IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF KENTUCKY
LOUISVILLE DIVISION

KENTUCKIANS FOR THE COMMONWEALTH, and SIERRA CLUB,	)	
Plaintiffs,	)	
v.	)	Civil Action No. 3:12-cv-00682
UNITED STATES ARMY CORPS OF ENGINEERS, THOMAS P. BOSTICK, Commander and Chief of Engineers, U.S. Army Corps of Engineers, and Luke T. Leonard Colonel, District Engineer, U.S. Army Corps of Engineers, Louisville District,	)	
Defendants.	)	

PLAINTIFFS' MEMORANDUM IN SUPPORT OF PARTIAL SUMMARY JUDGMENT[1]

On July 26, 2012, the Army Corps of Engineers issued a Clean Water Act section 404 permit to Leeco, Inc. to mine-through and fill streams including Stacy Branch, Yellow Creek of Carr Creek, and unnamed tributaries of these two streams. Pls.' Ex. A, Admin. Rec. Doc. # 353, Permit LRL-2007-217 (July 26, 2012) at 1 ("Stacy Branch Permit" or "Permit"). The Permit serves as the necessary federal approval for Leeco to conduct surface mining operations on an 869.44-acre surface mine near the town of Vicco, Kentucky. Pls.' Ex. B, Admin. Rec. Doc. # 351, Dept. of the Army Permit Evaluation and Decision Document 2007-00217 at 3.

Despite a growing body of scientific evidence that large-scale surface mining increases the risk and severity of cancer, pulmonary disease, cardiovascular disease and other chronic

[1] This motion pertains to Counts 1, 2 and 3 of Plaintiffs' Complaint for Injunctive and Declaratory Relief. Resolution of Count 4 may involve additional factual development outside of the record.

conditions, the Corps did not conduct any review of potential public health impacts of this mine. The Corps disregarded numerous peer-reviewed studies, which Plaintiffs cited in comments on the Permit, documenting these health risks. *See* Pls.' Ex. C, Admin. Rec. Doc. # 291, Margaret Janes Comment Letter (August 8, 2011) at 58-59; Pls.' Ex. D, Admin Rec. Doc. # 291 Ex WW[2]; Pls. Ex. E, Admin. Rec. Doc. # 291 Ex. c;[3] Pls.' Ex. F, Admin. Rec. Doc. # 291 ex. j;[4] Pls.' Ex. G, Admin Rec. Doc. # 317, Margaret Janes Comment Letter at 7-9 (November 11, 2011); Pls. Ex. H, Admin Rec. Doc. # 317 Ex. 10;[5] (cumulatively, Pls.' Exs. C through H, are hereinafter referred to as "Record Health Studies."). The Corps also failed to do its own review of the body of literature documenting startling health disparities.[6]

The Corps' failure to consider the potential health impacts of the mine is particularly puzzling in light of the considerable attention paid to mining-related health studies by the media, the public, and the Corps' partner agency, the U.S. Environmental Protection Agency (EPA), and the public controversy which has arisen in response. *See* Pls.' Ex. I, Admin Rec. Doc. # 112, EPA Preliminary Review Letter at 4 (October 22, 2010); Pls.' Ex. J, EPA, Improving Review of Appalachian Surface Coal Mining Operations Under the Clean Water Act, National

[2] Margaret Palmer, et al., "Mountaintop Mining Consequences," Science (January 8, 2010)

[3] Nathaniel Hitt and Michael Hendryx, "Ecological Integrity of Streams Related to Cancer Mortality Rates," *Ecological EcoHealth Online* (April 2, 2010)

[4] Keith Zullig and Michael Hendryx, "Health Related Quality of life Among Central Appalachian Residents in Mountaintop Mining Counties," *American Journal of Public Health*, Vol 1001 No. 4 at 848-52 (May 2011)

[5] Melissa Ahern et al. "The Association between mountaintop mining and birth defects among live births in central Appalachia, 1996-2003," *Environmental Resources* (May 2011)

[6] Remarkably, the Corps has declined to prepare or file an official administrative record in this case. The Corps relies instead on materials previously provided to Plaintiffs under a FOIA and an index filed with the Court. *See* Doc. No. 16. In an effort to give the Court the most complete record possible Plaintiffs have included exhibits that contain the entirety of cited documents. To clearly distinguish studies which were part of the record Plaintiffs refer to Exhibits C through H as "Record Health Studies." Documents that were not submitted to the Corps, but which Plaintiffs contend the Corps should have reviewed on its own initiative are referred to as "Non-Record Health Studies" and are compiled in Exhibit M. Plaintiffs note however, that many of these "Non-Record Health Studies" were cited as authority in the "Record Health Studies" and thus were at least mentioned in the record.

Environmental Policy Act, and the Environmental Justice Executive Order (July 21, 2011) at 4 (citing Record Health Studies); and Pls.' Ex K, collected Media Reports. A bill was even introduced in Congress, during the pendency of this permit, that would impose a moratorium on this type of permit until the Department of Health and Human Resources issued a decision on the impacts of mountaintop mining on human health. *See* Pls.' Ex. L, Appalachian Community Health Emergency Act, HR 5959 (June 29, 2012). As detailed in this this Motion for Summary Judgment, the Corps has a legal duty under the National Environmental Policy Act (NEPA) and the Clean Water Act (CWA) to analyze the potentially significant public health impacts of the Stacy Branch Permit before issuing it. Because the Corps failed to do so, Plaintiffs respectfully request that the Court vacate the Permit.

BACKGROUND

I. The Science

Numerous peer-reviewed studies, appearing in highly regarded scientific journals, have linked coal mining in Appalachia – especially large-scale surface mining – with serious health problems. Those studies show a positive correlation between the prevalence and intensity of mining and the prevalence of cancer, mortality from cancer, kidney disease, birth defects, mortality from cardiovascular and pulmonary disease, impaired function due to health problems, and health problems and mortality in general. *See* Record Health Studies, Pls.' Exs C through H; *see also* Pls.' Ex. M, Collected Non-Record Health Studies. Health problems are most severe in areas where the amount of mining is the greatest, and they are greater near large-scale mountaintop surface mines than near underground mines. Pls. Ex. H, Admin Rec. Doc. # 317 Ex. 10. Health problems in mining areas have worsened as large-scale surface mining has accelerated. *Id.*

Although non-mining socio-economic factors contribute to health problems in Appalachia, they cannot explain these significant health disparities. Significant correlations between health problems and mining persist even after statistical adjustment for age, smoking, alcohol consumption, obesity, poverty, education, availability of doctors and other risk factors. *See e.g.* Pls. Ex. E, Admin Rec. Doc. # 291 Ex. c;[7] Pls.' Ex. F, Admin Rec. Doc. # 291 Ex. j;[8] Pls.' Ex. H, Admin Rec. Doc. # 317 Ex. 10.[9] Health disparities are present not just for men, who experience most on-the-job exposures, but for women and children who live near the mines as well. Pls.' Ex. D, Admin Rec. Doc. #291 Ex. WW.[10]

Sierra Club urged the Corps to consider this mounting evidence of potential adverse human health impacts during the Corps' comment period. Pls.' Ex. C, Admin. Rec. Doc. # 291, Margaret Janes Comment Letter (August 8, 2011) at 58-60. Quoting from a landmark study in the January 8, 2010 issue of the journal *Science*, Plaintiffs explained "[a]dult hospitalizations for chronic pulmonary disorders and hypertension are elevated as a function of county-level coal production, as are rates of mortality; lung cancer; and chronic heart, lung, and kidney disease." Pls' Ex. C, Admin Rec. Doc. # 291 at 58; Pls.' Ex. D, Admin Rec. Doc. # 291 Ex WW. Plaintiffs went on to describe another study which found "[c]oal mining [is] significantly associated with ecological disintegrity and higher cancer mortality" and that "cancer clusters . . . correspond to areas of high coal mining intensity." Pls' Ex. C, Admin Rec. Doc. # 291 at 58;

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[7] Nathaniel Hitt and Michael Hendryx, "Ecological Integrity of Streams Related to Cancer Mortality Rates," *Ecological EcoHealth Online* (April 2, 2010).

[8] Keith Zullig and Michael Hendryx, "Health Related Quality of life Among Central Appalachian Residents in Mountaintop Mining Counties," *American Journal of Public Health*, Vol 1001 No. 4 at 848-52 (May 2011).

[9] Melissa Ahern et al. "The Association between mountaintop mining and birth defects among live births in central Appalachia, 1996-2003," *Environmental Resources* (May 2011)

[10] Margaret Palmer, et al., "Mountaintop Mining Consequences," *Science* (January 8, 2010)

Pls. Ex. E, Admin. Rec. Doc. # 291 Ex. c. And Plaintiffs cited another study showing that deficiencies in health-related quality of life are concentrated in surface mining areas of Appalachia. Pls' Ex. C, Admin Rec. Doc. # 291 at 58-59; Ex. F, Admin. Rec. Doc. # 291 ex. j. This study concluded that, on average, people in large-scale surface mining areas experience four additional years of poor health during their lifetimes, compared to residents of non-mining areas. Ex. F, Admin. Rec. Doc. # 291 ex. j. Mortality rates are also increased. *Id.* Plaintiffs sent an update to this letter on November 11, 2011. The November 11 comments referenced an additional health study finding that the rate of birth defects is 26 percent higher in surface mining counties than in counties with no mining. Pls.' Ex. G, Admin Rec. Doc. # 317; Pls.' Ex. H, Admin. Rec. Doc. 317 Ex. 10.[11]

Even without Plaintiffs' comments, the Corps should have known about the accumulating science linking large-scale surface mining to negative health outcomes. The EPA, which is required to cooperate with the Corps to ensure that section 404 permits will not cause water quality problems, *see* 33 C.F.R. 325.2(a)(3), stated in a highly-publicized guidance document that "[p]ossible human health impacts from coal mining activities have also been documented, including peer-reviewed public health literature that has preliminarily identified associations between increases in surface coal mining activities and increasing rates of cancer, birth defects, and other health problems in Appalachian communities." Pls.' Ex. J, U.S. EPA, *Improving EPA Review of Appalachian Surface Coal Mining Operations Under the Clean Water Act, National Environmental Policy Act, and the Environmental Justice Executive Order*, 4-5 (July 21, 2011).[12]

[11] Melissa Ahern et al. "The Association between mountaintop mining and birth defects among live births in central Appalachia, 1996-2003," *Environmental Resources* (May 2011).

[12] Citing Hitt, N.P. and M. Hendryx, Ecological Integrity of Streams Related to Human Cancer Mortality Rates. *EcoHealth* (2010); Hendryx and Ahern, Relations Between Health Indicators and Residential Proximity to Coal

And in vetoing the Corps' issuance of a specific section 404 permit to Mingo Logan Coal Company for a proposed operation on Spruce Mountain in West Virginia, the EPA concluded that "[a] growing body of research suggests that health disparities are not uniformly distributed across the Appalachian region, but instead are concentrated in areas where surface coal mining activity takes place." Pls. Ex. W, U.S. EPA, *Final Determination of the U.S. Environmental Protection Agency Pursuant to § 404(c) of the Clean Water Act Concerning the Spruce No. 1 Mine, Logan County, West Virginia*, 96-97 (Jan. 13, 2011). Both EPA documents cited specific primary research supporting these conclusions.[13]

The health studies also received considerable press attention. *See* Pls.' Ex. K, Collected Media Reports. Articles appeared in the local press, including the Lexington Herald-Leader, Louisville Courier Journal, and Charleston Gazette. *Id.* The findings from the health studies and the controversy surrounding them was significant enough that the national media even picked up on the issues. Articles have been published by CBS News, USA Today, and CNN. *Id*

If the Corps had further investigated the body of research relating to public health effects it would have found still more evidence of disparities.[14] One non-record study found that coal

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Mining in West Virginia, *Am. Jnl. of Public Health* (2008); Ahern, *et al*., The Association Between Mountaintop Mining and Birth Defects Among Live Births in Central Appalachia, 1996-2003, *Environmental Res.* (2011); Palmer, *et al*., Mountaintop Mining Consequences, *Science* (2011).

[13] Although the procedural validity of these EPA actions has been called into question by two recent decisions of the U.S. District Court for the District of Columbia, neither court decision questioned the scientific conclusions reached by EPA. *Nat'l Mining Ass'n v. Jackson*, 816 F. Supp. 2d 37 (D.D.C. 2011); *Mingo Logan Coal Co. Inc. v. EPA*, 850 F. Supp. 2d 133 (D.D.C. 2012). EPA has appealed both decisions. *Mingo Logan Coal Co. v. EPA*, No. 12-5150 (D.C. Cir.); *Nat'l Mining Ass'n v. Jackson*, 12-5310 (D.C. Cir.).

[14] Plaintiffs note that many of the "Non-Record Health Studies" were specifically referenced in one or more "Record Health Studies." For example, Rec. Doc. # 291 ex. j, includes citations to the following:

1) Hendrix, Mortality Rates in Appalachian Coal Mining Counties: 24 Years Behind the Nation, *Environmental Justice* (2008);
2) Hendryx et al., "Lung Cancer Mortality Is Elevated in Coal Mining Areas of Appalachia," *Lung Cancer* (2008);
3) Hitt and Hendryx, "Mortality from Heart, Respiratory and Kidney Disease in Coal Mining Areas of Appalachia," *International Archives of Occupational and Environmental Health* (2009);

mining areas experienced an excess of 1,607 deaths compared to non-mining areas of Appalachia from 1999 to 2004, even after accounting for negative health factors other than mining. Pls.' Ex. M, Non-Record Health Studies, (Hendrix, 2008).[15] This puts the mortality rates of Appalachian coal-mining communities 24 years behind the rest of the nation. *Id.*

Other studies found that specific disease outcomes are worse in mining areas, particularly those with surface mining. Mortality rates in coal mining areas of Appalachian are higher than in non-coal mining counties of Appalachia for heart, respiratory and kidney disease, heart attacks, chronic cardiovascular disease, lung cancer, leukemia, colon cancer and bladder cancer. Pls.' Ex. M, Non-Record Health Studies, (Hendrix et al., 2008), (Hitt and Hendryx, 2009), (Hendryx 2009), (Hendrix et al. 2009), (Esch and Hendryx 2011).[16] The odds of hospitalization for chronic obstructive pulmonary disease (COPD) increase 1 percent for each 1462 tons of coal mined in the county. Pls.' Ex. M, Collected Non-Record Health Studies (Hendryx et al. 2007).[17] The odds of hospitalization for high-blood increase 1 percent for every 1873 tons. *Id.* Surface coal mining has serious public health impacts even for those yet to be born. The risk of low birth

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4) Hendrix et al., "Higher Coronary Heart Disease and Heart Attack Morbidity in Appalachian Coal Mining Regions," *Preventive Medicine* (2009).

Pls. Ex. H, Admin Rec. Doc. # 317 ex. 10, *cites* Ahern M, Mullett M, MacKay K, Hamilton C. "Residence in Coal-Mining Areas and Low-Birth-Weight Outcomes," *Maternal and Child Health Journal* (2010); Pls. Ex. E, Admin Rec. Doc. # 291 Ex. c, cites Hendryx et al, "Hospitalization Patterns Associated with Appalachian Coal Mining," *Journal of Toxicology and Environmental Health* (2007)

[15] Hendrix, Mortality Rates in Appalachian Coal Mining Counties: 24 Years Behind the Nation, *Environmental Justice* (2008).

[16] Hendryx et al., "Lung Cancer Mortality Is Elevated in Coal Mining Areas of Appalachia," *Lung Cancer* (2008); Hitt and Hendryx, "Mortality from Heart, Respiratory and Kidney Disease in Coal Mining Areas of Appalachia," *International Archives of Occupational and Environmental Health* (2009), Hendrix et al., "Higher Coronary Heart Disease and Heart Attack Morbidity in Appalachian Coal Mining Regions," *Preventive Medicine* (2009); Esch L, Hendryx M, "Chronic Cardiovascular Disease Mortality in Mountaintop Mining Areas of Central Appalachian States," *Journal of Rural Health* (2011).

[17] Hendryx et al, "Hospitalization Patterns Associated with Appalachian Coal Mining," *Journal of Toxicology and Environmental Health Part A* (2007)

weight in infants is 16 percent greater in areas with high mining and 14 percent greater in areas with low levels of mining than in areas with no mining. Pls.' Ex. M, Non-Record Health Studies (Ahern et al., 2010).[18]

Evidence indicating public health risks associated with large-scale surface mines like Stacy Branch is not new. Research about the impacts of surface mining on human health has accumulated steadily over the last five years. It started with the study of general county level data examining general health indicators in counties with mining. Studies then became more specific, looking at the prevalence of specific diseases and specific disease outcomes. Studies also began to look not only at whether mining was present in a county, but the intensity of mining in a county and the type of mining which occurred there. All of these studies have found that mining has pronounced and significant health effects. *See generally* Pls.' Exs. C through H, Record Health Studies; Pls.' Ex. M, Non-Record Health Studies. Many effects are most severe in areas where mining intensity is highest and in areas where large-scale surface mining, such as mountaintop removal mining is practiced. Pls.' Ex. F, Admin. Rec. Doc. # 291 ex. j.[19]

Although Plaintiffs have examined the available research carefully, they were unable to find a single peer-reviewed study that contradicts these findings. Moreover, neither the Record Health Studies nor Collected Non-Record Health Studies are contradicted by anything in the record.

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[18] *Pls.' Ex.* M, Non-Record Health Studies, *including,* Ahern M, Mullett M, MacKay K, Hamilton C. "Residence in Coal-Mining Areas and Low-Birth-Weight Outcomes," *Maternal and Child Health Journal* (2010)

[19] Keith Zullig and Michael Hendryx, "Health Related Quality of life Among Central Appalachian Residents in Mountaintop Mining Counties," *American Journal of Public Health*, Vol 1001 No. 4 at 848-52 (May 2011)

II. Affected Community Members

The Corps' issuance of a section 404 permit for the Stacy Branch mine increases the risk of serious health problems for people living nearby.

A. Cleveland Smith

Cleveland Smith is a member of Kentuckians For The Commonwealth and the Sierra Club. He has lived northeast of the proposed mine for 21 years, less than a quarter mile away from the boundary of the operation. Pls.' Ex. N, Decl. of Cleveland Smith at ¶¶ 1, 3. He lives close enough that he can hear vehicles working on the mine site and is worried that he will not be able to sleep as the operations progress. *Id.* at ¶¶ 3, 5.

Mr. Smith is familiar with the health studies published by Michael Hendryx and others. *Id*. at ¶ 4. He has even lobbied in Washington D.C. in support of federal action to protect himself and his family. *Id.* Because he lives so close to the mine he is worried that he is at an increased risk of developing the conditions described in those studies. *Id.* at ¶ 7. He has family members who live in areas where mining is prevalent that have already experienced some of these problems, including birth defects and heart disease. *Id.* at ¶ 9. Mr. Smith worries that mining contributed to these illnesses. *Id.* Contributing greatly to Mr. Smith's fears is the fact that, although it is becoming clear that the mines cause community health problems, the precise causal mechanism of the harm remains uncertain. *Id.* at ¶¶ 7, 11. Mr. Smith says that because it is not clear what about the mines is causing the health outcomes described in the studies he does not know how to take precautions or protect his family. *Id.* at ¶¶ 7, 11. Perhaps more importantly, the mine operators do not know what they should be doing to protect nearby residents. *Id.* at *Id.* at ¶ 11. Mr. Smith is sufficiently concerned about the health studies that he says he will move if the mine is allowed to proceed as currently permitted. *Id.* at ¶ 10. Because

the land is his family's homeplace, he would prefer to stay and plans to visit if the mine goes forward. *Id.* at ¶ 12.

B. Pam Maggard

Pam Maggard is a member of Kentuckians For The Commonwealth and Sierra Club who lives in Sassafras, Kentucky. Pls.' Ex. O, Decl. of Pam Maggard at ¶¶ 1, 2. She received a notice from Leeco stating that she lives 1.13 miles from the Stacy Branch mine, close enough that she could be affected by blasting. *Id.* at ¶ 3. She is familiar with the studies published by Michael Hendryx and others and fears that her proximity to the mine puts her at increased risk for health problems. *Id.* at ¶ 4. She has family members who live even closer to the mine, in Allock, and she worries that their health is in jeopardy. *Id.* at ¶ 9.

Because she lives in a location that will be impacted by blasting, Ms. Maggard worries about dust and other contaminants traveling through the air from the mine. *Id.* at ¶¶ 5-6. In addition to the dust, which she can see, Ms. Maggard worries that the mine may affect her health in other ways. *Id.* at ¶ 7. She understands that the studies are not clear about the ways in which mining affects human health in nearby communities. *Id.* Because of that she does not know how best to protect her own health or that of her family and neighbors. *Id.* As a general precaution she will restrict the amount of time she spends outside. *Id* at¶ 8. She expects many of her neighbors will do the same. *Id.* at ¶ 8. Ms. Maggard is upset that the Army Corps has not done more to investigate the potential impacts of the Stacy Branch mine on her community and others nearby. She would be less concerned if the Corps had examined those issues before releasing the Stacy Branch Permit. *Id.* at ¶ 10.

C. Alice Whitaker

Alice Whitaker is a resident of Hazard, Kentucky and the director of the Lotts Creek Community School. Pls.' Ex. P, Decl. of Alice Whitaker at ¶ 1. She is a member of Kentuckians For The Commonwealth and a supporter of the Sierra Club. *Id.* at ¶ 2. Ms. Whitaker is familiar with the studies of Michael Hendryx, and others, showing relationships between surface coal mines and health problems such as cancer, heart disease, lung disease, kidney disease, and birth defects. *Id* at ¶ 4. She has observed these effects in her own students and their families. *Id.*

Ms. Whitaker is dedicated to protecting the health of her students, and participates in a program to help educate them about the things they can do to protect their own health. *Id.* at ¶ 5. Because the Corps did not consider potential health effects from the Stacy Branch Mine, she is not sure how to advise her students to protect themselves, and she does not know how to protect herself. *Id.* She is justifiably worried, therefore, that the health of her students will continue to be threatened from the mine.

She is concerned about pollutants that are transported by both air and water from mines such as Stacy Branch. *Id.* at ¶¶ 6-7. She has seen haze in the air from mines even further away than Stacy Branch and knows that Stacy Branch will contribute more dust. *Id.* at ¶6. She has seen first-hand how water quality suffers as a result of mining, and worries that children will be exposed to harmful pollutants while they play in streams below the Stacy Branch operation. *Id.* at ¶ 7. Ms. Whitaker's concerns would be alleviated if the Corps was required to consider these potential health impacts when it issued its permit for the Stacy Branch Mine. *Id.* at ¶ 9. At least

then she could educate herself as well as her students on what precautions to take to protect their health. *Id.*[20]

III. The Permit

On April 17, 2007, the Corps issued the first public notice for the Stacy Branch Permit. Pls.' Ex. S, Admin Rec. Doc. # 5, USACE, Public Notice (April 17, 2007). That notice proposed to permit Leeco to mine through several streams and construct six valley fills and six sediment control ponds in conjunction with the mining operation, burying 22,194 linear feet of streams in total. *Id.* at 1. On August 5, 2011, the Corps published notice of a revised proposed permit after the mine plan was reconfigured by the applicant. Pls.' Ex. T, Admin Rec. Doc. # 282, USACE Public Notice (August 5, 2011). The new configuration calls for the construction of a single, huge, valley fill and sediment pond that will destroy 8500 feet (approximately 1.6 miles) of streams. *Id* at 1. It also allows the mining through and permanent destruction of nearly 10,000 feet (approximately 1.9 miles) of Stacy Branch, Yellow Creek of Carr Creek and unnamed tributaries of these streams. *Id.* In all, nearly 18,300 feet, or 3.5 miles, of streams will be permanently lost. *Id.*

Plaintiff Sierra Club filed objections to the permit in May 2007 and again on August 8, 2011, well within the applicable comment periods. Pls.' Ex. U, Admin. Rec. Doc. # 8, Margaret Janes Comments (May 2007); Pls' Ex. C, Admin Rec. Doc. # 291, Margaret Janes Comments (August 8, 2011). As described above, the August 2011 objections notified the Corps of scientific findings correlating mining with serious health consequences. Pls.' Ex. C, Margaret Janes Comments at 43, 58-60 (August 8, 2011).

[20] In addition to affidavits of Cleveland Smith, Pam Maggard, and Alice Whitaker, Plaintiffs append additional declarations from Joey Shadowen (Pls.' Ex. Q) and Lane Boldman (Pls.' Ex. R), both of which provide additional support for Plaintiffs' standing.

Despite Plaintiff's comments, a partner agency's formally stated concerns, and numerous reports in the media, the Corps ignored potential human health impacts in its analysis of the permit. The only reference to the health studies appears in a summary of Leeco's response to Plaintiffs' comments. Pls.' Ex. B, Admin. Rec. Doc. # 351 Dept. of the Army Permit Evaluation and Decision Document 2007-00217 at 15-16. The Corps provided no explanation for its failure to consider serious potential health impacts related to the Permit.

IV. Statutory Background

A. The National Environmental Policy Act

Congress enacted the National Environmental Policy Act (NEPA) to "declare a national policy which will encourage productive and enjoyable harmony between man and his environment[,] promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man[, and] enrich the understanding of the ecological systems and natural resources important to the Nation . . . ." 42 U.S.C. § 4321. To those ends, NEPA requires federal agencies to consider "the environmental impact of" all "proposals for legislation and other major Federal actions significantly affecting the quality of the human environment." *Id.* § 4332. Although NEPA does not dictate substantive environmental results, it requires that an agency "not act on incomplete information, only to regret its decision after it is too late to correct." *See Sierra Club v. Slater,* 120 F.3d 623, 632 (6th Cir.1997) (quoting *Marsh v. Oregon Natural Resources Council,* 490 U.S. 360, 371 (1989)).

The agency must "take[] a 'hard look' at the environmental consequences of its decision." *Save Our Cumberland Mountains v. Kempthorne*, 453 F.3d 334, 339 (6th Cir. 2006). NEPA regulations promulgated by the Council on Environmental Quality, which are entitled to "substantial deference" by courts, *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332,

356 (1989), require consideration of all "effects" of the federal action, whether direct, indirect, or cumulative. 40 C.F.R. §§ 1502.16, 1508.8. "Effects includes . . . health." *Id.* § 1508.8. *Cf. Metropolitan Edison Company v. People Against Nuclear Energy*, 460 U.S. 766, 733 (1983) (noting that Congress chose to pursue NEPA's sweeping goal of protecting human health and welfare by means of protecting the environment); *see also Citizens Against Toxic Sprays, Inc. v. Bergland*, 428 F.Supp. 908, 927 (D. Or. 1977) *supplemented*, 76-438, 1978 WL 23466 (D. Or. Apr. 18, 1978) ("[n]o subject to be covered [under NEPA] can be more important than the potential effects of a federal program upon the health of human beings.").

Perhaps the most critical duty under NEPA is the requirement to draft a "detailed statement" analyzing all "significant" environmental effects of the proposed action, commonly referred to as an Environmental Impact Statement (EIS). 42 U.S.C. § 4332. While agencies are permitted to conduct a preliminary investigation, known as an Environmental Assessment, to determine whether impacts may be significant, such an inquiry must "provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact." 40 C.F.R. § 1508.9(a)(1). "An agency's refusal to prepare an [EIS] is arbitrary and capricious if its action might have a significant environmental impact." *State of N.C. v. FAA* 957 F.2d 1125, 1131 (4th Cir. 1992) (citing *LaFlamme v. Federal Energy Regulatory Comm'n*, 852 F.2d 389, 397 (9th Cir. 1988); *Citizen Advocates for Responsible Expansion, Inc v. Dole*, 770 F.2d 423, 432-33 (5th Cir. 1985)).

B. The Clean Water Act

The Clean Water Act (CWA) prohibits the discharge of dredge and fill material into the waters of the United States without a valid section 404 permit, and requires the Corps to comply with requirements established by the EPA—called section 404(b)(1) Guidelines—in issuing

those permits. 33 U.S.C. §§ 1311(a), 1344(b); *Ohio Valley Envt'l Coalition v. Aracoma*, 556 F.3d 177, 191 (2009). The Guidelines are incorporated by the Corps into its own regulations. 40 C.F.R. § 230; 33 C.F.R. § 320.2(f). They require prevention of "[s]ignificantly adverse effects of the discharge of pollutants on human health and welfare[.]" 40 C.F.R. § 230.10(c)(1). The Corps' § 404 permit process must also reflect an evaluation of the public interest, in which "the benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments." 33 C.F.R. § 320.4(a)(1). This must include an analysis of the general needs and welfare of the people. *Id*.

STANDARD OF REVIEW

A party is entitled to summary judgment when it establishes that there is no genuine issue as to any material fact and that it is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). At the summary judgment stage, the judge is not "to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249 (1986). A genuine issue for trial exists when there is sufficient "evidence on which the jury could reasonably find for the plaintiff." *Id.* at 252.

When reviewing an agency action the court follows the standard prescribed by the Administrative Procedure Act. *Simms v. National Highway Traffic Safety Admin.*, 45 F.3d 999, 1003 (6th Cir. 1999). Pursuant to section 706 of the Act a court must set aside an agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Id.* (quoting *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402 (1971)). "In determining whether a decision was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law the reviewing court must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Id*

(internal quotation marks omitted). The court may uphold a decision only on the grounds the agency gave, not based on "counsel's *post hoc* rationalizations." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 50 (1983).

ARGUMENT

Plaintiffs are entitled to summary judgment because the Corps' failure to consider human health effects violated NEPA and its implementing regulations, the Corps' own regulations, and the Clean Water Act and its implementing regulations. The Corps failed to take the requisite "hard look" at human health effects and instead based its finding of no significant impact on an incomplete analysis that ignored potential health impacts. The Corps also failed to consider adverse effects on human health and welfare as required by the CWA § 404(b)(1) Guidelines or consider the needs and welfare of local residents, as required by its own regulations.

I. Plaintiffs have Standing.

As a threshold matter, Plaintiffs have standing to pursue this action. To establish standing to bring suit, a citizen plaintiff "must show that he is under threat of suffering 'injury in fact' that is concrete and particularized; the threat must be actual and imminent, not conjectural or hypothetical; it must be fairly traceable to the challenged action of the defendant; and it must be likely that a favorable judicial decision will prevent or redress the injury." *Summers v. Earth Island Inst.*, 555 U.S. 488, 493 (2009) (citing *Friends of the Earth, Inc. v. Laidlaw Envtl. Services (TOC), Inc.*, 528 U.S. 167, 180-81 (2000)). When a procedural violation is alleged, such as a violation of NEPA, the causation and redressability components of this test are relaxed, and the plaintiff need only show that the injury may be avoided if the proper procedures are followed. *See id* at 496–97 (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 598 n.7 (1992)). An organization may sue in a representational capacity when "its members would otherwise have

standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit." *Am. Canoe Assn. v. City of Louisa* 389 F.3d 536, 540 (6th Cir. 2004) (quoting *Laidlaw*, 528 U.S. at 181).

A. Injury-in-Fact

Injury in fact is present when "reasonable concerns" about the effects of a challenged action affect plaintiffs' "recreational, aesthetic, and economic interests." *Laidlaw*, 528 U.S. at 183-84. In addition, "[t]hreats or increased risk [constitute] cognizable harm." *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 159-60 (4th Cir. 2000) (en banc). *See Florida Audubon Soc.*, 94 F.3d 658, 669 (D.C. Cir. 1996) ("[Plaintiffs must show a] substantial probability that the substantive agency action . . . created a demonstrable risk, or caused a demonstrable increase in an existing risk, of injury to the particularized interests of the plaintiff."); *Mountain States Legal Found. v. Glickman*, 92 F.3d 1228, 1234-35 (D.C. Cir. 1996) (holding an unquantified increase in risk of wildfires which threatened aesthetic environmental interests sufficient to support standing).

The Plaintiffs easily meet the injury-in-fact prong. Plaintiffs have at least three members, Cleveland Smith, Pam Maggard, and Alice Whitaker, who live and/or work in proximity to the Stacy Branch operation Each will be exposed to an increased risk of serious health problems as a result of the Corps' issuance of this permit. Each will also experience harm to their concrete interests as a direct result of their reasonable concerns about the operation and its potential health impacts. Mr. Smith and Ms. Maggard will both take precautions that reduce their enjoyment of their property. Cleveland may go so far as to move from his homeplace. Pls.' Ex. N at ¶10. Ms. Maggard will restrict the amount of time she spends outside. Pls.' Ex. O at ¶ 8. As a result of

what she has personally seen, Ms. Whitaker worries about the effects of the mine not only on her own health but on that of her students, and volunteers she sends to nearby communities to build and repair homes. Pls.' Ex. P at ¶¶ 6-8. Their increased concerns about their health and loss of enjoyment of regular activities constitutes and injury in fact. *See Defenders of Wildlife*, 504 U.S. at 572 & n.7 (1992) (recognizing that plaintiffs may assert standing to "enforce a procedural requirement the disregard of which could impair a separate concrete interest of theirs," such as "the procedural requirement for an environmental impact statement before a federal facility is constructed next door to them"); *Kelley v. Selin*, 42 F.3d 1501, 1509 (6th Cir. 1995) (holding injury was sufficient to establish standing where plaintiffs owned land in proximity to a nuclear plant and asserted harm to their aesthetic interests and physical health).

B. Traceability and Redressability

The causation requirements of traceability and redressability exist to "eliminate those cases in which a third party and not a party not before the court causes the injury." *American Canoe Ass'n v. Louisa Water & Sewer Com'n*, 389 F.3d 536, 542 (6th Cir. 2004). "Traceability does not mean that plaintiffs must show to a scientific certainty" that defendant's actions led to the precise harm suffered. *Id.* (quoting *Piney Run Pres. Ass'n v. County Comm'rs of Carroll County*, 268 F.3 255, 263-64 (4th Cir. 2001)). Moreover, plaintiffs do not need to show that a particular defendant is the only cause of their injury. *See Public Interest Research Group of New Jersey Inc. v. Powell Duffy Terminals, Inc.* 913 F.2d 64, 72 (3d Cir. 1990). In a procedural challenge such as this one, a plaintiff "has standing to challenge the [] agency's failure to prepare an environmental impact statement, even though he cannot establish with any certainty that the statement will cause the [permit] to be withheld or altered, and even though the [project] will not be completed for many years." *Defenders of Wildlife*, 504 U.S. at 598 n.7; *accord*

Massachusetts v. EPA, 549 U.S. 497, 518 (2007) ("[A] litigant has standing if there is some possibility that the requested relief will prompt the injury-causing party to reconsider the decision that allegedly harmed the litigant."). Plaintiffs have standing here because proper consideration of the potential for grave human health effects could lead to a change in the Corps' permitting decision.

II. The Corps' Failure to Consider Health Violated NEPA, CEQ Regulations, and the Corps' Own Regulations.

In its review of the Stacy Branch permit, the Corps failed to consider human health impacts of the surface mine. It did not provide even a minimal statement of these effects, and failed to provide any information or analysis to justify a finding that its authorization of environmental impacts under the permit would have no significant impact upon human health. This violated NEPA.

A. The Corps' Failure to Take a "Hard Look" at the Potential Human Health Impacts of Its Action Violated NEPA and Its Implementing Regulations.

By failing to take a "hard look" — or any look at all — at the possible health effects of the project, the Corps violated NEPA. *Save Our Cumberland Mountains*, 453 F.3d at 339. NEPA requires consideration of the environmental impact of the Stacy Branch Permit, which includes all reasonably foreseeable effects on human health. 40 C.F.R. § 1508.8. The Stacy Branch Permit authorizes the mining-through and burial of 3.5 miles of streams, and these mining activities are within the scope of NEPA review that the Corps itself defined. Pls.' Ex. B, Admin. Rec. Doc. # 351 at 2-3. ("The NEPA Scope of Analysis in this case would include jurisdictional 'waters of the U.S.' and the immediate adjacent riparian corridor that would be filled directly or indirectly by the construction of the Hollowfill, construction of the sediment pond, and the mining through of streams.").

The Corps was thus required to consider reasonably foreseeable effects on human health from these activities. But the Corps failed to consider health impacts at all. Plaintiffs provided comments citing several specific health studies which demonstrate a connection between large scale surface mining and negative health outcomes. Pls.' Exs. C through H, Record Health Studies. Even the most cursory literature review would have revealed several others. There is, however, no evidence in the record that the Corps considered this line of research. Pls.' Ex. M, Collected Non-Record Health Studies. Because the Corps failed to "take[] a 'hard look' at the environmental consequences of its decision," it violated NEPA. *Save Our Cumberland Mountains*, 453 F.3d at 339.

NEPA requires that the Corps' decisions under the CWA be environmentally informed; the Corps may "not act on incomplete information, only to regret its decision after it is too late to correct." *Slater*, 120 F.3d at 632. The CWA, in turn, requires a wide-ranging evaluation of the public interest, 33 C.F.R. § 320.4(a)(1), and prohibits issuance of permits that will produce "significantly adverse effects on human health or welfare." 40 C.F.R. § 230.10(c)(1). Because these CWA decisions on the Stacy Branch permit were made without any consideration of human health effects, or the numerous studies documenting a connection between large-scale surface mining and negative health outcomes, they were environmentally uninformed in violation of NEPA.

The Corps' complete failure to consider health effects also violated the Corps' own implementing regulations for NEPA, which require the Corps to analyze any environmental effects that are "essentially the products of the Corps permit action." 33 C.F.R. § 325 App. B. Because health effects will potentially result from the Corps' permitting of mining activities in and through jurisdictional waters, the Corps' own regulations require that they be considered.

B. The Corps Unlawfully Restricted Its Scope of Review.

NEPA and its implementing regulations do not permit the narrowly truncated scope of review that the Corps adopted. A lawful scope of review would encompass health risks imposed on nearby residents by the project.

NEPA requires analysis of the effects of the Corps' action, including direct, indirect and cumulative effects. 42 U.S.C. § 4332 (requiring analysis of "the environmental impact" of "legislation and other major Federal actions"); 40 C.F.R. § 1508.8. This means the proper scope of a NEPA review is a question of causation. *See Department of Transportation v. Public Citizen,* 541 U.S. 752 (2004). In *Public Citizen,* the Supreme Court instructed that determining which effects fall within NEPA requires consideration of both "but for" causation and NEPA's "rule of reason" – analogous to the "familiar doctrine of proximate cause from tort law." *Id.* at 767 (quoting *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983)). The "rule of reason" serves the dual purposes of NEPA—informed agency decision-making and informed public participation in agency processes. *Id.* at 767-68; *see also Churchill County v. Norton*, 276 F.3d 1060, 1071 (9th Cir. 2001) (holding that the "rule of reason" is "not susceptible to refined calibration" but "requires a pragmatic judgment whether the [EIS] . . . foster[s] both informed decision-making and informed public participation.").

Public Citizen compels the consideration of health impacts that may result from issuance of this Permit because they are effects of the Permit and consideration of them complies with the rule of reason. The Permit is a "but for" cause of the health risks because the project could not proceed without fill activities in jurisdictional waters – the decision document states as much. In evaluating the effect of a permit denial (the "No Action Alternative"), the Corps stated: "This alternative would result in no new impacts to waters of the U.S. However, taking no action or

permit denial would prevent the applicant from recovering coal at this mine site and delivering it to the marketplace." Pls.' Ex. B Admin. Rec. Doc. # 351 Dept. of the Army Permit Evaluation and Decision Document 2007-00217.

Consideration of human health impacts complies with the rule of reason because the Corps is not authorized to issue a permit unless and until it undertakes a broad public interest determination on the effects of its action, including specific determinations on the effects of the action on human health and welfare. *See* 40 C.F.R. § 230.10(c)(1) (requiring the Corps to consider "[s]ignificantly adverse effects of the pollutants on human health and welfare. . ."); 33 C.F.R. 320.4(a)(1) (requiring a broad public interest review for every Corps permit including the effects on the "needs and welfare of the people."). In the circumstances of *Public Citizen*, the rule of reason counseled against including pollution effects within the scope of analysis because the governing substantive statute mandated a decision *without* regard for the environment. 541 U.S. at 766. Here the opposite is true.

This case is on all fours with two decisions of the Ninth Circuit Court of Appeals concerning Corps permits issued under § 404 of the CWA. In *Save our Sonoran v. Flowers*, the Ninth Circuit held that NEPA required consideration of the effects of an entire development project, despite the fact that only 5% was planned within the Corps jurisdiction, because the project could not go forward without a Corps permit. 408 F.3d 1113, 1122-23 (9th Cir. 2005). The court explained that "while it is the development's impact on jurisdictional waters that determines the scope of the Corps' permitting authority, it is the impact of the permit on the environment at large that determines the Corps' NEPA responsibility." *Id.* at 1122. Similarly, in *White Tanks Concerned Citizens, Inc. v. Strock*, the court vacated the Corps' issuance of a § 404 permit for filling waters in a "relatively tiny percentage of acreage of the overall project"

"[b]ecause th[e] project's viability [was] founded on the . . . permit." 563 F.3d 1033, 1039–40 (9th Cir. 2009). *See also Sierra Club v. Mainella*, 459 F. Supp. 2d 76, 105 (D.D.C. 2006) (holding the Park Service must consider the effects of private activity outside the park when there is a "reasonably close causal relationship between such impacts and the [Park Service's] decision. . . .").

Because the Stacy Branch mine cannot go forward without the Permit, and consideration of health impacts is required by NEPA's rule of reason, the scope of review must encompass the health consequences of issuing the Permit.

C. The Corps Violated NEPA and Its Own Regulations By Using a Broader Scope of Review for Benefits Than For Harms.

The Corps impermissibly ignored its own regulations by using a greater scope of review for benefits than for harms. 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). In this case, the FONSI issued by the Corps was based on a scope of analysis limited to the streams and the immediately adjacent riparian area that would be filled by the valley fill, transformed into a sediment pond, or mined through. Pls.' Ex. B, Admin. Rec. Doc. # 351 Dept. of the Army Permit Evaluation and Decision Document 2007-00217, 2-3. The analysis of environmental impacts in the EA was apparently restricted to that scope. But the analysis of benefits, particularly the benefits invoked to justify the choice of an environmentally harmful alternative, included not only the entire mining operation, but the larger regional economy. This is arbitrary and capricious.

"The Corps cannot tip the scales of an [EA] by promoting possible benefits while ignoring their costs." *Sierra Club v. Sigler*, 695 F.2d 957, 979 (5th Cir. 1983). In *Sigler*, the

Fifth Circuit remanded an EIS for the deepening of a port channel to the Corps for impermissibly including the benefits of expanding bulk facilities while ignoring the adverse environmental impacts of such expansions. *Id.* The Corps went on to recognize the inherent logic of that decision by preventing future skewed cost-benefit analyses through regulation. 33 C.F.R. 325, App. B 7(b).

The Corps' analysis here violates that rule. Under the no-action alternative, the Corps determined that denying the permit would prevent any coal mining at the site. The Corps' consideration of the benefits of this mining extended to taxes that could be reaped from the mining operation, employment opportunities for miners, and the effect of coal on the national energy market. Pls.' Ex. B, Admin. Rec. Doc. # 351 Dept. of the Army Permit Evaluation and Decision Document 2007-00217 at 6. In another discussion of benefits, the Corps considered "the jobs supplied by this mining operation, the energy generated by the harvested coal reserves and the additional demand for mine service and supply vendors" as beneficial effects of the project. *Id.* at 29. Energy production and mine service and supply vendors are many steps removed from the narrow the scope of review the Corps adopted for analysis of environmental harms—jurisdictional waters and immediate adjacent riparian areas.

While the Corps touted the indirect benefits of the entire mining project, it conspicuously ignored its public health consequences. In the discussion of economics, the costs of public health harms were never mentioned. Although the Corps was well aware of the existence of such studies, which were raised in Plaintiffs Comments, *Id.* at 13, it performed no analysis of the many studies linking surface coal mining to negative public health outcomes.

That approach resulted in a document skewed against health impact considerations. A balanced approach that limited the benefits analysis to the activity directly regulated would

reveal that there are few, if any, economic benefits to burying streams. Instead the NEPA analysis gives the impression that the benefits of the Corps' action far outweigh the adverse environmental impacts. This result is misleading and contrary to the purposes of NEPA as either a decision-making or public disclosure tool. The Corps' lopsided approach violated its own binding regulation, 33 C.F.R. § 325, App. B 7(b).

D. The Corps Failed to Justify Its Disregard of Health Effects.

The Corps neither responded to Plaintiffs' comments urging consideration of the potential health consequences of issuing the Stacy Branch Permit, nor addressed the issue in any way, except for summarizing the views of the applicant, Leeco. Pls.' Ex. B, Admin. Rec. Doc. # 351 Dept. of the Army Permit Evaluation and Decision Document 2007-00217 at 15-16. The Corps gave no explanation of its own for its failure to consider health impacts. At one point, the Decision Document invokes the permitting authority of the Kentucky Department of Mine Permits as a reason not to conduct a broader NEPA review. *Id* at 3. But the Decision Document never relates this determination to health.

In any event, the Corps could not satisfy its NEPA obligation to consider health by deferring to the Kentucky Division of Mine Permits, the agency that administers SMCRA. As both NEPA and SMCRA expressly provide, the SMCRA program does not limit the Corps' NEPA responsibilities. 42 U.S.C. § 4332(D) ("[Analysis conducted by a state agency or official] shall not relieve the Federal official of his responsibilities for the scope, objectivity, and content of the entire statement or of any other responsibility under [NEPA.]"); 30 U.S.C. § 1292(a) ("Nothing in this Act shall be construed as superseding, amending, modifying, or repealing the ... National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-47) ...."). In the Sixth Circuit, those provisions mean what they say. *Save Our Cumberland Mountains v. Kempthorne*, 453 F.3d

334, 343 (6th Cir. 2006) ("Whatever duties the Surface Mining Control and Reclamation Act imposes . . ., it does not suspend the agency's independent obligations under the National Environmental Policy Act.").[21]

E. A "Hard Look" Analysis Would Have Resulted in the Decision that An Environmental Impact Statement Was Required.

The potential for serious human health effects from the Stacy Branch Permit requires the Corps to prepare an Environmental Impact Statement for the project. In determining whether a federal action may significantly impact the human environment, triggering an EIS, CEQ regulations require the consideration of context and intensity. 40 C.F.R. § 1508.27. "Proper assessment of an impact's intensity requires consideration of . . . ten factors" listed in the regulation, *Anglers of the Au Sable v. U.S. Forest Serv.*, 565 F. Supp. 2d 812, 824 (E.D. Mich. 2008), three of which are particularly relevant in this case: "[t]he degree to which the proposed action affects public health or safety," "[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks," and "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts." 40 C.F.R. §§ 1508.27(b)(2), (5), (7). Had the Corps taken a "hard look" at those factors, it would have been compelled to conclude that the project has the potential to significantly affect the human environment, requiring an EIS.

As the Record Health Studies and Non-Record Health Studies demonstrate, the Stacy Branch Permit may pose a significant threat to public health, necessitating an EIS under NEPA. *See* 40 C.F.R. § 1508.27 (defining "Significant" as used in NEPA). The uncontroverted research

[21] Deferring to the KDMP would be particularly inappropriate here because there is no evidence that KDMP took human health effects of the mine into account in its permit process. Thus this case is distinguishable from *Ohio Valley Environmental Coalition v. Aracoma Coal Company*, in which the Fourth Circuit accepted a narrow scope of review in reliance on the principle that NEPA does not require "duplication of work by state and federal agencies." 556 F.3d 177, 196 (4th Cir. 2009).

is more than sufficient to trigger the Corps' duty to prepare an EIS. "'If substantial questions are raised whether a project may have a significant effect upon the human environment, an EIS must be prepared.'" *House v. U.S. Forest Serv., U.S. Dept. of Agric.*, 974 F. Supp. 1022, 1035 (E.D. Ky. 1997) (quoting *Foundation for North American Wild Sheep v. U.S. Dept. of Agriculture*, 681 F.2d 1172, 1177–78 (9th Cir.1982)); *accord Anglers of the Au Sable*, 565 F. Supp. 2d at 825 ("a plaintiff need not show that significant effects *will in fact occur* [;] raising substantial questions whether a project may have a significant effect is sufficient.") (quoting *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150 (9th Cir.1998) and citing *Shenandoah Ecosystems Defense Group v. United States Forest Service*, 194 F.3d 1305, *7 (4th Cir. 1999)); 40 C.F.R. § 1508.3 ("Affecting means will *or may* have an effect on.") (emphasis added).

Moreover, although the link between large-scale surface mines and negative public health consequences is clear, the precise causal mechanisms are not yet completely understood. *See* 40 C.F.R. § 1508.27(b)(5). An EIS must be performed to help clarify this uncertainty. *See e.g. National Parks & Conservation Assoc. v. Babbit*, 241 F.3d 722, 731-32 (9th Cir. 2001) *abrogated on other grounds by Monsanto Co. v. Geertson Seed Farms* 130 S.Ct. 2743, 2757 (2010) ("Preparation of an EIS is mandated where uncertainty may be resolved by further collection of data. . . or where collection of such data may prevent speculation on potential effects") (internal citations omitted). Although current research has not pinpointed the causal pathways through which surface mining may cause health effects, the research establishes a clear link between coal mining operations and public health. The Corps is therefore obligated to conduct further studies to understand the causes of well-documented public health disparities.

III. The Corps Did Not Satisfy Its Obligations Under Section 404 of the Clean Water Act.

The Corps is bound to follow the § 404(b)(1) Guidelines when it issues § 404 permits. *See Aracoma*, 556 F.3d at 191. Those guidelines are promulgated by EPA pursuant to 33 U.S.C. § 1344(b)(1) and incorporated by the Corps into its own regulations. *See* 40 C.F.R. pt. 230; 33 C.F.R. § 320.2(f). They require the Corps to consider "[s]ignificantly adverse effects of the pollutants on human health and welfare. . . ." 40 C.F.R. § 230.10(c)(1). The Corps' section 404 permit process must also include an evaluation of the public interest, in which "the benefits which may reasonably be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments." 33 C.F.R. § 320.4(a)(1). Those must include an analysis of the general needs and welfare of the people. 33 C.F.R. § 320.4(a)(1).

Those provisions independently require the Corps to assess potential health impacts of its permit action to fulfill its duties under the CWA. Despite those requirements, the Corps failed to investigate peer-reviewed literature documenting serious health effects among residents living near surface mines such as the Leeco Stacy Branch Mine. The Corps therefore violated not only NEPA, but the CWA as well.

IV. The Corps Failed to Assess Cumulative Impacts Under Either the CWA or NEPA.

The Corps is obligated under both the CWA and NEPA to consider the impacts of the Stacy Branch mine not only individually, but also when combined with the effects of other such operations. Not only did the Corps fail to consider the individual impacts of the proposed Stacy Branch mine, it failed to consider the cumulative health impacts of the mine in combination with the many other mines in the area. The Corps' failure to even attempt to perform that fundamental duty is astonishing.

The 404(b)(1) guidelines provide that the effects contributing to impacts on human health and welfare must be considered "collectively." 40 C.F.R. § 230.10(c)(1). NEPA requires that "cumulative impacts" be considered. 40 C.F.R. § 1508.7. A cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably forseeable future actions." *Id.* An action will be considered "significant" under NEPA "if it is reasonable to anticipate a cumulative significant impact on the environment." *Id.* § 1508.27(b)(7). This is particularly true when the cumulative impacts of projects result in the disturbance of large portions of a watershed. *Louisiana Wildlife Federation v. York*, 761 F.2d 1044, 1052-53 (5th Cir. 1985); *see also*, Pls. Ex. W, U.S. EPA, *Final Determination of the U.S. Environmental Protection Agency Pursuant to § 404(c) of the Clean Water Act Concerning the Spruce No. 1 Mine, Logan County, West Virginia*, 13, 50 (Jan. 13, 2011).

Stacy Branch flows into Carr Fork, which eventually makes its way to the North Fork of the Kentucky River. *See* Pls.' Ex. B, Admin. Rec. Doc. # 351 Dept. of the Army Permit Evaluation and Decision Document 2007-00217 at 26-27. These watersheds have been extensively mined in the past and will remain so into the future. The North Fork of the Kentucky River encompasses 852,626 acres. Past mining (through 1984/85) disturbed 94,772 acres or 11.12% of the watershed. *Id.* at 35. Present mining (through 2006) occurs on 216,333 acres or 25.36% of the watershed. *Id.* When future projects are considered active mining operations are expected to take up 226,264 acres or 26.5 percent of the watershed. *Id.* at 36. Mining takes up an even more significant portion of the Carr Fork watershed. Past mining (through 1984/85) occurred on 8,042 acres or 14.72% of the watershed. *Id.* at 35. Present mining (through 2006) is much more extensive, covering 20,243 acres or 36.99% of the watershed. *Id.* Future projections

suggest active mining operations will eventually cover 21,190 acres or 38.7% of the watershed. *Id.* at 36. The watershed of Stacy Branch itself is mined almost in its entirety. Although in the past mining took place on only 9.10% of the watershed present mining occurs on 95% of the watershed and future mining is projected to do the same. *Id.* at 35-36.

The high prevalence and intensity of mining over a large portion of the region where the Stacy Branch mine is located makes it crucial to carefully examine and consider the effects of mining on the health of residents in the region. The Corps' permit decision, therefore, does not comply with either NEPA or the CWA because it failed to comply with its fundamental duty to consider likely cumulative health impacts associated with its permitting decision.

V. The Corps' CWA Public Interest Review Rests on Environmental Justice Conclusions that are Arbitrary and Capricious.

The Corps' regulations require it to consider "the needs and welfare of the people" before issuing a section 404 permit, and Executive Order 12898 requires consideration of "disproportionately high and adverse human health or environmental effects of [the Corps'] programs, policies, and activities on minority populations and low-income populations." 33 C.F.R. § 320.4(a)(1).; Exec. Order No. 12898., 59 Fed. Reg. 7,629-33 (Feb. 11, 1994). Accordingly, the Corps included an environmental justice analysis in its public interest determination for the Stacy Branch permit. Pls.' Ex. B, Admin. Rec. Doc. # 351 Dept. of the Army Permit Evaluation and Decision Document 2007-00217 at 30. Because the Corps' environmental justice analysis was arbitrary, capricious and unsupported by the record, the public interest determination is invalid.

The Corps' environmental justice analysis concludes that the permitted actions would not "discriminate on the basis of race, color, or national origin nor would it have a disproportionate effect on minority or low-income communities." *Id.* at 30. This conclusion was reached despite

the fact that low-income populations will disproportionately be the victims of increased health risks as a result of the project.

The Army Corps identified the demographics of the mining area, finding that while only a small percentage of the affected households are minority households, 40.6% of individuals living within a 1.5-mile radius of the mine are below the poverty level. *Id.* The counties surrounding the mine also have high rates of poverty, at 31.1% for Knott County and 29.1% for Perry County. *Id.* In comparison, only 10.7% of Kentucky residents live below the poverty level. *Id.* Those numbers show a starkly disproportionate low-income population in the coal mining counties of Kentucky and particularly in the shadow of the Leeco mine.

With the issuance of the Stacy Branch permit, this low-income population will be subject to increased risk and severity of cancer, pulmonary disease, cardiovascular disease, birth defects, and other chronic conditions. The combination of the demographic makeup of the surrounding community and the health harms associated with mountaintop mining mean that low-income individuals will disproportionately bear the burden of the serious health risks caused by such mining. The conclusion that the project will not have a disproportionate impact on low-income populations is not supported by substantial evidence in the record, and accordingly the public interest determination is invalid.

VI. The Corps Should Have Completed a Supplemental Environmental Analysis after the Submission of Plaintiffs' August 17, 2012 Comments.

The Corps has a duty under NEPA to prepare a supplemental EIS whenever "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii); 33 C.F.R. § 230.13(b). That duty also applies to an environmental assessment (EA), which is what the Corps prepared in this case. *See Idaho Sporting Cong. Inc. v. Alexander*, 222 F.3d 562, 566 n.2 (9th Cir. 2000). That

duty to prepare a supplemental EA continues even after the Corps issues a section 404 permit. *See National Wildlife Federation v. Marsh*, 721 F.2d 767, 782-84 (11th Cir. 1983) (affirming a preliminary injunction requiring the Corps to prepare a supplemental EIS after it had issued a § 404 permit). In fact, the Stacy Branch Permit specifically provides that the Corps may reevaluate its permitting decision if "[s]ignificant new information surfaces which [the] office did not consider in reaching the original public interest decision." Pls.' Ex. A, Admin. Rec. Doc. # 353, Permit LRL-2007-217 (July 26, 2012) at 2. Such a reevaluation of the permitting decision may result in the suspension or revocations of the permit. *Id.*

Although the Corps should have been aware of the potential human health effects of surface mining through Plaintiffs' comments before permit issuance, the statements of a partner agency, significant media attention, and even the action of members of the U.S. House of Representatives, comments on August 17, 2012, contained significant new information. Pls.' Ex. V, Margaret Janes Comments (August 17, 2012). Additionally, comments submitted to the Corps by Plaintiffs after the issuance of the permit contained more recent human health studies informing the Corps about research confirming and strengthening the link between large-scale surface mining and adverse effects on human health. Although those comments were sent after permit issuance, the Corps was legally obligated to consider the significant new information provided by Plaintiffs and require a supplemental EA. Unfortunately, the Corps violated its duty under NEPA by not preparing a supplemental EA analyzing the potential for the Stacy Branch permit to lead to human health effects in nearby communities including several prominent studies outside of the record. For that reason, the Corps' permit issuance was arbitrary, capricious and not in compliance with the law.

CONCLUSION

For the foregoing reasons, the Plaintiffs respectfully ask the Court to (1) vacate the permit and remand the permit to the Corps for consideration of the public health implications of the proposed mine, and (2) order the Corps to consider all relevant information available at the time of remand regarding human health impacts (both individual and cumulative) of the proposed mine. In addition, Plaintiffs request that the Court required a new public notice and opportunity for public comment on remand.

Respectfully submitted,

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IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF KENTUCKY
LOUISVILLE DIVISION

KENTUCKIANS FOR THE COMMONWEALTH, and SIERRA CLUB, Plaintiffs, v. UNITED STATES ARMY CORPS OF ENGINEERS, THOMAS P. BOSTICK, Commander and Chief of Engineers, U.S. Army Corps of Engineers, and Luke T. Leonard Colonel, District Engineer, U.S. Army Corps of Engineers, Louisville District, Defendants, v. LEECO, INC., Intervenor.	)	Civil Action No. 3:12-cv-00682

CERTIFICATE OF SERVICE

I, J. Michael Becher, do hereby certify that, on January 28, 2012, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system, which will send notification of such filing to the following:

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