

7.5.b.16. Machine Passable Grade means the maximum grade that can be safely accommodated by commonly used, self-propelled, rubber-tired farming equipment.

7.5.b.17. Rural Parcels means homesteading parcels planned to promote rural uses such as farming, orchard growing, timber management, viticulture, and Morret gardening. The rural parcels shall be an appropriate size for the designated use and may be up to 40 acres. Rural homesteaders may receive title only to that portion of the land that they have improved over the five-year period.

7.5.b.18. Service Drop means the overhead service conductors from the last pole or other aerial support to and including the splices, if any, connecting to the service-entrance conductors at the building or other structure.

7.5.b.19. Service-Entrance Conductors, Overhead System means the service conductors between the terminals of the service equipment and a point usually outside the building, clear of building walls, where joined by tap or splice to the service drop.

7.5.b.20. Service-Entrance Conductors, Underground System means the service conductors between the terminals of the service equipment and the point of connection to the service lateral.

7.5.b.21. Service Lateral means the underground service conductors between the street main, including any risers at a pole or other structure or from transformers, and the first point of connection to the service-entrance conductors in a terminal box or meter or other enclosure with adequate space, inside or outside the building wall. Where there is no terminal box, meter, or other enclosure with adequate space, the point of connection shall be considered to be the point of entrance of the service conductors into the building.

7.5.b.22. Soil Plan means the maps and descriptions of premining and postmining soil included in the Homestead Plan.

7.5.b.23. Village Parcels means homesteading parcels that provide a higher density of residential population than rural parcels.

7.5.c. Eligibility Requirements And Responsibilities For Homesteaders

7.5.c.1. Homesteader shall meet the following eligibility requirements:

7.5.c.1.A. Be a resident of the State of West Virginia and be at least 18 years old;

7.5.c.1.B. Apply for a homestead as required by this rule;

7.5.c.1.C. Abide by the rules of the Homestead Selection Lottery;

7.5.c.1.D. Reside on the subject parcel within 12 months after the property is certified as ready for use. Provided that subject to the approval of the Escrow Agent, occupancy may be delayed up

to 6 additional months for good cause shown.

7.5.d. Rules For The Lottery

7.5.d.1. The rules for the Lottery are as follows:

7.5.d.1.A. Each household may receive no more than one homestead.

7.5.d.1.B. Homestead parcels shall be distributed by anonymous lottery.

7.5.d.1.C. For any given Homestead, the lottery shall first be opened only to West Virginians living within three (3) miles of the permitted area within five years of the date of the filing of the permit application. Provided, however, that if parcels remain after an initial lottery, subsequent lotteries shall be held in the following order. The first subsequent lottery shall be open to any resident of a county (or counties, if more than one) in which the mine is located. Further, lotteries, if necessary, shall be open to any resident of West Virginia, and shall be held at six (6) month intervals.

7.5.d.1.D. The lottery shall be held as soon as practicable after Phase I bond release is approved. Adequate notice shall be provided at least six (6) months in advance of the lottery.

7.5.d.1.E. The lottery shall be fair, impartial, and open to the public.

7.5.d.1.F. A lottery participant who receives a parcel may decline a parcel, but may not sell the right to homestead on the parcel.

7.5.d.1.G. The right to participate in the lottery is not assignable or saleable.

7.5.d.1.H. Each lottery participant shall, before the lottery, apply for either a rural or a village parcel.

7.5.e. Homestead Plan Development

7.5.e.1. The Director may authorize Homesteading as a post-mining use only if the following conditions have been satisfied.

7.5.e.1.A. The Homestead Plan and any subsequent modifications shall be prepared under the direction of and certified by a professional engineer, a soil scientist, and a design professional that is either a licensed architect, landscape architect, or AICP certified land planner.

7.5.e.1.B. The Homestead Plan shall identify each member of a specialty group that contributed to the plan. The Plan shall be sufficiently detailed to ensure success in achieving the designated use of each homestead panel and to ensure sound future management of the homestead.

7.5.e.1.C. Homestead plan may be used alone or in conjunction with any other alternate land use plan. The Homesteading area, minus commercial parcels, shall occupy at least 50% of the permitted area. In the event that the Homestead use is used in conjunction with another land use, the Landowner of Record shall provide for the Homestead use at least as much land on the mining bench as it retains for alternate land use.

7.5.e.1.D. The Permittee shall submit plans prepared at a preferred scale of at least 1 inch = 200 feet, which include the following:

7.5.e.1.D.1. A Land Plan showing the homestead boundaries, homestead parcels, building pads, roads, easements, civic parcels, and commercial parcels, as applicable.

7.5.e.1.D.2. A Site Plan and description of the following:

7.5.e.1.D.2.(a) wastewater and sewage systems,

7.5.e.1.D.2.(b) potable water supply,

7.5.e.1.D.2.(c) non-potable water supply (if applicable)

7.5.e.1.D.2.(d) electrical service, and

7.5.e.1.D.2.(e) telephone service.

7.5.e.1.D.3. A grading plan showing contours at an interval appropriate for the map scale and slopes, and including surface drainage and stormwater provisions. The Director shall require

maps at specific scales and contour intervals to satisfy the designated uses of the homestead parcels and the land plan.

7.5.e.1.D.4. A map showing all off-bench fill areas and the outcrop of the lowest coal bed.

7.5.e.1.D.5. A Soil Plan showing soil and weathered spoil storage areas. The plan shall describe the methods to be used to distribute, protect, and enhance the stored material upon final regrading of the disturbed surfaces. The plan shall identify the proposed depths of soil and subsoil for each specific use within the Homestead Area. These specific uses may include, but shall not be limited to, the following:

7.5.e.1.D.5.(a) Haul roads

7.5.e.1.D.5.(b) Conservation Easements

7.5.e.1.D.5.(c) Building Pads

7.5.e.1.D.5.(d) Garden Plots

7.5.e.1.D.5.(e) Waste Water and Sewage Disposal Facilities

7.5.e.1.D.5.(f) Storm Drainage Facilities

7.5.e.1.D.5.(g) Wetland Facilities

7.5.e.1.D.5.(h) Utility Easements

7.5.e.1.D.5.(i) Civic/Public Facilities

7.5.e.1.D.5.(j) Commercial Areas

7.5.e.1.D.6. Soil maps.

7.5.f. Financial Commitments

7.5.f.1. A contract between the Permittee and the Director, binding the Permittee to complete the homestead use as soon practicable but no later than two years after the completion of mining, shall be required.

7.5.f.2. The contract between the Permittee and the Director shall, at a minimum, require the Permittee to follow the homesteading reclamation plan.

7.5.f.3. To receive approval for a homestead use, the Permittee shall demonstrate that it has the financial capability to achieve the use and carry out the reclamation plan. The Permittee shall submit signed statements containing financial information and data sufficient to demonstrate that the Permittee has the financial capability to achieve the homesteading use.

7.5.f.4. Before approving the Permit, the Director shall find, in writing, that the Permittee has the financial capability to achieve the use.

7.5.g. Required Elements For All Homestead Plans

7.5.g.1. Boundary of the homestead area:

7.5.g.1.A. The Homestead Area shall be defined by a metes and bounds description prepared and certified by a Professional Engineer or Licensed Land Surveyor registered with the State of West Virginia.

7.5.g.1.B. Non-mined areas may be included in the Homestead Area.

7.5.g.1.C. In the event that any portion of the land transferred to the Escrow Agent is not mined, that land may revert to the Landowner of Record.

7.5.g.2. General Requirements of all Parcels:

7.5.g.2.A. Each individual parcel shall be delineated by metes and bounds description prepared by a Professional Engineer or Licensed Land Surveyor registered with the State of West Virginia.

7.5.g.2.B. Parcels shall support their designated land uses.

7.5.g.2.C. Parcels shall be configured and arranged to minimize adverse environmental impacts.

7.5.g.2.D. The Permittee shall provide adequate road frontage for access to each Homestead,

Public Nursery, Civic and Commercial Parcel.

7.5.g.2.E. Houses and appurtenant facilities shall be no closer than 50 feet from the edge of a designated Conservation Easement.

7.5.g.3. Homestead parcels:

7.5.g.3.A. Homestead Parcels shall be designated as either rural or village parcels. All parcels shall contain machine passable land appropriate to the designated use.

7.5.g.3.B. Each rural homestead parcel shall be provided with a garden area of at least 5,000 square feet. Each village homestead parcel shall be provided with a garden area of at least 600 square feet. The garden areas shall be constructed in compliance with the soil requirements set forth in subdivision 7.5.j. of this rule.

7.5.g.3.C. Each rural and village homestead parcel shall contain a building pad of a minimum of 2,500 square feet for a dwelling. Each rural homestead parcel shall also contain a building pad of a minimum of 2,500 square feet for an outbuilding.

7.5.g.4. Civic Parcels:

7.5.g.4.A. The Homestead Plan shall delineate one or more appropriate sites within the total proposed Homestead area for Civic Parcels. These uses may include, but are not limited to, the following: park land, playing fields, schools, post office, and community administrative facilities. This area shall occupy at least 10% of the post-mining permit area.

7.5.g.4.B. The Civic Parcels may be one contiguous parcel or appropriately sized non-contiguous parcels.

7.5.g.4.C. The Civic Parcels shall be deeded at no charge to the duly recognized Community Association.

7.5.g.4.D. The Civic Parcels shall be provided with an access road and utilities that are consistent with the proposed civic land use.

7.5.g.5. Commercial Parcels:

7.5.g.5.A. The Landowner of Record may elect to retain up to 15% of the land in the proposed Homestead Area for the purpose of commercial development; provided that the Landowner of Record may retain no more than 50% of the permitted area.

7.5.g.5.B. The retained commercial area may be comprised of one or more parcels and shall be indicated on the Land Plan.

7.5.g.5.C. In the area for the Commercial Parcel the mine-spoil shall be placed, compacted, and regraded in a manner consistent with the proposed commercial land use.

7.5.g.6. Approval:

7.5.g.6.A. Before approving a homesteading reclamation plan, the Director shall assure that Homestead Plan is reviewed and approved by either a licensed architect, landscape architect, or AICP certified land planner employed by or under contract to the Director. In addition, the Director shall assure that the plans for Rural Parcels are reviewed and approved by an agronomist employed by or under contract with the Director. The applicants shall pay for any review under this subsection.

7.5.h. Construction And Conveyance Of Homestead Parcels. All construction projects not performed by the homesteaders on Homestead Areas shall be performed by the Permittee, using a West Virginia licensed contractor.

7.5.h.1. STABILIZATION OF THE HOMESTEAD AREA:

7.5.h.1.A. The Homestead Plan shall describe the methods that will be used during the placement of mine spoil to minimize mine spoil consolidation and its associated ground settlement, where such settlement will adversely affect the use of the homestead. Conditions relating to the placement of structures on the mine-spoil shall be clearly identified in the Plan.

7.5.h.1.B. The Plan must delineate the areas on each parcel where the mine-spoil will be placed in a manner to minimize post-mining land surface settlement on Building Pads, roads and other appropriate areas.

7.5.h.1.C. The placement methodology shall be specified by a qualified engineer. The Plan shall indicate the type and style of structure appropriate for each building pad. The Plan shall include the requirement that a professional engineer will monitor the construction of the building pads to certify compliance with the specifications of the plan.

7.5.h.2. Construction Of The Building Pad:

7.5.h.2.A. Building Pads shall be designed by a registered professional engineer.

7.5.h.2.B. The registered professional engineer shall supervise the placement of the uppermost 20 feet of spoil for Building Pads to minimize consolidation.

7.5.h.2.C. The engineer shall certify the integrity of the Building Pad and that the Building Pads will not settle more than 2 inch after the expected structure is in place.

7.5.h.2.D. Building Pads shall be designed to accommodate the type of building expected to be placed on the pad.

7.5.h.2.E. Building Pads shall not be placed on valley fills.

7.5.h.3. Conveyance Of Homestead Parcels:

7.5.h.3.A. Estimated short and long-term costs to Homesteaders shall be designated in the Homestead Plan and presented to Homesteaders immediately after the Lottery on a parcel specific basis.

7.5.h.3.B. The rights to the surface estate shall be deeded to each Homesteader free and clear of all liens and encumbrances as soon after bond release as the Escrow Agent determines that the property is ready for use. The deeds shall not retain right of entry onto the homestead parcels to conduct future surface mining activities.

7.5.h.3.C. Consistent with State and federal law, the transfer of the surface to the Escrow Agent may be for surface rights only and need not include any minerals, oil or gas and shall be subject to usual and customary mining or extraction rights.

7.5.h.3.D. Before receiving the Homestead Parcel, each homesteader shall:

7.5.h.3.D.1 Install and reside in a dwelling whose structure complies with the Homestead Plan community association rules, and all applicable local, county and state laws;

7.5.h.3.D.2 Reside on the parcel for at least forty-five weeks each year for five (5) consecutive years prior to receipt of title to the land;

7.5.h.3.D.3. Use and improve the parcel by completing a dwelling that complies with this rule, installing an approved septic system and maintaining vegetative cover on all parts of the homestead parcel and plant trees from the Public Nursery in accordance with subdivision 7.5.1.4. of this rule.

7.5.h.3.E. In the event extreme hardship causes a homesteader to be forced to sell his property before the five-year occupancy period has expired, the Escrow Agent shall convey title early. The Escrow Agent's determination of extreme hardship shall be reasonable by the Circuit Court of County in which the homestead parcel is located.

7.5.i. Required Infrastructure

7.5.i.1. Roads:

7.5.i.1.A. The Land Plan shall designate an all-weather road connecting the Homestead Area to a public road or highway. The road shall meet State Department of Highways' standards, and shall be certified as safe for passenger car traffic by registered professional engineer.

7.5.i.1.B. The Land Plan shall incorporate adequate road frontage to all parcels. Such roads shall

be designated in the plan and referred to as "main roads." Main roads shall meet State Department of Highways standards, and shall be certified as built as safe for passenger car traffic by registered civil engineer. Before the Director may approve a surface mining application for this use, the County or State road authority shall conditionally agree to accept responsibility for maintaining the all-weather and main roads after mining is complete.

7.5.i.1.C. The Land Plan shall provide an entrance from the main road to each parcel, complete with culvert as needed. The Homesteader shall be responsible for extending the driveway from the entrance to the building pad.

7.5.i.2. Wastewater And Sewage:

7.5.i.2.A. The Homestead Plan shall incorporate a wastewater and sewage disposal plan conditionally approved by the Director, the West Virginia Bureau of Public Health or the public health authority of the county. The wastewater/sewage disposal system shall be approved by the appropriate entities before Phase II bond release shall be authorized. No such approval may be granted unless the system meets local health department standards.

7.5.i.2.B. A variety of wastewater and sewage disposal systems, including individual septic systems, may be proposed. Alternative/innovative systems shall be consistent with all State and federal regulations. The reclamation, topsoiling, grading, and revegetation plan of each parcel shall be designed to accommodate the proposed wastewater/sewage system.

7.5.i.2.C. The Homestead Plan shall provide a functional wastewater and sewage system for each Civic, Commercial or Homestead Parcel. The system shall describe an approved hookup/cleanout point no more than 50 feet from such homestead and civic Building Pads.

7.5.i.2.D. Each Homesteader shall be responsible for all costs incurred to connect structures on the Homestead parcel to the wastewater and sewage system. Additionally, if necessary, each homesteader shall be responsible for all costs incurred to install an individual septic system.

7.5.i.2.E. The entity administering the Civic Parcel shall be responsible for all costs incurred to connect structures on the Civic Parcel to the wastewater and sewage system.

7.5.i.2.F. The Homestead Plan shall describe the maintenance and upkeep demands of any proposed sewage disposal system, and shall designate the entity responsible for such maintenance. Phase III bond release may not be approved until the designated entity has accepted responsibility for such maintenance.

7.5.i.3. Water Supply:

7.5.i.3.A. The Homestead Plan shall include a potable water supply source or sources adequate for each Homestead Parcel. The supply of water shall be provided by one of the following methods in the following order of priority: a) water piped from an existing public water supply; b) from wells; or c) from reservoirs with catchment basins adequate to supply the homestead area. Before authorizing any system of potable water supply that is not piped from an existing water supply, the Director shall find, in writing, that the higher order methods of delivery of potable water are not feasible. The Director may rely on the sewers if an appropriate Public Health Authority.

7.5.i.3.B. The Permittee shall establish and pay for the potable water supply system.

7.5.i.3.C. The water shall be delivered at a constant rate and at water industry accepted pressure and flow.

7.5.i.3.D. The Homestead Plan shall describe the future maintenance of the water supply system. If the water system is public, the plan shall designate the entity responsible for its upkeep. Homesteaders may be required to pay a fair market price for the water. Homesteaders shall not be charged for water from their own individual well, although Homesteaders shall be responsible

for maintenance of their own wells.

7.5.i.3.E. Individual supply systems shall, at a minimum, meet all applicable health standards, comply with all state and federal laws, and be approved by the appropriate public health authority. Appropriate wellhead protection or watershed protection practices shall be incorporated into the Homestead Plan, and shall be protect water from potential vulnerability from future land use.

7.5.i.3.F. The source or sources of potable water must be identified within the Homesteading Plan, along with a demonstration of the adequacy of quantity and quality. Upon completion of the reclamation plan, the Permittee shall install and demonstrate the quality and adequacy of the supply. If the originally proposed water supply system proves to be inadequate or unsuitable, the Permittee shall immediately make application with the Director for approval of alternate supplies or adequate improvements to the water supply system. The resulting improvements and/or alternate supplies shall comply with the requirements in this rule and shall be subject to the approval of the appropriate public health authority. Phase I bond release may not be approved until the Director finds that the installed water supply complies with this rule and applicable State and federal law.

7.5.i.3.G. The Homestead Plan shall describe a water supply plan that is adequate to meet the needs of the Homestead Area. The water supply plan shall address the anticipated future land use of the Homestead Area, and must be reviewed and approved by the Director and the appropriate public health authorities.

7.5.i.3.H. The potable water supply sources shall meet the Federal Primary Drinking Water Maximum Contaminant Level standards. (40 CFR 141, Subpart B). Verification of such quality shall be provided to the appropriate public health authority.

7.5.i.3.I. The supply source means the contiguous water body or contiguous aquifer from which supplies are drawn. If multiple homestead unit supplies are withdrawn from the same source, determination of water quality of the source shall be made at points that are representative of the water that will be withdrawn from the source.

7.5.i.3.J. The potable water supply shall provide for a minimum quantity of 12,500 gallons per month per homestead unit. The supply may incorporate one or a combination of sources and storage facilities demonstrated to provide an adequate supply for each homestead parcel.

7.5.i.3.K. If a ground water source is to be used, the plan and the confirmation of the installed ground water supply system shall be conducted under the direction of a qualified ground water professional. The locations of drilled wells shall be consistent with appropriate public health requirements.

7.5.i.3.L. The water supply shall be developed (or extended as applicable) free of charge to the homesteader to a point within 50 feet of the designated residence and civic parcel construction pads for each homestead unit.

7.5.i.3.M. After initial establishment of compliant water quality and quantity, responsibility for maintenance of the water supply shall revert to the homesteader or, in the event that the supply is community- or publicly-controlled, to the appropriate and capable public authority.

7.5.i.3.N. When the potable water supply is insufficient to meet the needs of the proposed use for rural homestead parcels, the Homestead Plan shall include nonpotable water supplies for uses that do not require potable water. Before approving Phase I bond release, the Director shall find that the non-potable water supply is sufficient in both quality and quantity for such uses, including agricultural uses. The plan for the system shall indicate the provisions that will be taken to assure that the potable water supply shall not be compromised. The approval of nonpotable water supplies distribution and handling system shall be consistent with State and

federal law.

7.5.i.3.O. Each Homesteader shall be responsible for costs incurred to connect dwellings to water facilities.

7.5.i.3.P. The entity administering the civic parcel shall be responsible for costs incurred to connect structures on the civic parcel to water facilities.

7.5.i.3.Q. If a reservoir is used, a registered professional engineer shall certify its integrity. The engineer shall also certify that, taking account of inflow, seepage and evaporation, the reservoir will provide the amount of water and water pressure required by the Homestead use.

7.5.i.4. Electrical Utilities:

7.5.i.4.A. The Homestead Plan shall provide access to electrical power for all Homestead Parcels and for all Civic Parcels requiring electric power. The quantity of electricity supplied shall be sufficient to support the proposed use. Phase II bond release may not be approved until all the necessary facilities have been rendered operational and extended to a point where the service drop for the Homestead or Civic Parcel can be accomplished in no more than one span. If a service lateral is proposed, access to electrical power shall be deemed to have been satisfactorily provided when the service lateral is no more than 50 feet in length. Such electrical power facilities shall be designated in the plan and referred to as "main electrical power facilities".

7.5.i.4.B. All line work shall conform to the practices of the electric power utility servicing the area. The installed main utilities and associated equipment shall be conveyed to the electric power utility servicing the area.

7.5.i.4.C. Each Homesteader shall be responsible for all costs incurred to install a service drop or service lateral the building pads.

7.5.i.4.D. The entity administering the Civic Parcel shall be responsible for all costs incurred to install a service drop or service lateral to structures on the Civic Parcel.

7.5.i.4.E. Each Homesteader shall be responsible for cost of electrical service.

7.5.i.5. Communication Services:

7.5.i.5.A. The Permittee shall provide access to telephone service for all Homestead Parcels and for all Civic Parcels requiring telephone service. Phase II bond release may not be approved until access to telephone service has been rendered operational and extended to a point within 50 feet of the Parcel's building pads. Such telephone or equivalent utilities shall be designated in the plan and referred to as "main telephone facilities".

7.5.i.5.B. All service line work shall conform to the practices of the telephone service provider of the area. All line work and associated equipment shall be conveyed to the local telephone service provider.

7.5.i.5.C. Each Homesteader shall be responsible for all costs incurred to extend and connect main telephone facilities to the building pads.

7.5.i.5.D. The entity administering the Civic Parcel shall be responsible for all costs incurred to extend and connect main telephone facilities to the Civic Parcels.

7.5.i.5.E. Each Homesteader shall be responsible for the cost of telephone service.

7.5.i.6. Solid Waste:

7.5.i.6.A. The Homestead Plan shall contain a plan for the off-site disposal of solid waste that is acceptable to the Director and the appropriate public health authority.

7.5.i.7. Surface Drainage And Stormwater:

7.5.i.7.A. The Homestead Plan shall contain a detailed surface drainage pattern and stormwater runoff control plan. This plan shall be certified by a registered professional engineer.

7.5.i.7.B. The surface drainage pattern and stormwater plan shall be consistent with a surface drainage pattern that would be found on natural topography similar to the post-mining

topography proposed in the Homestead Plan. The beds of the surface and stormwater drainways shall contain material that is as natural as practicable.

7.5.i.8. Reforested Conservation Easements:

7.5.i.8.A. The Homestead Plan shall identify areas within the Homestead Area reserved for reforested Conservation Easements. These areas shall be reforested by the Permittee at no cost to Homestead.

7.5.i.8.B. In the event that an isolated forest patch exists as a result of mining activities, the Conservation Easement shall serve as a corridor to establish a wind break and a forested connection with the isolated forest patch and to facilitate the adequate movement of fauna out of and into the isolated forest patch.

7.5.i.8.C. Conservation Easements may serve the purpose of a stormwater management systems. In such case, the technical specifications applicable to the design and construction of the storm water channels and their associated structures shall be satisfied.

7.5.i.8.D. Conservation Easement shall compromise at least 10% of the Homestead Area, including the Commercial Parcels.

7.5.i.8.E. The Director shall assure that all areas suitable for hardwoods in the Conservation Easement are planted with native hardwoods at a rate of 500 seedlings per acre in continuous mixtures across the conservation easement with at least six (6) species from the following list: white and red oaks, other native oaks, white ash, yellow-poplar, black walnut, sugar maple, black cherry, or native hickories. Plants shall be a minimum of 2" in diameter at breast height at planting.

7.5.i.8.F. Each of the species shall not be less than 10% of the total planted composition and at least 75% of the total planted woody plant composition shall be from the above list of species. Species shall be selected based on their compatibility and expected site-specific long-term dynamics.

7.5.i.8.G. At least 10% of the required number of woody plants shall be a planted continuous mix of three or more nurse tree and shrub species that improve soil quality and habitat for wildlife. They shall consist of black alder, black locust, bristley locust, redbud, or bi-color lespedeza.

7.5.i.8.H. On areas unsuitable for hardwoods, the Director may authorize the following conifers: Virginia pine, red pine, white pine, pitch pine, or pitch x loblolly hybrid pine. Areas unsuitable for hardwoods shall be limited to southwest-facing slopes of greater than 10% or areas where the soil pH is less than 5.5. These conifers shall be planted as single-species stands less than 10 acres in size at the same rate as the hardwood requirements in this rule. The Director shall assure that no Conservation Easement area contains a total of more than 15% conifers.

7.5.i.8.I. The Director shall assure that the specific species and selection of trees and shrubs shall be based on the suitability of the planting site for each species site requirements based on soil type, degree of compaction, ground cover, competition, topographic position, and aspect.

7.5.i.8.J. The Director shall assure that the total planting rate of trees and nurse plants is not less than 500 stems per acre.

7.5.i.9. Perpetual Easements:

7.5.i.9.A. The Homestead Plan shall describe areas within the Homestead reserved for perpetual easements relating to storm water management, protection of out slopes and steep slopes, protection of water sources, public roads of all kinds, and utilities. These areas shall be included within Homesteader's deeded parcels and may have permanent development restrictions included within the Homesteader's deeds of conveyance.

7.5.i.9.B. Fill faces shall be placed under perpetual easements that prohibit activities that may lead to instability or erodability. Trees may be planted on the faces of the fills.

7.5.i.10. Wetlands: Each Homestead Plan may describe areas within the Homestead Area reserved for created wetlands. These created wetlands may be ponds, permanent impoundments

or wetlands created during mining. They may be left in place after final bond release.

7.5.j. Soils, Soil Placement And Grading

7.5.j.1. General Requirements:

7.5.j.1.A. Phase I bond release shall not be approved until a soil scientist certifies and the Director finds that the soil meets the criteria established in this rule and has been placed in accordance with this rule.

7.5.j.1.B. The Homestead Plan shall include a topographic map of the permit area, 1:12000 or finer, showing the location of pre-mining native solids, weathered slightly-acidic brown sandstone and drainages which includes site index for common native tree species. A profile description of each soil mapping unit that includes, at minimum, soil horizons, including the O horizon depths, soil texture, structure, color, reaction and bedrock type. A certified professional soil scientist shall conduct a detailed on-site survey, create the maps, and provide the written description of the soils and sandstones.

7.5.j.1.C. The Homesteading Plan shall include a description of the present soils and soil substitutes to be used as the plant medium, and a description of the proposed handling, and placement of these materials. The handling plan shall include procedures to:

7.5.j.1.C.1. Protect native soil organisms and the native seed pool;

7.5.j.1.C.2. Include organic debris such as litter, branches, small logs, roots and stumps in the soil;

7.5.j.1.C.3. Inoculate the minesoil with native soil organisms; and

7.5.j.1.C.4. Increase soil fertility.

7.5.j.1.D. A surface preparation plan which includes a description of the methods for replacing and grading the soil and other soil substitutes and their preparation for homesteading.

7.5.j.2. Landscape Criteria:

7.5.j.2.A. The Director shall assure that the postmining landscape is rolling, and diverse. The backfill on the mine bench, shall be configured to create a postmining topography that includes the principles of landforming to reflect the premining irregularities in the land. Postmining landform shall provide a rolling topography with slopes of between 5% and 15%. The elevation change between the ridgeline and the valleys shall be varied. The slope lengths shall not exceed 500 feet. The minimum thickness of backfill, including minesoil, placed on the pavement of the basal seam mined in any particular area shall be 10 feet.

7.5.j.2.B. At least 3 ponds, permanent impoundments or wetlands totaling at least 3.0 acres shall be created on each 200 acres of permitted area. They shall be dispersed throughout the landscape and each water body shall be no smaller than 0.20 acres. All ponds, permanent impoundments or wetlands shall comply with all requirements of this rule, and shall be left in place after final bond release.

7.5.j.2.C. All ponds and impoundments created during mining shall be left in place after bond release and shall comply with all the requirements of this rule.

7.5.j.2.D. The ponds, permanent impoundments, surface water channels and wetlands on the Permit Area shall be vegetated on the perimeter with at least six native herbaceous species typical of the region at a density of not less than 1 plant per linear foot of edge, and at least 4 native shrub species at a density of not less than 1 shrub per 6 linear feet of edge. No species of herbaceous or shrub species shall be less than 15% of the total for its life form.

7.5.j.2.E. The landscape criteria in this rule do not apply to valley fills.

7.5.j.3. Soil:

7.5.j.3.A. Soil is defined as and shall consist of the O, A, B, C, and Cr horizons.

7.5.j.3.B. The Director shall require the operator to recover and use all the soil on the mined area,

as shown on the soil maps, except for those areas with a slope of at least 50%, and other areas from which the applicant affirmatively demonstrates and the Director finds that soil cannot reasonably be recovered. The Director shall assure that all saved soil includes all of the material from the O and A horizons.

7.5.j.3.C. When the Director determines that available soil volume on the permit area is not sufficient to meet the depth requirements, selected overburden materials may be used as soil substitutes. Soil substitutes shall consist of weathered, slightly acid, brown sandstone from within 10 feet of the soil surface if the Director determines that such material is available. Material from this layer may be removed with the soil and mixed with the soil in order to meet the depth requirement.

7.5.j.3.D. If the applicant affirmatively demonstrates and the Director finds that weathered, slightly acid, brown sandstone from within 10 feet of the soil surface cannot reasonably be recovered, weathered, slightly acid, brown sandstone taken from below 10 feet of the soil surface from anywhere in the permit area may be substituted. Materials may be suitable for this purpose only if their bulk pH in water is between 5.0 and 7.0. Materials with net potential acidity greater than 5 tons of calcium carbonate equivalence per 1000 tons may not be used.

7.5.j.3.E. Before approving the use of soil substitutes, the Director shall require the permittee to demonstrate that the selected overburden material is suitable for restoring land capability and productivity. This will be demonstrated by the results of chemical and physical analyses, including pH, total soluble salts, phosphorus, potassium, calcium, texture class, acid-base accounting, and other such analyses as necessary.

7.5.j.3.F. The final surface material used on all parts of the permit area except roads, building pads, and valley fill faces shall consist of a minimum of 4 feet of soil, or a mixture of soil and suitable soil substitutes.

Homesteading soil depth shall contain at least 33% soil. If the applicant affirmatively demonstrates and the Director finds, that sufficient weathered slightly acid brown sandstone cannot reasonably be recovered from the mined area to satisfy the mine soil depth requirement, then up to one quarter of the total volume of the minesoil may consist of highly-fractured sandstone, as long as it has been demonstrated that the physical and chemical quality of this material is suitable.

7.5.j.3.G. If the applicant does not demonstrate that there is sufficient material available on the permit area to satisfy the requirements of this rule, then the Director may not authorize a Homesteading variance.

7.5.j.3.H. The Director may require the operator to include as part of the minesoil mix organic debris such as forest litter, branches, small logs, roots and stumps in the soil to help reseed the native vegetation, inoculate the minesoil with native soil organisms and increase soil fertility.

7.5.j.3.I. The Director shall require that soil be removed and reapplied in a manner that minimizes stockpiling such that seed pools and soil organisms remain biological viable. No more than 10% of the available soil, described in the Director's findings, may be placed in a long-term stockpile, soil redistribution shall be done within one month of soil removal. Except for soil in a long-term stockpile, soil shall be stored for less than one month in piles less than six feet high and 24 feet wide in a stable area within the permit area where it will not be disturbed and will be protected from water or wind erosion or contaminants that lessen its capability to support vegetation. Long-term stockpiles shall be seeded with ground cover mixes used for reforestation.

7.5.j.4. Soil Placement And Grading:

7.5.j.4.A. Except for valley fill faces, building pads, roads, and other areas that must be

compacted, the Director shall require the Permittee to place minesoil loosely and in a non-compacted manner while meeting static safety factor requirements. Grading the final surface shall be minimized to reduce compaction. Once the material is placed, light grading equipment shall be used to grade the tops of the piles, roughly leveling the area with no more than one or two passes. Tracking in and rubber-tired equipment shall not be used. Non-permanent roads, equipment yards and other trafficked areas shall be deep-ripped (24" to 36") to mitigate compaction.

7.5.j.4.B. Soil physical quality shall be inadequate if it inhibits water infiltration or prevents root penetration or if their physical properties or water-supplying capacities cause them to restrict root growth of trees. Slopes greater than 50% shall be compacted no more is necessary to achieve stability and non-erodability.

7.5.j.4.C. The Director shall require the permittee to leave soil surfaces rough with random depressions across the entire surface to catch seed and sediment, conserve soil water. Organic debris such as forest litter, logs, and stumps may be left on and in the soil.

7.5.j.5. Limiting And Fertilizing: The Permittee shall submit a liming and fertilizing plan. The Director shall assure that the liming and fertilizing plan is appropriate for establishing the ground cover vegetation.

7.5.j.6. Ground Cover Vegetation:

7.5.j.6.A. The Director shall require the permittee to establish a temporary vegetative cover as contemporaneously as practicable with backfilling and grading. This cover shall consist of a combination of native and domesticated non-invasive cool and warm season grasses and other herbaceous vine or shrub species including legume species and ericaceous shrubs. All species shall be slow growing. The ground cover vegetation shall be capable of stabilizing the soil from excessive erosion. Seeding rates and composition must be in the Homestead Plan. The following ground cover mix and seeding rates (pounds/acre) shall be used: winter wheat (15 lbs/acre, fall seeding), foxtail millet (5 lbs./acre, summer seeding), redtop (2 lbs/acre), perennial ryegrass (2 lbs/acre), orchardgrass (5 lbs/acre), weeping lovegrass (2 lbs/acre) kobe lespedeza (5 lbs/acre), birdsfoot trefoil (10 lbs./acre), and white clover (3 lbs/acre). Kentucky-31 fescue, serecia lespedeza, all vetches, clovers (except ladino and white clover) and other aggressive or invasive species shall not be used. On south- and west-facing slopes with a soil pH of 6.0 or greater, the four grasses in the mixture shall be replaced with 20 lbs/acre of warm-season grasses consisting of the following species: Niagara big bluestem 95 lbs/acre), Camper little bluestem (2 lbs/acre), Indian grass (2 lbs/acre), and Shelter switch grass (1 lb/acre), or other varieties of these species approved by the Director. Also, a selection of at least 3 ericaceous shrub species shall be included in the ground cover mix.

7.5.j.6.B. The Permittee may regrade and reseed only those rills and gullies that are unstable.

7.5.j.7. Front Faces Of Valley Fills:

7.5.j.7.A. Front faces of valley fills shall be exempt from the requirements of this rule except that:

7.5.j.7.A.1. They shall be graded and compacted no more than is necessary to achieve stability and non-erodability.;

7.5.j.7.A.2. No shales may be present in the upper four feet of surface material;

7.5.j.7.A.3. The upper four feet of surface material shall be composed of soil and weathered brown sandstone when available, unless the Director determines other material is necessary to achieve stability;

7.5.j.7.A.4. The groundcover mixes described in subparagraph shall be used unless the Director requires a different mixture.

7.5.j.7.A.5. Kentucky 31 fescue, serecia lespedeza, vetches, clovers (except ladino and white

clover) or other invasive species may not be used; and

7.5.j.7.B. Although not required by this rule, native, non-invasive trees may be planted on the faces of fills.

7.5.k. Requirements For Reclamation Maps. An appropriately scaled, "as-built" topographic map of the Homestead Area shall be prepared and submitted as part of the permit application. An identically scaled *overlay* map showing the elevation contours at the base of all mined areas as well as the original ground contour of all excess mine spoil storage areas shall accompany the as-built map. The overlay map shall identify all backfilled mine sites and excess mine-spoil storage areas. The overlay map shall depict the boundaries of all parcels, areas of mine spoil specifically compacted for the placement of structures, easements, and areas that the Director may designate for special or limited uses. All post-reclamation maps shall be prepared under the direction of and certified by a registered professional engineer and shall be recorded with the county within one year following the final reclamation of the proposed Homestead Area.

7.5.l. Homestead Village

7.5.l.1. Homestead Village: The Homestead Village provides for a residential development at a higher density than in rural Homestead parcels. The Village is intended to:

7.5.l.1.A. Encourage mixed residential and commercial land uses, and

7.5.l.1.B. At least 20% of the Homestead Area shall be composed of Village parcels.

7.5.l.2. Village Parcel Requirements:

7.5.l.2.A. Each Village homestead parcel shall be no larger than one acre in size.

7.5.l.2.B. Each parcel shall have a minimum road frontage of 40 feet. No pipe stem parcel arrangements are permitted.

7.5.l.2.C. Each parcel shall be graded evenly to 5% maximum.

7.5.l.3. Common Lands: In addition to the Civic Parcels and Conservation Easements, each Homestead Area shall include a reserve of 10% of the land as a common area. The Common Land shall be conveyed to the Community Association. The planning and maintenance of the Common Land shall be the responsibility of the Community Association.

7.5.l.4. Public Nursery: Each Village Homestead shall designate an area for a Public Nursery constructed and planted by the Permittee at no cost to the Homesteaders. The nursery may be located adjacent to the Common Land but shall not constitute the required Common Land area. The Nursery shall provide woody plants of high quality and appearance for the use of the Homesteaders as specified below.

7.5.l.4.A. The nursery shall be 1 acre per 30 acres of Homestead Area. The Public Nursery shall be a civil parcel. The Permittee shall plant the nursery with the same species and to the same standards as required in the Conservation Easement. Once bond is released, the Community Association shall be responsible for maintaining the nursery. Success standards shall be the same as for the conservation easements.

7.5.l.4.B. The nursery plants shall consist of at least six species from the following list: white oak, red oak, other native oaks, white ash, yellow poplar, black walnut, sugar maple, black cherry, or native hickories.

7.5.l.4.C. Adequate water supply shall be provided for the nursery. This may be achieved through any of the water supply means specified or through the stormwater drainage system.

7.5.l.4.D. The nursery shall be maintained in manner consistent with the healthy development of the plants. The nursery plants shall meet the following criteria upon conveyance: 1) in regular form for the species, 2) 80% live branches, and 3) color consistent with the species. Materials not meeting the specifications shall be replaced with like species by the permittee. After final bond

release, the nursery shall be conveyed to the Community Association.

7.5.1.4.E. Each Homesteader shall be allowed to take trees from the nursery as determined by the Community Association. The remainder of the trees shall be for the common landscapes.

7.5.m. Community Association:

7.5.m.1. At the completion of the lottery, a Community Association shall be established among the designated Homesteaders for each Homestead Area. The Association shall maintain and administer the public areas, Conservation Easements and Civic Parcels of the Homestead and may levy membership fees.

7.5.m.2. By-laws for the Community Association shall be developed by the Escrow Agent, working with the Homesteaders and a qualified design professional as defined by this rule. The permittee shall pay the qualified land designer for such services. The by-laws may establish rules for building standards and other Homestead Area rules, as appropriate.

7.5.m.3. Membership in the association is mandatory for all Homesteaders and their successors.

7.5.m.4. The association shall obtain liability insurance for its property and shall be responsible for maintenance of insurance and taxes on undivided open space. The association may place liens on the homes or houselots of its members who fail to pay their association dues in a timely manner. Such liens may require the imposition of penalty interest charges.

7.5.m.5. The association shall administer common facilities and pay for maintaining and developing such facilities.

7.5.n. Interim Homestead Management

7.5.n.1. The Director or the Director's designee shall administer the Homestead Selection Lotteries.

7.5.n.2. The Escrow Agent shall monitor the 5-year occupancy requirement for each Homestead Parcel and transfer of the titles of the surface estates to the qualified Homesteaders.

7.5.n.3. The Escrow Agent shall manage and administer the homestead between final bond release and the time when all of the titles to the Homestead Parcels have been transferred and duly recorded with the Clerk of the County.

7.5.n.4. Funding these services shall be guaranteed by an insured Bank account established by the Permittee.

7.5.n.5. Before approving any Homestead variance, the Director shall find, in writing, that the funds in the account are sufficient to pay for these services.

7.5.n.6. After final bond release, this account shall be administered by the Escrow Agent.

7.5.n.7. The Escrow Agent shall receive the surface rights to the entire Homestead Area and all-weather and main roads before mining begins.

7.5.n.8. The Escrow Agent shall be charged with responsibility for transferring the surface rights in escrow to the Homesteaders, the Community Association, or the State or county road authority.

7.5.n.9. Such transfers shall promptly occur upon certification by the Escrow Agent that the Homesteader has met the requirements of this rule.

7.5.n.10. Before the homesteader receives title, property may revert to the Escrow Agent, when after notice and hearing, the Escrow Agent determines that the homesteader has not abided by this rule. The Escrow Agent's determination shall be reviewable by the Circuit Court of the County in which the homestead parcel is located.

7.5.n.11. If developed property reverts to Escrow, the Escrow Agent shall promptly sell the property and remit proceeds, less costs, to the homesteader, up to the value of the homesteader's investment.

7.5.n.12. Because deeds to Homestead Parcels will not be transferred to Homesteaders before a Homesteader has lived on a parcel for five years, lending institutions may be reluctant to make loans to Homesteaders before the five-year period has expired. Accordingly, to assure that

lending institutions are willing to make loans to Homesteaders during this period, the Escrow Agent shall establish a system to provide mortgage insurance to homesteaders so that lenders will be able to finance private development of homestead parcels. The Escrow Agent shall have all powers necessary to structure loans and other necessary transactions so lenders are reasonably secure.

7.5.o. Bond Release:

7.5.o.1. Before approving Phase I bond release, the Director shall assure that the soil is in place, the vegetative cover has been established, that the water system has been completed, that the roads have been completed and transferred to the State or county road authority, and that the main electricity transmission line is in place.

7.5.o.2. Phase II bond release may not occur before two years have passed since Phase I bond release. Before approving Phase II bond release, the Director shall assure that the vegetative cover is still in place. The Director shall further assure that the tree survival on the Conservation Easements and Public Nurseries are no less than 300 trees per acre (80% of which must be species from the approved list). Furthermore, in the Conservation Easement and Public Nursery areas, there shall be a 70% ground cover where ground cover includes tree canopy, shrub and herbaceous cover, organic litter, and rock cover. Trees and shrubs counted in considering success shall be healthy and shall have been in place at least two years, and no evidence of inappropriate dieback. Phase II bond release shall not occur until the service drops for the utilities and communications have been installed to each Homestead Parcel.

7.5.o.3. The Director may authorize Phase III bond release only after all parcels in the Homestead Areas are certified and ready for occupancy.

7.5.o.4. Once final bond release is authorized, the Permittee's responsibility for implementing the Homestead Plan shall cease."

And,

On page 129, subsection 14.12.a.1, by following the words "industrial, commercial, residential" by striking the word "woodlands" and inserting in lieu thereof "commercial forestry"."