ANR



State of Vermont

# LAND USE PERMIT

**CASE NO** 5W1406
**APPLICANT** Black Rock Coal, Inc.
**ADDRESS** PO Box 277
East Montpelier, VT 05651-0277
and
Stanley and Janice Morse
8261 County Road
Calais, VT 05648
and
Edward and Corrine Simmons
7970 County Road
Calais, VT 05648

**LAWS/REGULATIONS INVOLVED**
10 V.S.A., §§ 6001 - 6092
(Act 250)

The District 5 Environmental Commission hereby issues Land Use Permit 5W1406, pursuant to the authority vested in it by 10 V.S.A., §§ 6001-6092. This permit applies to the lands identified in Book 28, Page 47 and Book 34, Page 135 of the land records of the Town of Calais, Vermont, as the subject of a deed to Stanley and Janice Morse and Edward and Corrine Simmons respectively, the Permittees as Grantees. This permit specifically authorizes the Permittees to develop and operate a granite quarry and a slate quarry on approximately ten acres of a 45 acre tract. The remaining 35 acres will be managed forest. The project also involves the construction of 1500' driveway, two sedimentation ponds, and the construction of parking, storage and topsoil stockpile areas. The project tract is located off County Road in Calais, Vermont.

The project is subject to Act 250 jurisdiction pursuant to Environmental Board Rule 2(A)(2)

The Permittees, and their assigns and successors in interest, are obligated by this permit to complete, operate and maintain the project as approved by the District Commission in accordance with the following conditions:

1. By acceptance of this permit, the Permittees agree to allow representatives of the State of Vermont access to the property covered by the permit, at reasonable times, for the purpose of ascertaining compliance with Vermont environmental and health statutes and regulations and with this permit.

2. The project shall be completed, operated and maintained in accordance with the Findings of Fact and Conclusions of Law 5W1406, the plans and exhibits on file with the District Environmental Commission, and the conditions of this permit. The approved plans are Sheets C-1 dated January 25, 2002, last revised May 20, 2002; Sheet C-2, dated January 25, 2002, last revised June 20, 2002; Sheet C-3, dated February 26, 2002, last revised July 9, 2002, and Sheet C-4, dated May 13, 2002.

3. No changes shall be made in the design or use of this project without the written approval of the District Coordinator or the Commission, whichever is appropriate under the Environmental Board Rules.

4. The District Environmental Commission maintains continuing jurisdiction during the lifetime of the permit and may periodically require that the permit holder file an affidavit certifying that the project is being completed, operated and maintained in accordance with the terms of the permit, as provided by 10 V.S.A., Chapter 151 and the rules of the Environmental Board.

5. By acceptance of the conditions of this permit without appeal, the Permittees confirm and agree that the conditions of this permit shall run with the land and the land uses herein permitted, and will be binding upon and enforceable against the Permittees and all assigns and successors in interest.

6. This permit incorporates all of the terms and conditions of Discharge Permit #3-1489, issued on September 2, 2002 by the Wastewater Management Division, Department of Environmental Conservation, Agency of Natural Resources.

7. Prior to the commencement of construction, the permitteees shall install two 30' x 30' diamond shaped warning signs along County Road in the locations depicted on the site plan. The northern most sign shall be equipped with a beacon which shall be on at all times the quarries are operational.

8. The Permittees shall comply with the drilling and blasting procedures and plan outlined in the *Maine Drilling and Blasting Blast Plan Prepared for Black Rock, Coal, Inc*. Blasting will only during three weeks a year and then only from 10:00 AM until noon for the life of the project.

9. The Permittees shall comply with the maximum clearing limits depicted on the site plans. No more than two acres shall be open at any given time during the life of the project.

10. All vehicles that operate in the quarry shall be equipped with back-up alarms that are activated only if an object or movement is detected behind them.

11. The Permittees shall ensure that reasonable precautions are taken at all times to control fugitive particulate matter (dust) emissions from the site including the haul roads, traffic areas, storage piles, exposed surfaces and any site operations such as drilling and blasting. This shall include the application of water as necessary to the haul roads, traffic areas and storage piles. All trucks leaving the site loaded with material shall be covered to prevent fugitive dust.

12. The operation of crushing and/or screening equipment and pneumatic drills and hammers on site is prohibited.

13. Hours of operation shall be from 8:00 a.m. to 5:00 p.m., Monday through Friday, from May 1st through November 30th, for the life of the project. There shall be no more than four truck haul trips to and from the quarries per day (excluding as-needed trips by the water truck.), and the first truck shall not leave the site prior to 9:00 a.m. There shall be an additional five trips to and from the site for employees. All work shall be suspended during the weeks of Memorial Day, Independence Day, and Labor Day, and during the third week in July. No drilling or blasting shall be permitted during the month of July.

14. The Permittees shall comply with the exhibits for erosion control. The Permittees shall prevent the transport of any sediment beyond that area necessary for construction approved herein. All erosion control devices shall be periodically cleaned, replaced and maintained until vegetation is permanently established on all slopes and disturbed areas. The Commission reserves the right to schedule hearings and site inspections to review erosion control and to evaluate and impose additional conditions with respect to erosion control as it deems necessary.

15. Sediment shall be removed from the sedimentation ponds every year before October 1st, and the removed sediment shall be placed in an overburden storage area. The sediment shall be used in site reclamation.

16. All disturbed areas of the site shall be stabilized, seeded and mulched from October 1 to April 15. No earth disturbance is permitted during this period regardless of whether final grading has been finished. Work may continue through this period if the following winter erosion controls are added to the approved controls:
    a. Oat seeds shall be substituted for any other annual grass seeds.
    b. All exposed earth shall be mulched with 6 inches of hay or straw. Slopes over 5% shall have an additional covering of staked jute mat or its equivalent.
    c. Snow shall be removed from exposed earth before seeding and mulching.

17. In addition to conformance with all erosion control conditions, the permittees shall not cause, permit or allow the discharge of waste material into any surface waters. Compliance with the requirements of this condition does not absolve the permittees from compliance with 10 V.S.A., Chapter 47, Vermont's Water Pollution Control Law.

18. The Permittees shall maintain a 50 foot undisturbed (includes no clearing, no cutting, no mowing, no pesticide use, no motorized activity, no parking or placement of materials) naturally vegetated buffer strip between all watercourses on the project site and any disturbed areas.

19. This permit incorporates the forestry management plan prepared by Redstart Forestry and Paul S. Cate, entitled *Forest Management Plan for Land Which Will be Purchased By Black Rock Coal, Inc.*, dated May 2000.

20. The Permittees shall comply with the reclamation plan as detailed in the Findings of Fact. The Commission shall retain specific jurisdiction under criteria 8 and 9(E), and reserves the right to conduct site visits, and impose additional conditions in order to assure compliance with the operation and reclamation plans.

21. The Permittees shall submit a sworn affidavit each year by December 15th which includes a blasting log and details specific to the amount of material excavated and the total area reclaimed during the past year. A site plan that depicts the areas excavated and the areas reclaimed shall accompany the annual report.

22. This permit shall expire on October 7, 2012 unless an extension request by the applicant is submitted for Commission review and approval. The request shall include, but is not necessarily limited to, estimates of the quantity and quality of material to be extracted, and the time period for which the extension is requested.

23. Notwithstanding any other provision herein, this permit shall expire three years from the date of issuance if the permittees have not commenced construction and made substantial progress toward completion within the three year period in accordance with 10 V.S.A. § 6091(b).

24. Failure to comply with all of the above conditions may be grounds for permit revocation pursuant to 10 V.S.A., § 6090(b).

Dated at Barre, Vermont, this 7th day of October 2002

By /s/ Lisa Nolen Birmingham
Lisa Nolen Birmingham, Chair
District 5 Environmental Commission

Members participating in this decision:
Allan Heath
Karl Johnson

The applicant or a party may file a motion to alter within 30 days from the date of this decision, pursuant to Environmental Board Rule 31. Any appeal of this decision must comply with all provisions of 10 V.S.A. §6089 and Environmental Board Rule 40 including the submission of the original and ten copies of the following: notice of appeal, a statement of why the appellant believes the commission was in error, a statement of the issues to be addressed in the appeal, a summary of the evidence that will be presented, a preliminary list of witnesses and this decision. Decisions on minor applications may be appealed if a hearing was held by the district commission or timely requested by the appellant.

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**STATE OF VERMONT**
**ENVIRONMENTAL BOARD**
**DISTRICT 5 ENVIRONMENTAL COMMISSION**

**RE:** Black Rock Coal, Inc.
PO Box 277
East Montpelier, VT 05651-0277
and
Stanley and Janice Morse
8261 County Road
Calais, VT 05648
and
Edward and Corrine Simmons
7970 County Road
Calais, VT 05648

Application 5W1406
**FINDINGS OF FACT AND CONCLUSIONS OF LAW AND ORDER**
10 V.S.A., §§ 6001 - 6092

## I. INTRODUCTION

On February 27, 2002, Black Rock Coal, Inc. and Stanley and Janice Morse and Edward and Corrine Simmons filed an application for an Act 250 permit for a project generally described as the development of quarry for the extraction of slate and granite. The tract of land consists of 45 acres. The applicant's legal interest is ownership in fee simple described in a deed recorded in the land records of the Town of Calais, Vermont.

Under Act 250, projects are reviewed based on the 10 criteria of 10 V.S.A., Section 6086(a) (1)-(10). Before granting a permit, the District Commission must find that the project complies with these criteria and is not detrimental to the public health, safety or general welfare.

Decisions must be stated in the form of Findings of Fact and Conclusions of Law. The facts we have relied upon are contained in the documents on file identified as Exhibits 1 through 39 and the evidence received at a hearing held on April 8, 2002. At the end of the hearing, the Commission recessed the proceeding pending submission of additional information. The Commission adjourned the hearing on September 13, 2002 upon receipt of the additional information and completion of Commission deliberations.

## II. JURISDICTION

Jurisdiction attaches pursuant to 10 V.S.A, §§ 6001-6092 and Environmental Board Rule 2(A)(2).

## III. PARTY STATUS

A. Preliminary Party Status Determinations

Parties to this application who attended the hearing are:

1. The Applicant by Rose and Greg Pelchuck, their consultants DeWolfe Engineering; and Stanley and Janice Morse

2. The State of Vermont Agency of Natural Resources (ANR) by Elizabeth Lord, Land Use Attorney, through an Entry of Appearance dated April 5, 2002

The following adjoining property owners were either admitted as parties or denied party status, as indicated, pursuant to Board Rule 14(A):

3. Shirley Himes was granted provisional party status under 1, 3, and 8.

4. Linda and Dick Rouelle were granted provisional party status under criteria 1, 3, 5 and 8.

B. Final Party Status Determinations

Pursuant to 10 V.S.A. §6085(c)(2) and Board Rule 14(F), the District Commission made preliminary determinations concerning party status at the commencement of the hearing on this application. Prior to the completion of deliberations, the District Commission re-examined the preliminary party status determinations and found that Shirley Himes and Linda and Dick Rouelle continue to qualify under criteria 1 and 8.

## IV. FINDINGS OF FACT

In making the following findings, the Commission has summarized the statutory language of the 10 criteria of 10 V.S.A., Section 6086(a):

GENERAL FINDINGS

1. The project involves a 52.7 acre tract in Town of Calais. The tract is owned by Stanley and Janice Morse with frontage on Bliss Pond Road. Access to the project is proposed along an existing logging road with deeded right-of-way across Edward and Corrine Simmons property to County Road. (Exhibits 1, 3 and 4) The exact project location is depicted on a USGS map.(Exhibit 5)

2. A 45 acre tract will be transferred to Black Rock Coal, Inc., approximately ten acres of which will be utilized in the quarry operation. The project involves the construction of a 1500 liner foot driveway, two sedimentation ponds, and parking and stockpile storage areas. Clearing and grubbing the quarry area will follow. (Exhibits 3, 28 and 34)

3. The remaining 35 acres will be managed forest subject to a forest management plan. (Exhibits 3, 17 and 34)

4. The site has three ridges of rock, two slate and one granite. The project proposes to quarry the respective ridge lines concurrently. The three ridges and the proposed finished contours are depicted ion Sheet C-2 of Exhibit 28. The project overview is depicted on Sheet C-1.

5. The Zoning Board of Adjustment, Town of Calais, issued a permit for the project in December 1999, which was subsequently appealed to the Vermont Environmental Court, resulting in a Stipulated Settlement Agreement and Order issued on January 25, 2002 . (Exhibit 9) Terms and conditions set forth in Section II of the agreement have been incorporated by the applicants in the Act 250 submittals under the applicable criteria.

SECTION 6086 (a) (1) WATER AND AIR POLLUTION:

The Commission concludes that this project will not result in undue air or water pollution:

SECTION 6086(a)(1) AIR POLLUTION:

6. The project involves quarrying slate and granite, the construction of 1500 linear feet of driveway, timber harvesting, and the construction of two sediment ponds for stormwater and erosion control. These processes will generate dust and noise. (Exhibits 1 and 3)

7. Only water sprayed from a water truck will be utilized to control dust generated by the project. (Testimony of DeWolfe)

8. A noise impact study was prepared by Dr. M.S. Hundal, which defined the parameters of the study and two likely sources of noise. The study is predicated on a 23 week operation, from May 1st through November 30th, 9 hours a day, five days a week, four truck trips a day. (Excluding trips by the water truck when necessary) In addition, a drill will be operated for 3 weeks a year, and a large excavator will be operated for 3 weeks a year. The study assumes noise sources from truck trips and machinery operation. (Exhibit 11)

9. Hours of operation will be limited to 8:00 AM to 5:00 PM Monday through Friday from May 1st through November 30th for the life of the project. The first truck haul trip cannot exit the project site before 9:00 for the life of the project. In addition, work in the quarries will be suspended during the week of Memorial Day, the week of Independence Day, the third week in July and the week of Labor Day. (Exhibits 3 and 9)

10. In the absence of any local or state noise ordinance, the Equivalent Sound Level may be used as the appropriate metric for determining the noise impact in the present situation. The Equivalent Sound Level in dBA is the logarithmic average of noise levels due to all sources such as quarry operation, traffic and other human activities, such as lawn mowing or snowblowing. (Exhibit 11)

11. Peak sound levels from the operation of heavy trucks (≥ 10 cy) is determined to be 90 dBA at 50 feet. Idling or moving trucks below the speed of 25 mph at 200' have a peak sound level of 68 dBA. (Exhibit 11)

12. Peak sound levels from the operation of a drill at 200 feet is 68 dBA . At 200 feet, the peak sound level of a large and a small excavator is 63 dBA and 58 dBA respectively. (Exhibit 11)

13. The study estimated noise impacts at a Bliss Pond Road residence, which is 1500 feet from the quarry; impacts on a neighboring property, which is 1050 feet from the project site; and noise impacts on properties along County Road, south of the quarry entrance.

14. The study concluded that the operation of the quarry will not significantly increase the sound levels in the vicinity of the quarry as the equivalent sound level will increase from 40 to 44 dBA at the nearest property, and on the property on County Road, south of the entrance, the equivalent sound level goes from 60 to 62 dBA. There further concluded that there would be no effect on the sound level at the Bliss Pond Road residence. (Exhibit 11)

15. All quarry vehicles, machines, and equipment that are required by law to have back-up alarms will use "radar back-up alarm" systems instead of "back up beepers". (Exhibits 9 and 12)

16. A Blasting Plan was prepared by Maine Drilling and Blasting, which sets forth the pre-blasting procedures, the drilling and blasting procedures, and the procedures for maintaining a blasting record. The Blast Plan states that blasts will be in conformance with the criteria set forth by the United States Office of Surface Mines. In addition, due to the "sensitive nature of the neighbors, sequential blasting methods will be used, which will greatly reduce ground and air vibrations from quarry shots and thus lessen the likelihood of complaints." As per the settlement agreement, blasting will only during three weeks a year and then only from 10:00 AM until noon for the life of the project. In addition, Maine Blasting, or comparable licensed and insured driller and blaster, will provide notice to appellants of all blast events 24 hours prior to the event. (Exhibits 3, 9 and 10)

Therefore, the Commission concludes that this project will not result in undue air pollution.

SECTION 6086(a)(1)(A) HEADWATERS:

17. The project is located in a watershed drainage area of less than 20 square miles, which meets the statutory definition of a headwaters area. (Exhibit 3)

18. The Commission incorporates by reference herein it findings under criteria 1(B) and 4 with respect to the construction and maintenance of the two sedimentation ponds and erosion controls.

The Commission concludes that the project will meet applicable health and water resources regulations regarding the reduction of the quality of the ground or surface waters in headwaters areas.

SECTION 6086 (a)(1)(B) WASTE DISPOSAL:

19. Wastes generated by the project will include sewage, stormwater runoff, and stumps generated by site clearing. (Exhibits 3, 31 and 34)

20. The project is expected to generate less than 75 gpd, based on 5 employees at 15 gpd. There will be no on-site septic system or use of the municipal system. The project will utilize a portable toilet for employees that will be located near the parking area and will be serviced once per week by a licensed company. The "port-a-potty" will be removed during the shut down of the quarry. (Exhibit 3)

21. Runoff from the parking area and roadway will drain to three separate drainage areas. The roadway drainage will be diverted away from the roadway using shallow sheet flow through grassed or forested areas. The parking area drains to a forested area south of the lot. The flow will not be concentrated but allowed to sheet flow through the woods. (Exhibits 3 and 28)

22. Both quarry work areas will have sedimentation ponds located at their downstream points to provide extended detention for maximum sedimentation. The ponds are designed as "wet extended detention ponds" since their design is controlled by a specified minimum detention time. (31.83 hours based on a ten year design storm. Each pond has an emergency spillway and a Type II stone pad 3' x 6' at the end of the outlet pipe. (Exhibits 31 and 32) Exhibits 28 and 31 depict the design specifications of each of the sedimentation ponds.

23. Discharge Permit #3-1489 was issued to the applicants on September 2, 2002 by the Wastewater Management Division, Department of Environmental Conservation, Agency of Natural Resources. (Exhibit 36)

24. The applicant proposes to use the sediment, which will consist of rock dust, soil material, and forest duff, collected in the sedimentation ponds, for fill material in the reclamation process. (Exhibit 35) The applicant's position was that the solids would settle out and thus would to be suitable to dispose of on-site as part of the reclamation process. The applicant requested a position on this matter from the Waste Management Division. (Exhibit 35)

25. The ANR Waste Management Division, in a response dated September 16, 2002, cited §6-301(b)(2) of the Solid Waste Management Rules, which states that earth material resulting from mining, extraction, or processing operations are exempt from the provisions of the Rules unless the Secretary finds that the materials may pose a threat to the public health and safety, the environment, or create a nuisance. The response further stated that as long as the material was "properly managed and maintained on the site and used in the reclamation process as proposed, the material should not pose a threat to the public health and safety, the environment, or create a nuisance." (Exhibit 38)

26. The state geologist recommended the regular removal of sediments from the sedimentation ponds in order to prevent discharge pipes from clogging or releasing sediment. He further recommended that even though the sediment load is expected to be small, each pond should be cleaned of sediment before October 1 of each year and the removed sediment be placed in an overburden storage area to augment materials that will be used as soil cover during reclamation. (Exhibit 21)

27. Water is only required for use in dust control; a water truck will be used to deliver fresh, untreated water for dust control purposes. (Exhibit 3 and Testimony of DeWolfe)

28. No on-site storage of oils, fuels, chemical, cleaning fluids, solvents, batteries, pesticides or other hazardous materials is associated with this project. Quantities of grease, oil, fuel required for operation and minor maintenance of equipment will be brought to the site daily by pickup truck and removed each night. (Exhibit 3)

29. Waste oil and other fluids generated from preventative maintenance of equipment will be removed from site on the same day maintenance is preformed. Preventive maintenance will be done every 250 hours of running time on each piece of equipment. Standard safety care measures will be taken to protect against spills and leaks. (Exhibit 3)

30. The applicant will dispose of all stumps in on-site berms above the seasonal high ground water table. (Exhibits 3 and 28).

31. Brush, tree limbs etc. will be chipped and used as mulch for erosion control. (Exhibit 3)

32. Topsoil will be stockpiled on-site for future use in reclamation. The stockpiles will be seeded, mulched and ringed with silt fencing to prevent erosion. (Exhibits 3 and 28 and Testimony of DeWolfe) No topsoil will be removed from the site. Additional topsoil will be imported if necessary in order to fulfill the reclamation plan. (Testimony of DeWolfe)

Therefore, the Commission concludes that this project will meet applicable Division of Wastewater Management Regulations and will not result in the injection of waste materials or harmful or toxic substances into groundwater or wells.

SECTION 6086(a)(1)(C) WATER CONSERVATION:

33. The project does not involve the use of any plumbing fixtures. Water required for dust control will be brought on-site by a truck as required. (Exhibit 3)

Therefore, the Commission concludes that the project utilizes the best available technology for water conservation.

SECTION 6086(a)(1)(D) FLOODWAYS:

34. The project is 1400 feet from Bliss Pond, the nearest water body. (Exhibits 3, 5 and 6)

Therefore, the Commission concludes that this project will not be located in any floodway or floodway fringe.

SECTION 6086 (a)(1)(E) STREAMS:

35. There is an intermittent stream feeding an un-named tributary to the wetland that eventually flows into Sodom Pond. An 18" culvert will be installed as part of the access upgrade to allow the wetland overflow to drain to the intermittent stream. The intermittent stream will be preserved through the maintenance of the managed forest buffer area. (Exhibits 3 and 28)

Therefore, the Commission concludes that the applicant will maintain the natural condition of any streams.

SECTION 6086(a)(1)(F) SHORELINES:

36. The project is located 1400 linear feet northeast from Bliss Pond, which is the closest river, lake, pond or reservoir closest to the project site. (Exhibit 3 and 6)

Therefore, the Commission concludes that this project will not be located on any shoreline.

SECTION 6086(a)(1)(G) WETLANDS

37. There are no Class I or Class II wetlands located on the project tract. (Exhibit 3)

38. There is a Class III wetland located on the western side of the tract. The wetland is approximately 0.55 acres in size. 99% of the wetland is located on adjoiner Guerrette's property. This wetland is located at the closest point 20 liner feet from the existing logging road, which will be upgraded for access to the quarry. (Exhibits 3, 14, and 28)

39. The closest new construction disturbance to the Class III wetland is approximately 200 liner feet. The existing logging road passes within 20 liner feet of the wetland.

Therefore, the Commission concludes that this project will not violate the rules of the Water Resources Board relating to significant wetlands.

SECTION 6086(a)(2 & 3) WATER AVAILABILITY AND IMPACT ON EXISTING SUPPLY:

40. The project does not involve the use of domestic water. Any water required for dust control will be trucked onto the site. (Exhibit 3)

41. The nearest public water supply source is the Worcester Fire District No 1, which is located approximately two miles west of the project site. (Exhibits 3 and 6)

42. The quarry operation will not involve excavating a pit into bedrock, which often requires pumping groundwater out of the excavation to allow the operation to continue. There will be no groundwater extraction required on any part of the project. (Exhibit 13) Based on the extraction plans, a site visit, and a review of the topographic and geologic maps, along with the existing well locations and well logs, the applicant's hydrologist found it unlikely that any significant impact on groundwater resources in the vicinity would occur as a result of the project. (Exhibit 13)

Therefore, the Commission concludes that there is sufficient water available to meet the needs of this project and that it will not place an unreasonable burden on an existing supply.

SECTION 6086 (a)(4) SOIL EROSION AND THE CAPACITY OF THE LAND TO HOLD WATER:

43. The project site contains slopes ranging from 0 to 66% Topography along property boundaries will not be altered by the project. The slopes near the Class III wetland are up to 33%, however no new construction is proposed in this area. Disturbed areas are surrounded by 35 acres of managed forest. Silt fencing will be installed on all down slopes

of disturbed areas. Silt fencing will be maintained until permanent ground cover is established, then the erosion control devices will be removed. (Exhibit 3)

44. Before any clearing or grubbing of the site is initiated, and during all earthwork phases, sediment traps, or erosion barriers shall be constructed and maintained at the inlet to all storm drains, swales, and ditches receiving water from the project. (Exhibit 28)

45. During construction, erosion control measures will include silt fences, stone check dams and mulching. (Exhibits 3, 27 and 28) Sediment traps will be installed in newly constructed swales, ditches, and other waterways during construction and reclamation. After every storm each sediment trap will be inspected for failures or clogging and remedied immediately (Exhibit 28)

46. All stockpiled soil will be encircled with an erosion control barrier, or seeded and mulched. (Exhibit 28)

47. New swales, unlined ditches and any other area subject to concentrated storm runoff will be fertilized and seeded with the following mixture to at least two feet above the channel bottom: creeping red fescue @ 20 lbs. per acre; redtop @ 2 lbs. per acre; and smooth bromegrass @ 20 lbs. per acre. The seeds will be mulched at a rate of 1½ tons per acre. (Exhibit 28)

48. Where the invert of new swales or ditches exceeds a 2% slope and where the slope grade exceeds 25% (a 1 on 4 slope) matting or netting will be placed over mulch and installed securely into the ground. The netting will be maintained until vegetation is established. (Exhibit 28)

49. The Commission incorporates by reference herein it findings under criterion 1(B) with respect to the construction and maintenance of the two sedimentation ponds.

50. All disturbed terrain at final grade will be seeded and mulched within seven days of completion, and by October 1st at the latest. Before applying final seeding, four inches of topsoil will be placed on all areas. Seed mixtures will be one of the following as appropriate: tall fescue @ 10 lbs. per acre; redtop @ 2 lbs per acre; flate pea @ 30 lbs. per acre. All newly seeded areas will be mulched with hay, straw or woodchips at a rate of two tons per acre. Jute or other equal netting will be used where wind or water may erode newly placed seed or mulch. Netting will be secured per manufacturer's recommendations. (Exhibit 28)

51. All disturbed areas not at final grade, but that will not be disturbed again for a period of greater than sixty days will be seeded with a temporary, rapid growing cover crop, such as

rye grass and millet and will be mulched. Netting may also be applied if necessary in order to stabilize the seed and mulch. (Exhibit 28)

52. During the period of operation between October 1st and November 30th, winter erosion controls will be followed in accordance with the *Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites*. This includes but is not limited to the use of Winter Rye in seeding and 3" or greater depth below grade installation of check dams or silt fencing. No soils will be left bare during the winter shutdown period. All soils will be stabilized by vegetation, or covered with mulch and anchored. (Exhibit 3)

53. All erosion controls will be inspected and maintained by applicant Black Rock Coal. Temporary erosion controls will be inspected daily and after storm events during preliminary construction. Permanent erosion controls will be inspected weekly and after significant storm events. (Exhibits 3 and 4)

Therefore, the Commission concludes that the construction of the project will not cause unreasonable soil erosion or a reduction in the capacity of the land to hold water.

SECTION (a)(5) TRANSPORTATION:

54. Vehicle access to the site is off County Road, as depicted in Exhibit 28.

55. The project involves the construction of a new 1500 liner foot driveway extension. The new portion is an extension of the existing logging road. The maximum gradient is 16% . (Exhibits 3 and 28)

56. The driveway has been designed in accordance with the Vermont Agency of Transportation Standard Sheet B-71 and AASHTO three centered compound curve minimum edge-of-traveled-way design for WB-67 tractor trailer entering or exiting to the south onto County Road. (Exhibit 3)

57. County Road is nearly level for more than a thousand feet south of the project site, providing corner site distances greater than the recommended 550 feet for a 50 mph road. North of the project access County Road ascends a 5% to 10% grade through a sharp curve. Corner site distance was measured for this approach and found to be 548 feet, or just under, the minimum. In discussions with the Calais Selectboard regarding the driveway, the Board determined that truck warning signs would be installed as part of the project. (Exhibits 3 and 19) In addition, the Board required the installation of a flashing beacon on the northern sign to be on only when the quarry is operational. (Exhibit 3)

58. One locked cable gate will be installed, located beyond the tree line, shortly before the storage unit and the parking area. The gate will be constructed of two poles on either side of the drive. The poles will be marked with reflectors at a height which can bee seen in headlights. Poles will have a hook-eye for a cable connection. Cables will be 1/4 inch in diameter with plastic coating. The gate will be locked when the quarry is not in operation. (Exhibits 27 and 28)

59. The project is designed to accommodate the turning and maneuvering characteristics of a semi-tractor trailer with a total vehicle length of 73.5 feet. It is anticipated that emergency vehicles, which require less maneuverability, will be able to readily access the project site. (Exhibit 3)

60. Peak parking is estimated at five vehicles. Parking is delineated on the site plan, however no paving or pavement marking is proposed as part of the project. (Exhibits 2 and 28)

61. There will be two trips per day per employee, or five trips in and five trips out. Employees will arrive at 7:45 a.m. each morning and leave approximately at 5 p.m. each day. (Exhibit 3)

62. There will be four truck haul trips in and four trips out per day (excluding as needed trips by the water truck) during the life of the project. The first truck haul trip shall not exit the project site before 9:00 a.m. Trucks are limited to the use of County Road during the life of the project. (Exhibits 3 and 9)

63. Trips to and from the quarry are opposite the prevailing traffic at these times since County Road serves as a minor collector for commuter traffic heading to and from Montpelier during those hours. County Road currently operates at service level A. The truck trips will be spaced through out the day, similar to the occasional truck trips presently using County Road. (Exhibit 3)

Therefore, the Commission concludes that this project will not cause unreasonable congestion or unsafe conditions with respect to transportation.

SECTION 6086(a)(6 & 7) EDUCATIONAL AND MUNICIPAL SERVICES:

64. The project is not residential. (Exhibit 3)

65. The project will utilize municipal police, fire, and rescue services. (Exhibits 3 and 39)

66. The Town of East Montpelier Fire Department can provide services to the project.(Exhibit 20) The Town of Calais Constable finds no adverse effect on the ability to provide police protection. (Exhibit 39)

67. The Applicant will construct the access road to allow safe passage for rescue equipment (Testimony of DeWolfe)

68. The Commission incorporates its findings herein under criterion 5 with respect to emergency access to the project site.

Therefore, the Commission concludes that this project will not place an unreasonable burden on the ability of the municipality to provide educational, municipal or governmental services.

SECTION 6086 (a)(8) AESTHETICS, SCENIC BEAUTY, HISTORIC SITES AND NATURAL AREAS:

69. There are no historic sites or rare and irreplaceable natural areas which will be affected by this project. (Exhibit 3)

70. The quarry is located in the south central part of Calais in a forested area off Town Highway 1, commonly referred to as the County Road. The area is zoned rural residential for low density residential development. Scattered residential development has occurred along the existing road network of County Road and Bliss Pond Road. The area adjacent to County Road was originally open farm fields. The area along Bliss Pond Road is heavily wooded. Currently, there are two logging roads that access the tract from county Road and Bliss Pond Road.

71. The Commission incorporates by reference herein its findings under criterion 1 with respect to noise mitigation associated with blasting and equipment operation at the project site.

72. There are no buildings proposed as a part of this project. A dark green, metal storage container is proposed for the storage of tools and emergency equipment for the project. The storage container will be 8'6" by 22"6". (Exhibits 3 and 8) It is proposed as temporary storage, and will not be visible from other area buildings or from any public highway. The storage container will be removed from the project site once the tract is reclaimed. There will also be a porta-a-potty on-site when the quarries are operational, which will be removed during those months when the quarry is shut down. (Exhibits 3 and 28)

73. The proposed parking area will not be paved, nor will it be visible from nearby residences or public highways. (Exhibits 3 and 28)

74. As per agreement with the Town of Calais Selectboard, there will be two 30' x 30' diamond shaped warning signs placed on County Road to warn motorists of truck traffic. The signs will be located as depicted on Exhibit 28. The signs will be of the color and materials required by the Manual of Uniform Traffic Control Devices. The Town has required the installation of a blinking amber light, referred to as a beacon, on the northern sigh during the operation hours of 8:00 a.m. to 5:00 p.m. The bacon, which will be controlled by a manual switch, will not operate on weekends or when the quarry is shut down. (Exhibits 3 and 19)

75. There are no utilities, dumpsters, or electric service proposed for the project. All rubbish will be removed daily by company vehicles or stored within the storage container. No outside storage of trash will be allowed. (Exhibit 3)

76. There is no outdoor lighting proposed other than the flashing beacon. (Exhibit 3)

77. There are several sections of stone wall along property boundaries which will not be disturbed by the project. (Exhibits 3 and 28)

78. The Commission incorporates by reference herein its findings under criteria 9(C) and 9(E) with respect to visual buffers incorporated into the forest management plan and the phased reclamation plan.

Therefore, the Commission concludes that the project will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, or rare and irreplaceable natural areas.

SECTION 6086 (a)(8)(A) NECESSARY WILDLIFE HABITAT:

79. Maps published by the Vermont Fish and Wildlife Department indicate that there is a deer wintering area north of Bliss Pond and another between Blackberry Hill and Adamant. These critical habitats are over 3,000 feet and 4,000 feet respectively from the project site. (Exhibits 14 and 15) The southern end of the project site may be utilized by wintering deer. If these softwood stands are used by wintering deer, the project clearing limits as proposed lie 160' to 320' away, up hill. (Exhibit 14)

80. The Vermont Department of Fish and Wildlife recommends a 300' buffer zone surrounding deer wintering areas, within which activities that might disturb overwintering deer should be restricted. (Exhibit 14)

81. Under an operating schedule from May 1st through November 30th, the project will have no activities taking place that will interfere with any deer use of wintering cover and adjacent mixed woodlands during the winter months. (Exhibit 14)

Therefore, the Commission concludes that the project will not destroy or significantly imperil necessary wildlife or endangered species habitat.

SECTION 6086 (a)(9) CONFORMANCE WITH THE CAPABILITY AND DEVELOPMENT PLAN:

The Commission concludes that this project conforms to the capability and development plan.

SECTION 6086(a)(9)(A) IMPACT OF GROWTH:

82. The project is not residential. (Exhibit 3)

83. Existing employees of Black Rock Coal will be used to staff the quarry operations as required. Retail sales by Black Rock Coal are not anticipated to increase, since they are already selling rock; only the source will change. (Exhibit 3)

84. Currently the land is all in current use status as agricultural land. It is anticipated that the land will be reapplied for current use status under the new ownership of Black Rock Coal. As the quarry will not qualify for agricultural use, there should be an increase in tax revenues derived from this parcel. (Exhibit 3)

Therefore, the Commission concludes that the municipality will be able to accommodate the total growth and rate of growth that will result from this project.

SECTION 6086(a)(9)(B) PRIMARY AGRICULTURAL SOILS:

85. The site contains approximately four acres of primary agricultural soils. Soils are Glover-Vershire complex (67D,C), Vershire-Dummerston complex (66C), and Buckland Silt loam (92B). According to the Prime Agricultural soils list for Washington County, 66C and 92B are considered prime agricultural soils. (Exhibit 3)

86. A portion of the 66C soils will be affected by the extension of the existing logging road, however topsoil will be stockpiled and used in the reclamation process. The balance of the soils are located within the managed forest area and will not be disturbed. (Exhibit 3)

87. The project tract is not currently farmed, although based on the forestry management plan it appears that the land was used for farming up to 40-60 years ago. (Exhibits 3 and 17)

88. The project proposes to keep the prime agricultural soils in agricultural use as managed forest. These soils are currently forested. (Exhibit 3)

89. The project does not alter the potential for future agriculture on the land after the life of the project. Topsoils will be stockpiled and used for reclamation. Forest growth will be reestablished on the project site as part of the reclamation process, as described in the forest management plan. (Exhibits 3 and 17)

90. The Department of Agriculture stated in a letter dated March 4, 2002 that as long as the project retains the current managed forest, agriculture/silvaculture on the parcel would remain largely unchanged. The Department determined that there would be no significant impact to the agricultural potential of the tract, nor would agriculture in the surrounding area be impacted significantly. (Exhibit 18)

Therefore, the Commission concludes that the subdivision will not significantly reduce the agricultural potential of any primary agricultural soils.

SECTION 6086(a)(9)(C) FOREST AND SECONDARY AGRICULTURAL SOILS:

91. A 15 Year Forest Management Plan has been developed for the 45 acre tract, ten acres of which will be utilized for the commercial quarrying project, and 35 acres of which are to remain as managed forest. The management plan describes the tract as quite diverse: red maple, white pine, paper birch, red spruce, balsam fir, hemlock, white ash, sugar maple, beech, yellow birch, and a small Norway spruce and red pine plantation. (Exhibit 17)

92. Exhibit 31 depicts the maximum clearing limits for both quarries.

93. The eastern side of the property appears to have been forested for a considerable period of time. The western side has returned from pasture during the last 40-60 years. The terrain is rolling, with veins of ledge running roughly north/south. On the higher ledgy sections thin soil depth limits tree growth. Hurricane Floyd in 1999 caused considerable uprooting of trees. Past losses from wind appear to have been common. (Exhibit 17)

94. The tract has been classified into four stands, as depicted on the Forest Management Plan Map. The proposed slate and granite quarry boundaries are shaded on the map. The slate quarry lies within designated stand 1 and the granite quarry lies in designated stand 2. (Exhibit 17)

95. The mixedwood stand 1 is the largest and most significant stand on the tract, comprising 26.6 acres. This stand began to return from past agricultural use 40-60 years ago. Hurricane Floyd in 1999 caused considerable uprooting. The stand will be managed for

production of reasonably good mixedwood sawlogs, shifting the stand gradually to an uneven-aged condition. One of the longterm management objectives for this stand is to promote and maintain a noise buffer between the houses and the County Road area from the proposed quarrying activities. (Exhibit 17)

96. The northern hardwood/spruce/hemlock stand designated as stand 2 is located in the far eastern side of the property and comprises 4.7 acres. The oldest trees here are larger in diameter than trees elsewhere on the tract. The terrain is ledgy, with thin soil depth in many locations. Hurricane Floyd caused significant uprooting along the northern boundary line. The longterm objective for this stand is to continue uneven-aged management for the production of reasonably good quality mixwood sawlogs and wildlife habitat. (Exhibit 17)

97. The balance of the tract, containing designated stands 3 and 4, which comprise 1.8 acres and 1.9 acres respectively, will continue with even-aged management. (Exhibit 17)

98. The applicants will stockpile topsoil removed during construction and operation of the project for utilization in the reclamation process. (Exhibits 3, 31, 34 and Testimony of DeWolfe)

Therefore, the Commission concludes that the project will not significantly reduce the potential of any secondary agricultural soils or forestry soils.

SECTION 6086(a)(9)(D & E) EARTH RESOURCES & EXTRACTION OF EARTH RESOURCES:

99. The project contains slate and granite deposits, which the applicant proposes to quarry. The applicant will extract no more than 8,000 cubic yards per year, as defined in the stipulated settlement agreement. (Exhibits 3 and 9)

100. The Commission incorporates herein its findings under criterion 1 and 5 with respect to the blasting plan, hours of operation, and the number of daily truck haul trips, respectively. In addition, there will be no crushing or screening activities performed on site, and no pneumatic drills or hammers will be operated at the site for the life of the project. (Exhibit 9)

101. The project will be undertaken in three phases; construction, operation and reclamation. These phases are detailed in the *Outline Construction, Operation and Reclamation Plan*. (Exhibit 34)

102. The construction phase is anticipated to be completed within a two year period. During the first few weeks, the warning signs will be installed, clearing limits will be field

delineated, the road alignment will be staked out, the boundaries of the sedimentation ponds will be field delineated, a silt fence will be installed around the Class III wetland, and the entrance road will be constructed. (Exhibit 34)

103. Construction clearing may be performed during the winter months when the snow will protect the duff layer. Construction clearing is anticipated to require two weeks and will involve the access road, storage areas, parking area and phase I of the extraction area. Brush and tree limbs will be chipped and used as mulch; any excess will be stockpiled as depicted on Exhibit 28. Stockpiles of topsoil will be established during the construction phase as the road is roughed in, the overburden is removed, and the sedimentation ponds are excavated. The gate will be installed and the storage container will be brought on site. The sedimentation pond specs are detailed on Sheets C-2 and C-3 of the revised site plans. The road profile is depicted on Sheet C-3. (Exhibits 28 and 34)

104. The operation plan involves the actual excavation of slate and granite from the two quarries not exceed 8,000 cubic yards per year. Hours and months of operation, daily truck traffic and quarry equipment allowed are detailed elsewhere herein. The excavation phases and quarry cross sections are detailed on Sheets C-2 and C-4 of the revised site plans. (Exhibits 28 and 34)

105. No more than 2 acres of stone will be exposed at any given time. The slate and granite will be extracted from the first phase's 2 acres, and then reclaimed as portions of equal area of the second phase are opened. (Exhibits 28 and 34)

106. The operation timetable for daily, weekly, bi-monthly, and monthly tasks is detailed on pages 3-5 of the *Outline Construction, Operation and Reclamation Plan*. Also included are those tasks to be performed quarterly and annually, along with specific winter tasks and emergency procedures. (Exhibit 34)

107. The Commission incorporates herein its findings under criterion 4 with respect to the phased erosion controls for the project.

108. Trees in quarry limits where extraction is not scheduled for more than twelve months will be left undisturbed. Preceding an extraction phase, clearing will be performed and saplings will be removed. Stumps will be left in place until their removal is necessary in order to excavate the stone. (Exhibit 34)

109. Any clearing associated with the excavation of the quarries will comply with the forest management plan, incorporated by reference herein. (Exhibits 17 and 34)

110. Extraction in the granite quarry will proceed with the removal of naturally fractured rock first. Blasting is not necessary until all the fractured rock is removed. Any remaining rock will be blasted to a depth of at least 2' below the final grade contours depicted on the revised site plans. (Sheets C-2 and C-4). Once the rock is removed, the area will be reclaimed. (Exhibits 28 and 34)

111. Extraction in the slate quarry is dependent on several factors: the quality of the stone, the slate market and the allowed extraction rates. In general, the excavation will proceed as depicted on Sheet C-2 of the revised site plans. (Exhibit 28) The initial extraction will commence in the area of C1, D1, D2 and E2. Extraction will be in lifts of 15', starting from the top of the exposed rock. Only two acres of the combined quarry area may be open at any given time. The excavation should progress in a westerly direction. (Exhibit 27)

112. Temporary reclamation will be integrated into the operation of the quarries. Temporary reclamation is defined as either the undisturbed, cleared, and re-vegetated natural grade, or an area that has been, but is not currently being excavated, and which has been reclaimed in accordance with the reclamation plan on Sheet C-3 of the revised site plans and the growth restoration plan detailed in the forest management plan. (Exhibit 34)

113. The reclamation process will be ongoing as excavation progresses; when stone is removed from one area, that area will be backfilled with topsoil excavated from the adjacent area. (Testimony of DeWolfe)

114. Final reclamation will consist of the application of 4" minimum of topsoil on a minimum of 20" of glacial till soil fill, SCS type C, or available on-site overburden, which will be placed over waste stone of depth required for 2' below finished grade or over bedrock or other undisturbed material. A detail of reclamation cross section is depicted on Sheet C-3 of the revised site plans. (Exhibits 28 and 34)

115. Fill material will consist of sediments captured in the sedimentation pond, any available overburden material and waste rock. Topsoil material will consist of stockpiled topsoil removed during the construction phase. Additional topsoil will be brought onto the site if necessary. (Exhibit 34 and Testimony of DeWolfe)

116. Final grades are depicted on Sheet C-2. Finished grades are estimates, and grades may be higher if poor quality stone is found. Finished grade slopes will not exceed 2:1. No open rock faces as finished grade are proposed as part of the project. (Exhibits 4, 28 and 34)

117. Final reclamation is anticipated to require two months. Vegetation should establish within six weeks, after seeding and mulching. Balsam, fir, red spruce and white pine seedlings

will be planted in the western portion of the tract. On the eastern portion, red spruce seedlings will be planted as set forth in the forest management plan. The plan anticipates that hardwoods will regenerate on their own. The reclamation process will be monitored. (Exhibit 34)

118. The storage unit will be removed and the area beneath will be seeded and mulched. All erosion control devices will be removed; the sedimentation ponds will be drained and allowed to revegetate naturally; the gate will be removed, the post holes will be filled in, and the area will be seeded. The warning signs will be removed and the post holes filled and seeded. (Exhibit 34)

CONCLUSION

In order to better monitor the excavation and reclamation progress of the project, the Commission will grant a permit for a duration of ten years, conditioned with a requirement that a sworn affidavit is submitted each year by December 15th, which includes a blasting log, and specifies the amount and type of material excavated, and area reclaimed during the past year. A site plan depicting areas excavated and reclaimed will be required as well. The applicant may request an extension after ten years, for which the Commission will consider the applicants' evidence as to the likely quantity and quality of remaining material, the estimated time frame for extraction, and compliance with the permit conditions. Therefore, the Commission concludes that this project will not have an unduly harmful impact upon the environment or surrounding land uses and development, and that the site will be left in a condition suited for an approved alternate use or development, in this instance a managed forest.

SECTION 6086(a)(9)(F) ENERGY CONSERVATION:

119. The proposed project does not involve electric service or heating or other energy consuming appurtenances at the proposed storage container. (Exhibit 3)

Therefore, the Commission concludes that the planning and design of this project reflects the principles of energy conservation and incorporates the best available technology for the efficient use or recovery of energy.

SECTION 6086(a)(9)(G) PRIVATE UTILITY SERVICES:

120. The project involves a deeded right-of-way along an existing logging road. Black Rock Coal will be legally and financially responsible for the ongoing maintenance of the existing driveway for the life of the project. No other shared utilities are proposed as a part of the project. (Exhibit 3)

121. No private utilities are proposed for the project. (Exhibit 3)

Therefore, the Commission concludes that the municipality is protected from having to assume responsibility for utility services or facilities.

SECTION 6086(a)(9)(H) COSTS OF SCATTERED DEVELOPMENT:

122. The project is not located within or immediately contiguous to an existing settlement.

The Commission concludes that the project is not physically contiguous to an existing settlement. The Commission further concludes that there are no additional costs of public services and facilities caused directly or indirectly by the proposed project that would out weigh the tax revenues generated by the project.

SECTION 6086(a)(9)(J) PUBLIC UTILITY SERVICES:

123. The project dos not require either a public or private utility. (Exhibit 3).

Therefore, the Commission concludes that utility service is available to this project, that an excessive or uneconomic demand will not be placed on such facilities or services, and that the provision of such services has been planned on the basis of a projection of reasonable population increase and economic growth.

SECTION 6086(a)(9)(K) DEVELOPMENT AFFECTING PUBLIC INVESTMENTS:

124. The project is located adjacent to the County Road, a public highway in Calais. The project will not adversely affect the public highway due to the limited number of truck-haul trips proposed: Four outgoing trips per day and four incoming trips per day. (Excluding as-needed trips by the water truck) (Exhibits 3 and 9). The project will be seasonally operational, from May 1st to November 30th of any year. (Exhibit 9) In addition, the trucks associated with the quarry operating will obtain over weight permits from the Town of Calais. The trucks will be limited to interstate highway limits when hauling slate out of the quarry. (Exhibit 3)

Therefore, the Commission concludes that this project will not unnecessarily or unreasonably endanger the public or quasi-public investment or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of or access to any adjacent public facilities.

SECTION 6086(a)(9)(L) RURAL GROWTH AREAS:

125. The project contains agricultural soils and earth resources. (Exhibit 3)

Therefore, the Commission concludes that this project is not located in a rural growth area as defined by the statute.

SECTION 6086(a)(10) CONFORMANCE WITH THE LOCAL OR REGIONAL PLAN:

126. The project conforms with the Calais Town plan as set forth in Sections D, Land Use at 18; Section E., Natural Resources at pages 25 and 28; and the town plan's goals at 16 as follows: Open Land: The project will conserve agricultural soils; Residential Growth: The project does not involve residential growth; Woodlands: The project will preserve 35 acres as managed forest; Wetlands and Water Resources: The project does not affect nearby wetlands; Natural Areas: The project site does not contain rare, remnant ro unique species; Scenic Areas: the project will be in character with a "working landscape" (Exhibits 3 and 19)

127. The Regional Plan encourages maintenance of forested lands and use of natural resources. The project proposes the maintenance of a 35 acre forest and the quarrying of slate and granite. (Exhibits 3 and 19)

Therefore, the Commission concludes that this project conforms to the local and regional plans.

## V. SUMMARY CONCLUSION OF LAW

Based upon the foregoing Findings of Fact, it is the conclusion of this District Environmental Commission that the project described in the application referred to above, if completed and maintained in conformance with all of the terms and conditions of that application, and of Land Use Permit 5W1406 will not cause or result in a detriment to public health, safety or general welfare under the criteria described in 10 V.S.A., Section 6086(a).

**VI.** **ORDER**

Based upon the foregoing Findings of Fact and Conclusions of Law, Land Use Permit 5W1406 is hereby issued.

Dated at Barre, Vermont, this 7th day of October 2002.

By /s/ Lisa Nolen Birmingham
Lisa Nolen Birmingham, Chair
District 5 Environmental Commission

Commissioners participating in this decision:

Allan Heath
Karl Johnson

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Exhibit List 5W1406
Black Rock Coal, Inc. And Morse and Simmons

1. Application
2. Original Site Plan, Three Sheets, submitted January 25, 2002
3. Schedule B
4. Operation Plan
5. USGS map depicting location of tract
6. Map depicting tract in relation to nearest public water supply
7. Smaller versions of original site plans.
8. Cut sheet depicting on-site storage container
9. Copy of Stipulated Agreement/Order from Environmental Court, January 25, 2002
10. Blast Plan prepared by Maine Drilling and Blasting
11. Noise Impact Study, April 2001
12. Cut Sheet detailing back-up alarm alternatives
13. Applicants hydrology study, August 24, 2000
14. Copy of applicant's submittals to Environmental Court re natural resources
15. Copy of 1997 Significant Habitat Map, Town of Calais
16. Resume of applicant's natural resources expert
17. Forest Management Plan, May 2000
18. Agriculture Division Comments and soils maps, March 4, 2002
19. Calais Town Plan, January 21, 1997
20. Capability to serve letter from East Montpelier fire chief
21. Letter from state geologist, April 5, 2002
22. Letter from Division for Historic Preservation, April 8, 2002
23. ANR Entry of Appearance under criteria 1, 1(B) 8 and 9(E), April 5, 2002
24. Applicants April 4, 2002 letter to ANR re discharge permit
25. ANR April 11, 2002 response to April 4th letter
26. Applicants response to ANR April 11th letter, April 15, 2002
27. Applicants response to April 22, 2002 recess memorandum, May 22, 2002
28. Revised Site Plans Sheets C-1, C-2, last revised May 20, 2002; Sheet C-3, dated February 26, 2002 and Sheet C-4, dated May 13, 2002
29. Copy of Application for discharge permit.
30. June 19, 2002 letter from ANR requesting additional submittals for discharge application
31. Applicants July 15, 2002 response to ANR June 19th letter. Incudes revised site plans Sheets C-2, last revised on June 20, 2002 and Sheet C-3, last revised July 9, 2002.
32. Applicants supplemental comments to ANR re discharge permit application, July 16, 2002
33. Additional comments from applicant re discharge permit application, July 22, 2002
34. Revised Construction, Operation and Reclamation Plan, August 13, 2002

35. Applicants response to ANR re draft discharge permit, August 7, 2002
36. Discharge Permit #3-1489, issued on September 2, 2002
37. Applicants September 6, 2002 letter to ANR re use of sediments from sedimentation ponds in reclamation
38. ANR response to applicants September 6th letter, September 16, 2002
39. Ability to serve letter from Town of Calais constable, September 24, 2002.

## CERTIFICATE OF SERVICE

I hereby certify that I sent a copy of the foregoing **Land Use Permit and Findings of Fact and Conclusions of Law 5W1406 (Black Rock Coal, Inc., Stanley & Janice Morse and Edward & Corrine Simmons)** by U.S. Mail, postage prepaid, on this 6th day of October, 2002, to the following:

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BY Lori Canas
Lori Canas
Administrative Secretary

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