

**COMMONWEALTH OF KENTUCKY
ENERGY AND ENVIRONMENT CABINET
FILE NO. _____
PERMIT NO. 898-0806**

SIERRA CLUB and
KENTUCKIANS FOR THE COMMONWEALTH,

PETITIONERS

v.

ENERGY AND ENVIRONMENT CABINET,

RESPONDENT

PETITION FOR A HEARING AND REVIEW OF PERMIT DECISION

Petitioners, Sierra Club and Kentuckians for the Commonwealth "KFTC," by and through Counsel, hereby petition the Energy and Environment Cabinet ("Cabinet"), pursuant to KRS Chapter 350 and 405 KAR 7:092 §8, for a review of the permit decision for permit number 898-0806, issued by the Cabinet's Division of Mine Permits ("DMP"). In support of this Petition, the Petitioners state as follows:

1. Sierra Club is a national nonprofit organization with approximately 625,500 members dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives.
2. The Cumberland Chapter of the Sierra Club has approximately 5,000 members in the state of Kentucky.
3. Kentuckians for the Commonwealth, Inc. "KFTC" is a nonprofit membership corporation, which is organized under the laws of the Commonwealth of Kentucky, has its main office in London, Laurel County, Kentucky, and has approximately 6,500 members statewide. KFTC's purposes include promoting social, economic and environmental justice for all Kentuckians, such as by addressing problems of land and mineral use and ownership, and through the participation of citizens in promoting democratic institutions.

4. KFTC and Sierra Club have members with interests that are directly and adversely affected by DMP's permitting of the proposed mining operation under permit number 898-0806.
5. The Cabinet is the agency with the authority under KRS Chapter 350 to administer the Kentucky Surface Mining Program. ("The Kentucky Program").
6. The Cabinet's DMP evaluates permit applications and issues or denies permits for surface coal mining in Kentucky.

FACTS

7. On November 9, 2009, the Petitioners, by counsel, submitted written comments and objections to permit application #898-0806, which was submitted to the Cabinet by Cambrian Coal Corporation ("Cambrian"). Exhibit A, attached.
8. On April 21, 2010, the Petitioners, by counsel, received a Notice of Decision from DMP dated April 15, 2010 regarding permit 898-0806. Exhibit B, attached.
9. The Notice of Decision states that the permit 898-0806 had been issued to Cambrian.
10. The Cambrian permit is for a 792-acre contour, auger, and area surface mining operation near Elkhorn City, Kentucky.
11. The proposed mine lies within and would discharge into the Lower Elkhorn Creek, Marrowbone Creek, and Pond Creek watersheds of Russell Fork of the Levisa Fork of the Big Sandy River.
12. The proposed mine would discharge into Jackson Branch, Little Branch, and Adams Branch, which are tributaries of Lower Elkhorn Creek; Dry Fork, which is a tributary of Marrowbone Creek; and Pond Creek.
13. Both Lower Elkhorn Creek and Marrowbone Creek watersheds are already impaired by high levels of specific conductance, total dissolved solids (TDS), and sediment caused by active mining.
14. According to DMP, the proposed new mine would increase the currently excessive levels of specific conductance, TDS, and sediment in those creeks.

15. The proposed new mine would further exacerbate the impairment of the Lower Elkhorn Creek and Marrowbone watersheds and would impede correction of already impaired conditions in those watersheds.
16. TDS and specific conductance are both indicators of the amount of certain pollutants in the water.
17. TDS and specific conductance are strongly correlated, in that water that exhibits high TDS will also exhibit high levels of specific conductance.
18. Sulfate is one type of pollution that is often caused by mining.
19. Sulfate increases the salinity of the water, and causes the water to have higher TDS and specific conductance levels.
20. Sulfate pollution is a persistent pollutant that is expensive to treat. CHIA, 18. Exhibit C, attached.
21. According to *Final 2008 Integrated Report to Congress on the Condition of Water Resources in Kentucky* ("2008 IR") submitted by the Cabinet's Division of Water, the segments of Elkhorn Creek and Marrowbone Creek watersheds that would receive the discharge from the Cambrian Coal Mine #898-0806 do not currently fully support their warm water aquatic life uses. Vol. II, 294, 301, A. 197, A.206. Exhibit D, attached.
22. According to the 2008 IR, those segments of Lower Elkhorn Creek and Marrowbone Creek watersheds do not fully support their aquatic life use because they are impaired by high levels of sedimentation/siltation and total dissolved solids (TDS). *Id.* at A.197, A.206.
23. The 2008 IR lists the suspected source of TDS in both watersheds to be surface mining. *Id.*
24. The 2008 IR lists the suspected source of sedimentation/siltation in Elkhorn Creek watershed to be surface mining. *Id.*
25. Surface mining is one of several suspected sources of sedimentation/siltation in Marrowbone Creek according to the 2008 IR. *Id.*
26. Under SMCRA and the Kentucky Program, the Cabinet is required to assess the "probable cumulative impact of all anticipated mining in the area" in order to determine whether the mining operation has been "designed to prevent material damage to the

hydrologic balance outside of the permit area.” 30 U.S.C. §1260(b)(3); 405 KAR 8:010 §14.

27. The assessment process and resulting document are referred to as the Cumulative Hydrologic Impact Assessment, or CHIA.

28. The DMP's CHIA for the Cambrian mine permit is dated March 26, 2010. CHIA, 4.

29. In the CHIA, the DMP relies on the 2008 IR in its assessment of the surface water quality of the receiving waters. CHIA, 10.

30. Based on the 2008 IR, the CHIA states that the entire length of Lower Elkhorn Creek from the upper end of the cumulative impact area to its confluence with Russell Fork is impaired with respect to sedimentation/siltation, total dissolved solids (TDS), and fecal coliform. CHIA, 10.

31. Based on the 2008 IR, the CHIA states that 9.9 miles of Marrowbone Creek, from river mile 1.4 to 11.3, is also impaired due to sedimentation/siltation and TDS. *Id.*

32. Based on the 2008 IR, the CHIA states that surface mining is one cause of the impairments of these creeks. *Id.*

33. The Cambrian mine permit's discussion of the probable hydrologic consequences of the mining operation acknowledges that “[s]urface mining disturbances will obviously create a temporary increase in suspended and settleable solids concentrations in the runoff from the mine site during the active phase of the operation.” Permit App., Att. 18.1.A. Exhibit E, attached.

34. The CHIA prepared by the Cabinet affirmatively states that during the mining operation and immediately after the mining operation, TDS and specific conductance levels are expected to increase. CHIA, 20.

35. The CHIA states that mining may increase dissolved minerals and settleable and suspended solids. *Id.* at 18.

36. The CHIA also states that the mining is likely to liberate sulfate and increase sulfate levels in receiving waters. *Id.*

37. The CHIA also states that mining may also cause an increase in sediment runoff. *Id.*

38. According to Cambrian's permit application, the proposed mining operation would create seven new hollow fills and significantly expand two existing hollow fills. Permit App., Att. 25.3.A. and Att. 26.3.A.

39. According to Cambrian's permit application, the mining operation would dispose of approximately 15 million cubic yards of excess spoil material in those nine fills. *Id.*

40. According to Cambrian's permit application, the seven proposed new hollow fills are in previously undisturbed areas. Permit App., Att. 26.3.A.

ASSIGNMENTS OF ERROR

1. In its Cumulative Hydrologic Impact Analysis, the Cabinet Failed to Consider the Impacts of Acknowledged Increases in TDS, Sulfates, and Specific Conductance During and Immediately After Active Mining Operations.

41. DMP failed to assess the cumulative hydrologic impact of increases in TDS, sulfates, and specific conductance during and immediately after the proposed mining operation.

42. Specifically, as set forth above, DMP acknowledges in the CHIA that the mine would cause increased levels of TDS, specific conductance, and sulfates. CHIA, 20.

43. The CHIA further acknowledges that the receiving streams are already impaired by high levels of TDS from surface mining, and those water resources are listed as impaired on Kentucky's current IR. CHIA, 10; 2008 IR 294, 301, A.197, A.206.

44. Despite the current impairment by TDS and the acknowledgment that the proposed mining operation would increase the levels of TDS, specific conductance, and sulfates in the receiving waters, the CHIA states that, with regard to TDS and specific conductance, "[i]ncreases during mining may vary widely from site to site *and are not addressed here.*" CHIA, 20 (emphasis added).

45. Determining whether the proposed mining operation would cause or contribute to future or ongoing exceedances of applicable narrative or numeric water quality standards, and thus fail to prevent material damage to the hydrologic balance outside of the permit area, is precisely what DMP was required to do before it could lawfully issue this permit. 30 U.S.C. §1260(b); 30 C.F.R. 773.15(e), KRS 350.060(7), and 405 KAR 8:010 §14(3).

46. DMP's failure to quantify and consider the impacts of increased TDS and specific conductance pollution in its cumulative hydrologic impact assessments constitutes a

failure to perform a mandatory, non-discretionary duty under SMCRA and the Kentucky Program.

47. Because of the failure to analyze the impact of key pollutants, the CHIA produced for this permit is invalid, and DMP's decision to issue the permit based on the CHIA's "no material damage" determination is in error and inconsistent with SMCRA and the Kentucky Program.

2. The Cabinet Erroneously Concluded "No Material Damage" Despite Increases in Sedimentation/Siltation and TDS

48. DMP's determination that the "proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area" is erroneous and unsupported by the CHIA and materials relied on by DMP in conducting the CHIA.

49. A permit can only be validly issued if the Cabinet lawfully finds that the operation has been designed to prevent material damage to the hydrologic balance outside of the permit area. 30 U.S.C. §1260(b); 30 C.F.R. §773.15(e); KRS 350.060(7); 405 KAR 8:010 §14(3).

50. Material damage to surface water quality outside of the permit area would occur, at a minimum, if the operation caused or contributed to a violation of applicable water quality standards outside of the permit area.

51. 405 KAR 16:060 §1 requires, "[a]ll surface mining activities shall be planned and conducted to minimize disturbance of the hydrologic balance in both the permit area and adjacent areas, in order to: (a) Prevent material damage to the hydrologic balance outside the permit area...."

52. 405 KAR 16:060 §6(1)(c) provides, "[i]n order to protect the hydrologic balance, surface mining activities shall be conducted [so that they]... (c) Will not cause or contribute to a violation of any federal or state effluent limitations or water quality standards."

53. The federal and state water quality standards referred to in 405 KAR 16:060 §6(1)(c) are the water quality standards adopted under the Clean Water Act.

54. Under the Clean Water Act, the discharge of the same pollutants that are already impairing a water body constitutes a discharge that would cause or contribute to a violation of a water quality standard. 40 C.F.R. §§ 122.4(i), 122.44(d).

55. Such a discharge is disallowed, except where (a) a total maximum daily load ("TMDL") has been developed, (b) a waste load allocation for the pollutant or pollutants of concern is made available to the proposed mine pursuant to the TMDL, and (c) a specific compliance schedule is in place that ensures the waterbody will be brought into compliance even if the proposed new discharge is allowed. 40 C.F.R. §§ 122.4(i).

56. Without a TMDL, waste load allocation for this specific mine, and compliance schedule, Kentucky may not permit the new discharge because discharge of additional amounts of the same pollutants that are already impairing a water body will cause or contribute to a further violation of the federal and state water quality standard for which the waterbody is already impaired. *Id.*

57. Similarly, the CHIA states that "[m]aterial damage to the surface water will occur when the surface water fails to comply with the surface water quality standards on a chronic basis and the designated use (401 KAR Chapter 10) for the surface waters is significantly impacted by mining." CHIA, 18.

58. As set forth above, the CHIA and the materials relied on by DMP in conducting the CHIA show that the receiving watersheds already fail to meet Kentucky's water quality standards because they are impaired by high levels of TDS and sediment from surface mining.

59. That impairment prevents both the Marrowbone Creek and Elkhorn Creek watersheds from fully supporting their designated warm water aquatic life use.

60. As set forth above, the CHIA and the 2008 IR on which it relies state that surface mining is the suspected source of the TDS that is preventing both watersheds from fully supporting their designated use.

61. As set forth above, the CHIA and the 2008 IR on which it relies state that surface mining is the suspected source of the sediment pollution that is preventing the Elkhorn Creek watershed from fully supporting its designated use.

62. As set forth above, the CHIA and the 2008 IR on which it relies state that surface mining is one of several suspected sources of the sediment pollution that is preventing the Marrowbone Creek watershed from fully supporting its designated use.

63. As set forth above, the CHIA and the permit application state that the proposed operation will add additional TDS and sediment to the receiving streams.

64. The discharge of additional sediment and TDS from this mine operation would cause or contribute to the ongoing violation of Kentucky's water quality standards in both Elkhorn Creek and Marrowbone Creek watersheds, which constitutes material damage under SMCRA, the Kentucky Program, and the CHIA's own definition of material damage.

65. The DMP's determination that the proposed operation "has been designed to prevent material damage to the hydrologic balance outside the permit area" is in error and DMP's issuance of the permit is inconsistent with SMCRA and the Kentucky Program and is invalid.

3. The Cabinet's Criteria for Determining Whether the Proposed Operation Would Cause Material Damage to the Hydrologic Balance Outside of the Permit Area is Invalid

66. The CHIA states that "[m]aterial damage to the surface water will occur when the surface water fails to comply with the surface water quality standards on a chronic basis and the designated use (401 KAR Chapter 10) for the surface waters is significantly impacted by mining." CHIA, 18.

67. The material damage criteria stated in the CHIA is invalid in that it is less protective than the water quality standards under the Clean Water Act, 33 U.S.C. §1251, et seq.

68. Specifically, the criteria by which DMP determined whether material damage would occur added qualifiers to the Clean Water Act water quality standards by stating that material damage would occur only where the Clean Water Act standards are violated on a *chronic* basis *and* the designated use is *significantly* impacted by mining.

69. The Clean Water Act has no such qualifiers, nor does it provide that a violation only occurs where there is both a violation of a numeric standard and impairment of the designated use.

70. Under Section 303(d) of the Clean Water Act, the receiving watersheds have already been determined to be in violation of the Kentucky designated aquatic life use water quality standard.

71. The Cabinet has no authority to set material damage criteria for surface mines that is less than the applicable Clean Water Act water quality standard. 30 U.S.C. §1292(a).

72. DMP's issuance of permit #898-0806 based on the material damage criteria set forth in the CHIA is in error, and DMP's issuance of the permit is inconsistent with SMCRA, the Kentucky Program, and the Clean Water Act, and is invalid.

4. Cambrian Coal Corporation and the Cabinet Failed to Minimize the Impacts of Excess Spoil Placement and Valley Fill Construction on the Hydrologic Balance on the Mine Site and on Fish, Wildlife, and Related Environmental Values

73. The mine operation described in permit application #898-0806 and approved by DMP fails to minimize the impacts of excess spoil placement and valley fill construction on the hydrologic balance on the mine site and on fish, wildlife and related environmental values.

74. The stream buffer zone rules, the excess spoil disposal rules, and the requirements that permittees minimize disturbance to the hydrologic balance and to fish, wildlife, and related environmental values contained in SMCRA and its regulations and the Kentucky Program require that applicants demonstrate in their application that their disposal of excess spoil in perennial or intermittent streams is minimized.

75. Cambrian failed to make such a demonstration in its application.

76. SMCRA and the Kentucky Program establish minimum environmental performance standards required for all surface mining operations.

77. Any permit issued under SMCRA and the Kentucky Program must be designed to meet all environmental performance standards. *See, e.g.*, 30 C.F.R. §§ 780.21(h), 780.35; 405 KAR 8:030, §§ 24, 27, 32, and 36.

78. The performance standards of SMCRA and the Kentucky program require, among other things, that the operation be designed to “minimize disturbances to the prevailing hydrologic balance at the mine-site” and “to the extent possible using the best technology currently available, minimize disturbances and adverse impacts of the operation on fish, wildlife, and related environmental values, and achieve enhancement of such resources where practicable.” 30 U.S.C. §1265(b)(10), (b)(24), KRS 350.420; 405 KAR 16:060 §1, 16:180 §1. *See also* 405 KAR 8:001(12).

79. The Kentucky Program requires that each surface mining application describe the measures to be taken to meet those performance standards. 405 KAR 8:030 § 32(1), §36.

80. The Kentucky Program also requires applicants to include a description of their excess spoil sites and structures in accordance with Kentucky performance standard on excess spoil disposal, which requires that excess spoil disposal minimize the adverse effects of spoil disposal on surface and ground water. 405 KAR 8:030, § 27; 405 KAR 16:130.

81. The SMCRA regulations require that, if the applicant proposes to generate excess spoil, it must include in its application a “[d]emonstration of minimization of excess spoil.” 30 C.F.R. § 780.35(a)(1).

82. In addition, the SMCRA stream buffer zone regulation requires that the permittee demonstrate in its application that the proposed disposal of excess spoil complies with the performance standards discussed above. 30 C.F.R. §§ 780.28(b), 816.57(b)-(c), 816.71(a).

83. In order to be consistent with and no less effective than the federal program, the Kentucky Program must be interpreted to require the applicant to demonstrate that the excess spoil has been minimized and that the disposal of the remaining spoil complies with the performance standards of SMCRA and the Kentucky Program. KRS § 350.069.

84. To carry out the requirement to minimize disturbances to the hydrologic balance on the mine site, the Cabinet issued Reclamation Advisory Memorandum (RAM) #145 on December 16, 2009. Exhibit F.

85. RAM #145 describes a "Fill Placement Optimization Process" that "maximizes the amount of mine spoil returned to the mined area while minimizing the amount of mine spoil placed in excess spoil disposal sites, i.e., valley fills." RAM #145, p. 1.

86. RAM #145 was designed, in part, to “[m]inimize watershed impacts by ensuring compliance with environmental performance standards imposed by SMRCA.” *Id.* at 2.
87. RAM # 145 outlines that type of mine planning and operation designed to minimize the impacts of fills and ensure compliance with the environmental performance standards.
88. Kentucky RAM #145 and other plans even more stringent than RAM #145 would reduce the impacts of spoil placement beyond the current proposal in Cambrian’s application.
89. Kentucky RAM #145 and other plans even more stringent than RAM #145 would constitute the “best technology currently available” in accordance with KAR 8:001(12) and would satisfy the requirements of 405 KAR 16:180.
90. Cambrian’s permit application contains no analysis of the fill optimization process describe in RAM #145 and Cambrian did not follow RAM #145 in designing the mine operation permitted by the Cabinet as #898-0806.
91. Cambrian’s permit application also fails to use any other more stringent analyses and fill minimization planning.
92. Because Cambrian did not use RAM 145 or any more stringent spoil placement plan, it did not use best technology currently available and has not minimized its disturbances.
93. The permit application otherwise fails to demonstrate that the mine plan was designed to meet the environmental performance standards by minimizing the amount of excess spoil placed in hollow fills and the impact of those fills on the hydrologic balance and fish, wildlife, and related environmental values.
94. The permit application fails to determine the most efficient method of waste disposal and optimization of fill volumes.
95. The permit application fails to determine the maximum quantity of excess spoil that could be backfilled on #898-0806 or backstacked on the contiguous Cambrian permits.
96. The permit application fails to calculate the maximum amount of backfill possible based on the mining methods used and then calculate the minimum excess spoil volume to be disposed of in fills based on the maximized backfill amount.

97. The permit application fails to consider whether off-site excess spoil locations could be used.
98. The permit application fails to determine the proper adjusted fill deck elevation based on the different types of mining being proposed.
99. The permit application fails to consider and calculate the length of streams that would be buried or otherwise directly impacted by the proposed fill operations.
100. For those reasons, Cambrian did not affirmatively demonstrate that the mine plan was designed to meet the requirements of the environmental performance standards of the Kentucky Program and SMCRA.
101. Without such a demonstration, the Cabinet's issuance of the permit #898-0806 based on Cambrian's application is in error, and DMP's issuance of the permit is invalid.

RELIEF

WHEREFORE, the Petitioners seek the following relief:

1. That this Petition for a Hearing be granted.
2. That a hearing be held regarding the Cabinet's Permit Determination.
3. That a Hearing Officer's Findings of Fact and Conclusions of Law be issued finding that the Cabinet's issuance of Permit #898-0806 was improper under the controlling statutes and regulations.
4. That the Cabinet grant Petitioners an appropriate award of costs and expenses, including reasonable attorney fees and expert witness fees.
5. That Petitioners be granted all further relief to which they may be entitled.

Respectfully Submitted,



Mary Varson Cromer
Appalachian Citizens' Law Center
317 Main Street
Whitesburg, Kentucky 41858

Counsel for the Petitioner

CERTIFICATE OF SERVICE

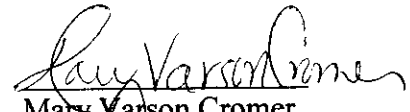
This is to certify that a true and accurate copy of the foregoing PETITION FOR REVIEW OF PERMIT DECISION was sent this 14th day of May, 2010 via FAX and postage paid U.S. mail, to the following:

Gwen McDonald
Docket Coordinator
Office of Administrative Hearings
Energy and Environment Cabinet
35-36 Fountain Place
Frankfort, KY 40601

FAX: 502-564-4973

Energy and Environment Cabinet
Office of Legal Services
#2 Hudson Hollow
Frankfort, KY 40601

FAX: 502-564-9212


Mary Varson Cromer
Counsel for Petitioner