

Nashville District Corps of Engineers Regulatory Division 501 Adesa Parkway, Suite 250 Lenoir City, TN 37771 Attn: Brent Sewell Brent.J.Sewell@usace.army.mil

October 24, 2019

### **RE:** Public Notice No. 19-34 – Application LRN 2004-02268 Proposed Nally and Hamilton Kelly Branch Surface Mine

Dear Mr. Sewell:

Please accept these comments on behalf of Sierra Club, the Alliance for Appalachia, Appalachian Voices, Defenders of Wildlife, Kentuckians For The Commonwealth, and the Kentucky Resources Council ("the Commenters") regarding the application for an individual permit under section 404 of the Clean Water Act submitted by Nally and Hamilton Enterprises, Inc., for its proposed Kelly Branch surface mine in Harlan County, KY. The proposed mine would disturb approximately 8,219 linear feet of stream via two permanent spoil disposal hollow fills and mining through streams. The proposed mine would discharge pollutants into Mary Wynn Branch, Left Fork Kelly Branch, and Kelly Branch, all within the Upper Clover Fork Cumberland River watershed.

Based on the information in the permit application, the U.S. Army Corps of Engineers (hereinafter "the Corps") cannot make the required determination that the activity complies with Section 404 of the Clean Water Act ("CWA"). Furthermore, the Corps cannot make a final determination until it has fully complied with the requirements of both the National Environmental Policy Act ("NEPA"), and the Endangered Species Act ("ESA"). There is no indication in the Public Notice or any other supporting document that the Corps has satisfied its NEPA or ESA obligations.

Section 404 of the CWA prohibits the discharge of dredged or fill material into the aquatic ecosystem "unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystem of concern." 40 C.F.R. § 230.120(c). The Corps cannot make that determination in this case.

Specifically, the Commenters submit the following comments:

## **Comment 1: The Proposed Mine Will Have Unacceptable Adverse Impacts on** Water Quality and Flow.

Surface coal mining in Appalachia that involves mine-throughs and the placement of mine spoil in streams leads to increases in both the concentration of solutes <u>and</u> in the volume of water exported from the watershed. This means that the total mass of solutes delivered to downstream ecosystems is higher than concentration changes alone would suggest.

In particular, research by EPA and other peer-reviewed studies has led to an established scientific consensus that increased concentrations of the ions  $SO_4^{2^-}$ ,  $Mg^{2^+}$ ,  $Ca^{2^+}$ ,  $HCO_3^{-}$ , measured as conductivity, is not only associated with the extirpation of aquatic macroinvertebrates in Appalachia, but is a cause of stream impairment in the region. More than 20 studies over the last decade, starting with the 2005 Mountaintop Mining/Valley Fills in Appalachia Programmatic EIS, show that surface mining has significant downstream consequences. Many of these showed that as mining increases, conductivity also increases, and sensitive aquatic taxa decline downstream. These articles cumulatively have more than fifty authors and have been peer-reviewed by dozens of eminent scientists. EPA's 2011 report A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams used EPA's standard method for deriving water-quality criteria to derive a conductivity benchmark of  $300 \text{ }_{\text{\tiny U}}\text{S/cm}$ , which EPA calculated to be the level needed to protect 95% of macroinvertebrate species. Five percent of species are lost when conductivity rises to 295  $\mu$ S/cm, over 50% are lost at 2000  $_{\mu}$ S/cm, and close to 60% are lost at 3000  $_{\mu}$ S/cm. EPA further concluded that there is a causal relationship between conductivity and stream impairment in West Virginia. EPA's benchmark and causal analysis have since been confirmed by multiple additional independent peer-reviewed studies. These studies clearly show that levels of conductivity above  $\sim 300 \text{ }_{\text{HS}}/\text{cm}$  and elevated sulfate levels are common below Appalachian mine sites and lead to extirpation of invertebrate genera.

In addition, scientific assessments have revealed that discharges from surface coal mining operations in Appalachia are toxic. In 2007 and August 2009, the EPA collected water quality samples for chronic WET testing at selected sites in the coalfields of Kentucky and West Virginia. Site selection criteria for the study included: 1) sites at or downstream from coal mining operations, 2) sites with no intervening pollution sources identified by EPA, and 3) sites with instream conductivity levels greater than 1000  $\mu$ S/cm. Seventeen out of the 20 samples collected exceeded state and federal acceptable chronic toxicity levels of 1 chronic toxic unit ("TUc"), with two sites exceeding 50 TUc. Generally, a correlation between high conductivity and high TUc's was seen in this study.

# Comment 2: The Corps and the Applicant Have Failed to Adequately Assess Potential Impacts to Federall Protected Species, Including the Threatened Blackside Dace and Endangered Indiana Bat.

The Corps is required to comply with the Endangered Species Act ("ESA") in considering the Application and determining whether to issue a permit under Section 404 of the Clean Water Act.

Section 7 of the ESA requires each federal agency, in consultation with the appropriate wildlife agency – here, the U.S. Fish and Wildlife Service ("USFWS") – to insure that any action authorized, funded, or carried out by the agency is not likely to (1) jeopardize the continued existence of any threatened or endangered species, or (2) result in the destruction or adverse modification of the critical habitat of such species.<sup>1</sup> "Action" is defined broadly to include actions that may directly or indirectly cause modifications to the land, water, or air; and actions that are intended to conserve listed species or their habitat.<sup>2</sup> An action agency must define the action area to include "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action."<sup>3</sup> Thus, the action area includes any off-site or downstream impacts. An action would "jeopardize the continued existence of" a species if it "reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species."<sup>4</sup> "Destruction or adverse modification" of critical habitat means "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical."<sup>5</sup> The threshold for triggering consultation with the USFWS is low: if the action agency determines that its proposed action "may affect" any listed species or critical habitat, it must engage in formal or informal consultation with the Service.<sup>6</sup>

Moreover, the Corps has a separate and distinct obligation under Section 9 of the ESA not to issue 404 permits that authorize permittees to undertake activities that will result in unpermitted incidental take of federally listed species. Section 9 prohibits "take" of threatened and endangered species.<sup>7</sup> The ESA defines take in the broadest possible manner to include every conceivable way in which a person can "take" fish or wildlife.<sup>8</sup> To "take" means "to harass, *harm*, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."<sup>9</sup> "The Secretary of the Interior has defined 'harm' as 'an act which actually kills or injures wildlife. Such act may include significant habitat modification or *degradation* where it actually kills or injures wildlife *by significantly impairing essential behavioral patterns, including breeding, feeding, or* 

<sup>5</sup> *Id*.

<sup>8</sup> S. Rep. No. 93-307, at 7 (1973).

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. § 1536(a)(2).

<sup>&</sup>lt;sup>2</sup> 50 C.F.R. § 402.02.

 $<sup>^{3}</sup>$  Id.

 $<sup>^{4}</sup>$  Id.

<sup>&</sup>lt;sup>6</sup> *Id.* §§ 402.13, 402.14.

<sup>&</sup>lt;sup>7</sup> 16 U.S.C. § 1538(a)(1)(B).

<sup>&</sup>lt;sup>9</sup> 16 U.S.C. § 1532(19).

*sheltering*.<sup>110</sup> The ESA generally prohibits any person, including any federal agency, from committing or causing to be committed a "take" of any individual member of an endangered species within the United States.<sup>11</sup> Thus, the Corps may be directly liable for violations of Section 9 of the ESA when it issues a 404 permit that results in the unpermitted incidental take of blackside dace, Indiana bat, or any other ESA-listed species.<sup>12</sup>

In addition to ensuring that the Corps' issuance of a 404 permit does not cause jeopardy, a formal Section 7 consultation process is necessary for the issuance of an incidental take statement to cover any incidental take of listed species that may result from the issuance of the permit.<sup>13</sup> The incidental take statement prescribes reasonable and prudent measures to minimize and mitigate the impacts of such take as well as terms and conditions to implement those measures.<sup>14</sup> The incidental take statement also establishes a trigger for reinitiating consultation should authorized take levels be exceeded.<sup>15</sup> Only through a formal consultation may the Corps receive approval via an incidental take statement for authorizing actions that may

The proposed mine will have unacceptable adverse impacts on the federally threatened blackside dace and the federally endangered Indiana bat. Direct threats to blackside dace and other listed aquatic species from the proposed mine include exposure to harmful levels of conductivity pollution and selenium pollution.

# <u>Blackside dace</u>

The federally threatened blackside dace is an organism of special concern in this area. The proposed mine will discharge directly into Kelly Branch, which is documented habitat for the blackside dace. The U.S. Fish and Wildlife Service and Kentucky Energy and Environment Cabinet have identified Kelly Branch as among the "streams with blackside dace populations."<sup>16</sup>

The blackside dace is known to be susceptible to increased ionic pollution, often measured as conductivity, at a similar conductivity threshold (300  $\mu$ S/cm) at which the

<sup>15</sup> 50 C.F.R. § 402.14(i)(4).

<sup>&</sup>lt;sup>10</sup> Strahan v. Coxe, 127 F.3d 155, 162 (1st Cir. 1997), *citing* 50 C.F.R. § 17.3 (1994); *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687 (upholding the regulation as a reasonable interpretation of the statutory language) (emphasis added).

<sup>&</sup>lt;sup>11</sup> 16 U.S.C. § 1538(a)(1)(B).

<sup>&</sup>lt;sup>12</sup> *Strahan*, 127 F.3d at 163

<sup>(&</sup>quot;a governmental third party pursuant to whose authority an actor directly exacts a taking of an endangered species may be deemed to have violated the provisions of the ESA"). <sup>13</sup> 1  $\in$  U.S. G = 8.1526(1)(4)(i) = (1)(2) = 50 G E B = 8.402 14(i)(5)

<sup>&</sup>lt;sup>13</sup> 16 U.S.C. § 1536(b)(4)(iv), (o)(2); 50 C.F.R. § 402.14(i)(5).

<sup>&</sup>lt;sup>14</sup> 16 U.S.C. § 1536(b)(4)(C), (b)(4)(C)(iii); 50 C.F.R. § 402.14(i).

<sup>&</sup>lt;sup>16</sup> <u>https://eec.ky.gov/Nature-</u>

Preserves/biodiversity/Documents/Dace\_map\_HarlanCnty2009.pdf

macroinvertebrate communities of Appalachian streams experience significant structural change. In a 2016 study (Hitt et al. 2016), Dr. Nathaniel Hitt estimated the threshold response to conductivity for the blackside dace was at 343µS/cm. See Hitt et al. 2016, Threshold Response of Blackside Dace (Chrosomus cumberlandensis) and Kentucky Arrow Darter (Etheostoma spilotum) to Stream Conductivity. Southeastern Naturalist. Black et al. found in a 2013 publication that blackside dace are more likely to be present when the conductivity of a stream is less than 240 µS/cm. See Black et al. 2013, Development and Validation of Habitat Models for the Threatened Blackside Dace, Chrosomus cumberlandensis, at Two Spatial Scales. Southeastern Naturalist. Jones used a predictive model in 2005 to demonstrate that blackside dace are more persistent in streams with conductivities less than 240 µS/cm. Jones, B.K. 2005. Predictive habitat models for conservation for the threatened Blackside Dace (*Phoxinus cumberlandensis*) [Master's Thesis] Tennessee Technological University, Cookeville, TN. The Corps must examine the potential impacts to the blackside dace, including the potential of permitted activities to raise conductivity and jeopardize the continued existence of this species, through the required ESA section 7(a)(2) consultation with the U.S. Fish and Wildlife Service. See 16 U.S.C. § 1536(a)(2).

The Permit Application documents accompanying the Public Notice state that current conductivity levels in the streams to be impacted by the proposed Kelly Branch mine range from 21.5 to 203  $\mu$ S/cm. Because even the highest of these levels is below the 240  $\mu$ S/cm threshold, these streams remain prime habitat for the blackside dace. The extensive research on conductivity levels in streams below surface coal mines in Appalachia makes clear that the proposed mine will raise conductivity in these streams beyond the level that can be tolerated by blackside dace. While the public notice indicates that a Protection and Enhancement Plan ("PEP") for the blackside dace was developed, it was not included in the public notice documents or the plan included with that notice. Upon information and belief, however, the Protection and Enhancement Plan is outdated and flawed. A similar PEP submitted by consultants for Nally and Hamilton Enterprises does not account for the recognized threshold of the blackside dace to conductivity and made unrealistic assumptions about the level of conductivity that would be discharged from outfalls. Specifically, the "target" level of conductivity for each outfall ranged from  $350 \,\mu$ S/cm to  $500 \,\mu$ S/cm. This level is above the change threshold currently established by the best science. Moreover, if an outfall exceeds 500 µS/cm the only remedial action is to conduct a remodel and limit future pond construction. There is no proposal for remediation, or water quality treatment for conductivity at that outfall. Once the "remedial" action is initiated, it will likely be too late. More fundamentally, the Corps may not rely on the PEP to satisfy its own independent assessment and consultation obligations under the ESA.

#### <u>Indiana bat</u>

The Permit Application also acknowledges the potential for the mine to negatively impact the federally endangered Indiana bat, but contains no actual assessment or analysis of the mine's likely impacts to the bat. The Corps must require current, on-the-ground surveys of potential Indiana bat habitat in order to adequately assesses the possible impacts to this endangered species. Because the project is located within the known or historic range of the endangered Indiana bat, in order to comply with the ESA, the Corps must require an appropriate survey specific to the project site.

#### <u>The Corps May Not Satisfy Its Obligations under the Endangered Species Act Through</u> <u>Reliance on the 1996 Biological Opinion Provided by USFWS to OSMRE.</u>

The plan document attached to the public notice states that "[t]hreatened and endangered species issues have been coordinated with regulatory agencies throughout the SMCRA permitting process." Reliance on coordination between other agencies, however, is not permitted. Under the ESA, the Corps has its own duty to consult with USFWS and ensure that its own actions are not likely to jeopardize the continued existence of the blackside dace and any other species listed under the ESA and to receive coverage via an incidental take statement for any incidental take that may occur as a result of permit issuance. Moreover, the 1996 Biological Opinion is both scientifically and legally invalid.

To the extent that the Corps proposes to rely on any ESA coordination during the SMCRA process based on the 1996 Biological Opinion resulting from a consultation between OSMRE and the USFWS rather than undertaking its own Section 7 consultation, it is legally barred from doing so. First and foremost, the Corps is not covered by that document because it has its own, independent responsibilities to comply with the ESA. The 1996 Biological Opinion addressed the effects of activities under the regulatory authority of OSMRE, *not those of the Corps*. The 1996 Biological Opinion only ever applied to OSMRE's obligations regarding state and federal regulatory programs under the Surface Mining Control and Reclamation Act ("SMCRA"). The consultation that resulted in the 1996 Biological Opinion did not involve the Corps and did not purport to address the effects of permitting discharges or the deposition of dredge spoils from surface coal mines into waters of the United States under Section 404 of the CWA.

Second, even if the Corps could rely on the 1996 Biological Opinion provided to OSMRE—which it cannot—its reliance would be arbitrary and unlawful. Because a federal agency may never delegate to the USFWS its obligation to ensure against jeopardy, it must not arbitrarily rely on a biological opinion.<sup>17</sup> Courts have rejected unlawful action agency reliance on biological opinions where 1) the action agency failed to take into account new, post-consultation scientific information that undercut the biological opinion's conclusions,<sup>18</sup> or 2) the biological opinion itself was legally flawed.<sup>19</sup> Where a biological opinion's flaws are legal, "[d]iscerning them requires no

<sup>&</sup>lt;sup>17</sup> Pyramid Lake Paiute Tribe of Indians v. U.S. Dept. of the Navy, 898 F.2d 1410, 1415
(9th Cir. 1990); Florida Key Deer v. Paulison, 522 F.3d 1133, 1145 (11th Cir. 2008).
<sup>18</sup> Pyramid Lake Paiute Tribe of Indians, 898 F.2d at 1415.

<sup>&</sup>lt;sup>19</sup> City of Tacoma, Washington v. FERC, 460 F.3d 53, 75–76 (D.C. Cir. 2006); Wild Fish Conservancy v. Salazar, 628 F.3d 513, 532 (9th Cir. 2010). W

technical or scientific expertise," and the action agency acts arbitrarily by relying on it.<sup>20</sup> Both circumstances are present here.

The first circumstance is present here because USFWS itself has determined that the 1996 Biological Opinion's analysis is fundamentally flawed and outdated. The USFWS specifically found that OSMRE must reinitiate consultation on the 1996 Biological Opinion "because there have been effects to ESA resources (listed and proposed species and designated and proposed critical habitat) not considered in the 1996 analysis and because the technical assistance process analyzed in the 1996 Biological Opinion has not been consistently implemented nationwide, as analyzed in that consultation."<sup>21</sup> Therefore, the Corps' reliance on the 1996 Biological Opinion would undoubtedly be ruled unlawful on this basis.

The second circumstance is also, and independently, present here because the 1996 Biological Opinion is fundamentally legally flawed; these errors, evident on the opinion's face, would render the Corps' reliance on it arbitrary and unlawful. A non-exhaustive list of the opinion's readily apparent legal deficiencies is as follows: 1) the opinion is devoid of any information on or analysis of the effects of the action on the hundreds of species it purports to cover; 2) the no-jeopardy opinion purports to apply not only to then-listed species but to all species listed or critical habitats designated post-1996; and 3) the incidental take statement fails to set any limits on incidental take via quantified levels or take or via a reasonable surrogate or proxy for each affected species, let alone species listed post-1996.

#### <u>Comment 3: The Applicant Must Disclose, and the Corps Must Consider,</u> Environmental Risks Related to the Discharge of Toxic Selenium.

There is a real risk of significant ecological harm from selenium discharged by surface coal mines in Appalachia such as the proposed Kelly Branch mine. Once selenium-bearing materials are exposed to the elements via surface mining, including via mine-throughs and spoil disposal valley fills, those materials will serve as persistent sources of biologically available selenium in downstream surface waters. Elevated levels of selenium in surface water poses a serious and persistent threat to aquatic life, including the federally threatened blackside dace. The USFWS has recognized that "Our results show that selenium present in surface waters in southern West Virginia is bioavailable, and that violations of the EPA selenium water quality criterion may result in selenium concentrations in fish that could adversely affect fish reproduction. In some cases fish tissue concentrations were near levels believed to pose a risk to fish-eating birds."

 <sup>&</sup>lt;sup>20</sup> Defenders of Wildlife v. EPA, 420 F.3d 946, 976 (9th Cir. 2005), rev'd on other grounds, Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 551 U.S. 644 (2007).
 <sup>21</sup> U.S. Fish and Wildlife Service, "Endangered Species Act Section 7 Consultation

<sup>&</sup>lt;sup>21</sup> U.S. Fish and Wildlife Service, "Endangered Species Act Section 7 Consultation Programmatic Biological Opinion and Conference Opinion on the Office of Surface Mining Reclamation and Enforcement's Regulatory Program as Modified by the Issuance and Implementation of the Final Regulation: Stream Protection Rule and as outlined in the 2016 Memorandum of Understanding" (December 2016), p. 32.

Attempts to avoid placement of high selenium laden materials in fill material, including in particular the use of material handling plans, have proven to be inadequate.

### <u>Comment 4: The Corps Must Consider Issues Impacting the Communities</u> <u>Surrounding the Proposed Mine, Including In Particular the Risk of Serious</u> <u>Impacts on Human Health.</u>

The proposed mine will have significant and irreparable impacts on the citizens living in the area. Property values will decline, making it difficult to sell homes and other real estate. Flooding will increase and cause irreparable harm to local citizens and to state and federal flood mitigation budgets. All of these concerns must be address in the EA and subsequent EIS done by the Corps.

Mined watersheds exhibit increased stormwater flows that result from increased impervious surface and decreased infiltration rates. These increased flows have real and devastating impacts on local communities, particularly during more extreme storm events.

In addition, mines cause large amounts of noise, blasting impacts and community disruption. The proposed mine will cause major alterations of the landscape, filling valleys and streams with tens of millions of tons of rock and debris hundreds of feet high.

Of greatest concern, however, is the potential for the proposed surface mine to negatively impact human health. Various studies have shown that surface coal mining in Appalachia has significant, negative impacts on the health of those living in nearby communities. Researchers have found that "[m]ountaintop coal mining in the Appalachian region in the United States causes significant environmental damage to air and water. Serious health disparities exist for people who live in coal mining portions of Appalachia, but little previous research has examined disparities specifically in mountaintop mining communities." The new research concluded, "[m]ountaintop mining is linked to increased community cancer risk. Efforts to reduce cancer and other health disparities in Appalachia must focus on mountaintop mining portions of the region."

Potential exposure pathways include contaminated well water, contact with contaminated streams, consumption of contaminated fish, or exposure to airborne toxins and dust. Specific health threats include increased rates of chronic pulmonary disorders and hypertension, lung cancer, low birth weights for newborns, increased rates of birth defects, and chronic heart, lung, and kidney disease. Studies assessing the impacts of proximity to surface coal mining on human health concluded that negative health effects are experienced by both women and men, making clear that the observed effects are not simply a result of direct occupational exposure of predominantly male coal miners. Human health studies have also controlled for multiple potential confounding factors.

These impacts must be considered by the Corps during the permitting process particularly in light of environmental justice concerns. The impacts are so serious and so fundamental the Corps must deny this permit.

### **Comment 5: The Public Notice is Inadequate**

The Public Notice Bulletin fails to satisfy the minimum requirements of the Clean Water Act and the National Environmental Policy Act because it does not provide adequate information and thereby makes it impossible for the Commenters to offer in-depth public comment. The Corps' Public Notice gives woefully inadequate information about the environmental impacts of the project including impacts to threatened and endangered species, the proposed compensatory mitigation, and alternatives. The "plans" made public during the notice of comment contain only 3 pages summarizing what is certainly many hundreds of pages of information, and a few figures and locational drawings. At the very least the Corps should make public the full plan documents along with its notice. The Corps should re-notice the application after it has added this information to the Bulletin.

### <u>Comment 6: When Evaluating the Proposed Project, the Corps Must Consider All</u> <u>Impacts of Surface Coal Mining.</u>

The purpose of the applicant's project is to recover coal. The Corps' regulations implementing NEPA for § 404 permits state, "In all cases, the scope of analysis used for analyzing both impacts and alternatives should be the same scope of analysis used for analyzing the benefits of a proposal." 33 C.F.R. § 325, App. B 7(b). If the Corps' analysis includes examination of the benefits from the mining operation as a whole, it must likewise consider the negative effects of the mining operation. Here, that means that the Corps must consider all impacts associated with every phase of the proposed mining operation, not just the impacts that will occur within jurisdictional waters.

Under NEPA, the Corps' scope of analysis of cumulative impacts must consider the whole environment, not just the aquatic environment. The Corps cannot legally segment upland mining development, including the destruction of forests, from the permitted filling of streams, because the two are interdependent. The purpose of mining through streams is to accommodate mining which could not otherwise occur. Thus, this mining operation is dependent on mine-throughs and the project must be considered as a whole, because "the environmental consequences of the larger project are essentially products of the Corps permit action." *Arkansas Nature Alliance v. Army Corps of Engineers*, 266 F. Supp.2d 876, 891-92 (E.D. Ark. 2003); *Friends of the Earth v. U.S. Army Corps of Engineers*, 266 F. Supp.2d 876, 891-92 (E.D. Ark. 2000) (Corps required to consider upland development resulting from and entirely conditional on the permitted activity); 33 C.F.R. § 325 App. B § 7.b.(2); *see also Save Our Sonoran v. Flowers*, 408 F.3d 1113 (9th Cir. 2005) and *White Tanks Concerned Citizens v. Strock*, 563 F.3d 1033 (9<sup>th</sup> Cir. 2009) (finding Corps responsibility and control over upland areas).

# <u>Comment 7: The Applicant and the Corps Have Failed to Adequately Assess All</u> <u>Practicable Alternatives Including Minimizing the Impacts of the Fills and Avoiding</u> <u>Mining through Streams.</u>

The Corps has failed to ensure that impacts from this mine have been minimized. It is not necessary to place fill material into streams in order for the mine to extract coal. Nor is it necessary to conduct coal removal activities through the streams themselves. Coal mining is not a water-dependent activity; thus, practicable alternatives that do not involve the placement of fill in the aquatic environment are presumed to be available. 40 C.F.R. § 230.10(a)(3). That the current application involves fewer fills and stream impacts than a previous application does not mean that the applicant has satisfied this requirement.

Mining can be profitable without the wholesale destruction of Appalachian streams. Congress's intent during promulgation of the 1977 SMCRA made it clear that "environmental protection and reclamation" was "a coequal objective with that of producing coal." H. Rep. No. 218, p. 96.

### **Comment 8: The Mine Will Contribute to Significant Degradation of the Environment and Must be Analyzed Fully in an EIS Under NEPA**

Widespread surface coal mining has already produced broad cumulative impacts throughout southern Appalachia. The programmatic EIS, or PEIS, on Mountaintop Mining/Valley Fills in Appalachia ("MTM/VF PEIS") clearly demonstrates that the cumulative adverse environmental impacts of mountaintop removal mining in Appalachia far exceed the significance threshold for preparation of an EIS. The magnitude of the destruction in terms of forest acreage, stream-miles, and lost wildlife populations, habitat, and species is enormous. Since the PEIS was completed many more studies have documented additional environmental degradation from large scale surface mines. Cumulatively, the ongoing impacts from active mines, mines in reclamation, bond-released mines, and pre-law mines are nothing short of significant.

## **Comment 9: The Proposed Mitigation Plan is Flawed and Illegal**

In order to decide whether discharges will cause or contribute to significant degradation of the affected streams, the 404(b)(1) Guidelines require the Corps to determine "the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the <u>structure and function</u> of the aquatic ecosystem and organisms." 40 C.F.R. § 230.11(e) (emphasis added). Thus, the Corps is required to use functional assessments. However, it does not appear that the Corps has employed a functional assessment in its evaluation of this permit application.

In addition, the Public Notice indicates that the Applicant intends to rely on in-lieu fee mitigation. The use of in-lieu fees violates the public notice and comment requirements of the Clean Water Act as there is no opportunity for the public to comment on the location, details or follow up structural and functional monitoring of the in lieu fee project. In general, mitigation carried out via this program suffers from the same deficiencies as onsite mitigation projects.

## **Comment 10: The Corps May Not Assume that the Proposed Mine Will Contribute Positively to Employment in Local Communities**

Surface coal mining operations do not deliver the jobs and other potentially positive economic benefits promised by their proponents. Surface coal mining of the type proposed for the Kelly Branch mine is highly mechanized and relies on heavy machinery rather than workers.

At the same time, the impacts of surface coal mines on local communities are tremendous, captured in a downward cycle of uncertain employment, poverty and poor health. The cost of poor health and excess deaths versus the myth of boosting local economies clearly shows that MTR not only devastates the environment but devastates communities and local and state economics. "The heaviest coal mining areas of Appalachia had the poorest socioeconomic conditions. Before adjusting for covariates, the number of excess annual age-adjusted deaths in coal mining areas ranged from 3,975 to 10,923, depending on years studied and comparison group. Corresponding VSL estimates ranged from \$18.563 billion to \$84.544 billion, with a point estimate of \$50.010 billion, greater than the \$8.088 billion economic contribution of coal mining. After adjusting for covariates, the number of excess annual deaths in mining areas ranged from 1,736 to 2,889, and VSL costs continued to exceed the benefits of mining. Discounting VSL costs into the future resulted in excess costs relative to benefits in seven of eight conditions, with a point estimate of \$41.846 billion."<sup>22</sup>

Another study examined and summarized the enormous body of research and information on the harmful impact that the stages of the life-cycle of coal- extraction, transport, processing, and combustion have on health and the environment. It also considered the costs of such damages, which are assumed by the U.S. public rather than coal companies and amount to a third to over one-half of a trillion dollars annually. Accounting for the damages conservatively doubles to triples the price of electricity from coal per kWh generated, making wind, solar, and other forms of non-fossil fuel power generation, along with investments in efficiency and electricity conservation methods, economically competitive.<sup>23</sup>

These impacts must be considered by the Corps during the permitting process particularly in light of environmental justice concerns. The impacts are so serious and so fundamental the Corps must deny the permit.

<sup>&</sup>lt;sup>22</sup> Memo from Nancy Stoner and Cynthia Giles of USEPA to Shawn Garvin, EPA Region 3, Gwendolyn Keyes Fleming, EPA Region 4, Susan Hedman, EPA Region 5, RE: Improving EPA Review of Appalachian Surface Coal Mining Operations Under the Clean Water Act, National Environmental Policy Act, and the Environmental Justice Executive Order. July 21, 2011.

<sup>&</sup>lt;sup>23</sup> GAO-10-206, FINANCIAL ASSURANCES FOR, AND LONG-TERM OVERSIGHT OF, MINES WITH VALLEY FILLS IN FOUR APPALACHIAN STATES 23 (Jan. 2010)

#### CONCLUSION

For all of these reasons, the Corps cannot make the required determination that the activity complies with Section 404 of the CWA. Furthermore, the Corps cannot make a final determination until it has fully complied with the requirements of both NEPA, and the ESA. There is no indication in the Public Notice or any other supporting document that the Corps has satisfied its NEPA or ESA obligations. The Commenters believe, based on the above, that full compliance with the CWA, NEPA, and ESA must result in a decision to deny the permit application.

Sincerely,

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On behalf of: Sierra Club, Alliance for Appalachia, Appalachian Voices, Defenders of Wildlife, Kentuckians For The Commonwealth, Kentucky Resources Council

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