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Re: Comments on Proposed Rule and Draft EIS on Excess Spoil Minimization/Stream Buffer Zones, 72 Fed. Reg. 48678, 48890 (August 24, 2007), RIN 1029-AC04, Docket Nos. OSM-2007-0007 and OSM-2007-0008; OSM-EIS-34.

Dear Mr. Hartos:

On behalf of the West Virginia Highlands Conservancy, Sierra Club, Ohio Valley Environmental Coalition, Coal River Mountain Watch and Waterkeeper Alliance¹, we submit these comments in opposition to the proposed rule.² Earthjustice also joins in these comments. The proposed rule is another in a series of actions by the Bush Administration to gut long-standing safeguards against the wholesale burial and pollution of streams in Appalachia by the coal mining industry. In May 2002, the U.S. Army Corps of Engineers (the Corps) repealed a 25-year-old prohibition on dumping waste material in streams. 67 Fed. Reg. 31129. In October 2005, the Office of Surface Mining (OSM) weakened its oversight of state mining programs, by

¹The members of the Waterkeeper Alliance are the Altamaha Riverkeeper, Animas Riverkeeper, Assateague Coastkeeper, Black Warrior Riverkeeper, Black Water/Nottoway Riverkeeper, Cape Fear Coastkeeper, Casco Baykeeper, Catawba Riverkeeper, Choctawhatchee Riverkeeper, Colorado Riverkeeper, Cook Inletkeeper, Delaware Riverkeeper, Detroit Riverkeeper, Emerald Coastkeeper, French Broad Riverkeeper, Grand Traverse Baykeeper, Great Salt Lakekeeper, Hackensack Riverkeeper, Housatonic Riverkeeper, Hudson Riverkeeper, Hurricane Creekkeeper, Inland Empire Waterkeeper, Kansas Riverkeeper, Klamath Riverkeeper, Lake George Waterkeeper, Lower Mississippi Riverkeeper, Lower Neuse Riverkeeper, Lower Susquehanna Riverkeeper, Milwaukee Riverkeeper, Mobile Baykeeper, Nantucket Soundkeeper, New Riverkeeper, NY/NJ Baykeeper, North Sound Baykeeper, Ogeechee-Canoochee Riverkeeper, Orange County Coastkeeper, Pamlico-Tar Riverkeeper, Peconic Baykeeper, Prince William Soundkeeper, Russian Riverkeeper, San Diego Coastkeeper, Santa Barbara Channelkeeper, Santa Monica Baykeeper, Saranac Waterkeeper, Savannah Riverkeeper, Severn Riverkeeper, Shenandoah Riverkeeper, South Riverkeeper, St. Clair Channelkeeper, St. Johns Riverkeeper, Tualatin Riverkeepers, Upper Chattahoochee Riverkeeper, Upper Neuse Riverkeeper, Upper St. Lawrence Riverkeeper, Waccamaw Riverkeeper, Western Lake Erie Waterkeeper, West/Rhode Riverkeeper, West Virginia Headwaters Waterkeeper, Willamette Riverkeeper and Youghiogheny Riverkeeper.

² We also incorporate by reference our April 23, 2004 comments on the prior proposed rule and our January 5, 2004 comments on the MTM/VF DEIS.

making federal takeovers for state violations of federal law discretionary rather than automatic. 70 Fed. Reg. 61194. Also in October 2005, the Administration released its final Programmatic Environmental Impact Statement on Mountaintop Mining/Valley Fills in Appalachia (PEIS), which proposed no meaningful mining reforms or limitations on valley fills. 70 Fed. Reg. 62102. Now, OSM proposes to gut the stream buffer zone (SBZ) rule, the most important safeguard under the Surface Mining Control and Reclamation Act (SMCRA) for protecting streams. Taken together, these actions can only accelerate the pace of mountaintop removal mining and valley filling, which has already destroyed 1,200 miles of Appalachia’s streams and 387,000 acres of its forests.

The proposed rule would eliminate the standing prohibition against mining within 100 feet of streams if it will have an adverse effect on water quantity, water quality, and other environmental resources of the stream. In its place, the proposed rule would merely ask coal operators to “minimize” harm to the extent possible. This is an open invitation to industry to ignore a rule that, as a practical matter, has been routinely abused and violated as federal and state regulators looked the other way.

For the reasons discussed below we believe that the proposed changes are unwise, inconsistent with the objectives of SMCRA and the requirements of the Clean Water Act, and supported by a draft environmental impact statement (“DEIS”) that is facially inadequate. We request that OSM withdraw its proposal and instead retain and enforce the existing requirements regarding the protection of streams. Our detailed analysis and comments on the proposed changes follow.

Table of Contents

I.	OSM’s Proposed Revision of the SBZ Rule Is Arbitrary and Capricious and Violates SMCRA	4
A.	OSM’s Proposal Contradicts Its Prior Interpretation of the Existing Rule.....	4
B.	OSM’s Proposal Violates Congressional Intent to Protect the Environment, Including Streams	6
C.	OSM’s Proposal Is Based on a Flawed DEIS	8
1.	The DEIS Fails to Consider All Reasonable Alternatives.....	8
2.	There Is No Evidence that the Preferred Alternative Would Reduce Environmental Impacts.....	15
3.	OSM Has No Rational Basis to Conclude that SBZs Are Not BCTA.....	15

4.	The DEIS’ Analysis of Cumulative Effects Is Pathetically Inadequate	16
II.	Under the Clean Water Act, OSM Must Obtain EPA Concurrence for the Final Rule.....	17
III.	EPA Cannot Legally Concur with the Proposed Rule Because It Will Cause Significant Degradation of Streams, in Violation of the CWA.....	18
A.	The DEIS Itself Finds that Valley Fills Cause Significant Degradation.....	19
B.	The Available Scientific Evidence Demonstrates that Surface Coal Mining Activities Are Causing Significant Degradation of Streams in Appalachia ...	19
1.	Stream degradation is significant.....	20
2.	Water quality degradation is significant	21
3.	Water quantity and community impacts are significant.	24
4.	Degradation of aquatic diversity is significant.....	25
5.	OSM’s DEIS Evades Its Obligation to Analyze Significant Degradation .	28
C.	The Proposed Rule Will Result in Significant Degradation of the Stream Segments Between the Toes of the Valley Fills and the Sediment Pond Embankments, Which Are “Waters of the United States”	30
D.	The Existing SBZ Rule is Consistent with the CWA	30
E.	OSM’s Deletion of the Requirement That Activities that Disturb the SBZ Must Comply With Water Quality Standards Is an Illegal Attempt to Exempt Activities From Water Quality Standards	31

I. OSM's Proposed Revision of the SBZ Rule Is Arbitrary and Capricious and Violates SMCRA

A. OSM's Proposal Contradicts Its Prior Interpretation of the Existing Rule

In the preamble, OSM reviews the history of the 1983 buffer zone rule and claims that it has consistently “applied” that rule to allow valley fills and other stream incursions. 72 Fed. Reg. at 48892, 48895. In the DEIS, OSM goes even further and states that “[n]either OSM nor the State SMCRA regulatory authorities have interpreted or implemented the stream buffer zone rule as an absolute prohibition of [sic] placement of excess spoil material fills or any other surface mining activity within the stream buffer zone.” DEIS, pp. 72-73. These statements are clearly intended to create the impression that the current proposal is consistent with all past practices and interpretations, and that there is no shift in agency thinking.

In fact, however, the proposed rule is a reversal of OSM's prior interpretation of SBZ requirements. When it promulgated the existing SBZ rule in 1983, OSM chose to protect intermittent and perennial streams because they were recognized to be especially significant in establishing the hydrologic balance. OSM stated that the buffer zone rule was designed “to protect streams from sedimentation and gross disturbances of stream channels caused by surface coal mining and reclamation operations.” 48 Fed. Reg 30312 (June 30, 1983). OSM further stated that “intermittent and perennial streams generally have environmental-resource values worthy of protection under Section 515(b)(24) of the Act.” *Id.* In the MTM/VF PEIS (p. II.C-34), OSM and the other participating federal agencies admit that one of the principal purposes of the stream buffer zone regulation is to “minimize gross disturbances to the prevailing hydrologic balance, fish and other biologically important plants and animals that may live in the streams or riparian zones adjacent to the streams.”

In his 1999 ruling interpreting the existing SBZ rule, Judge Haden, Chief Judge of the District Court for the Southern District of West Virginia, ruled that “[n]othing in the statute, the federal or state buffer zone regulations, or the agency language promulgating the federal regulations suggests that portions of existing streams may be destroyed so long as (some other portion of) the stream is saved.” Bragg v. Robertson, 72 F. Supp.2d 642, 651 (S.D.W.Va. 1999). Further, Judge Haden stated:

When valley fills are permitted in intermittent and perennial streams, they destroy those stream segments. The normal flow and gradient of the stream is now buried under millions of cubic yards of excess spoil waste material, an extremely adverse effect. If there are fish, they cannot migrate. If there is any life form that cannot acclimate to life deep in a rubble pile, it is eliminated. No effect on related environmental values is more adverse than obliteration. Under a valley fill, the water quantity of the stream becomes zero. Because there is no stream, there is no water quality.

Id. at 661-662. The Court pointed out the obvious: “Valley fills are waste disposal projects so enormous that, rather than the stream assimilating the waste, the waste assimilates the stream. The Court holds that placement of valley fills in intermittent and perennial streams violates

federal and state water quality standards by eliminating the buried stream segments for the primary purpose of waste assimilation.” *Id.* at 662. Moreover with valley fills, “[t]his concentration of industrial waste is mortal to animal or aquatic life in the stream segment buried. Existing stream uses are not protected, but destroyed. These effects are inconsistent with State and federal water quality standards.” *Id.* at 663. It is important to note that, while Judge Haden’s ruling was overturned on jurisdictional grounds, the substance of his ruling was not addressed by the Court of Appeals. See Bragg v. West Virginia Coal Ass’n, 248 F.3d 275 (4th Cir. 2001).

In their brief on appeal in Bragg, OSM, EPA and the Corps expressly agreed with Judge Haden’s interpretation of the SBZ rule:

[Judge Haden] correctly found that SMCRA’s stream buffer zone rule. . . prohibits the burial of substantial portions of intermittent and perennial streams beneath excess mining spoil. The elimination of substantial intermittent or perennial stream segment [sic] necessarily causes adverse environmental effects, as it eliminates all aquatic life that inhabits those stream segments. As the district court rightly concluded, the elimination of entire stream segments and all the life they contain plainly causes environmental harm. Accordingly, the district court correctly granted summary judgment on plaintiffs’ buffer zone claims.

Brief for the Federal Appellants, 4th Cir., No. 99-2683, April 17, 2000 (hereafter “U.S. Br.”), p. 2, Attachment 1 (emphasis in original).³ Additionally, these agencies stated that the District Court correctly held:

[T]hat valley fills in intermittent or perennial streams may be authorized under the buffer zone rule only if the permitting agency finds that they will not adversely affect the environmental resources of the filled stream segments. WVDEP has acknowledged that it has routinely approved valley fills in intermittent and perennial streams without making the findings called for by the buffer zone rule for the stream segment filled. The district court correctly rejected the arguments that WVDEP was not required to make the buffer zone findings, holding that the findings required by the buffer zone rule must be made for the filled stream segments and not at some point downstream from the valley fills; and (2) findings made by the Corps under the CWA section 404(b)(1) guidelines are not a substitute for the buffer zone findings.

The district court also correctly. . .[held]. . .that the burial of substantial portions of intermittent or perennial streams in valley fills causes adverse environmental impact in the filled stream segments and therefore cannot be authorized consistent with the buffer

³ In the 2004 proposal, OSM suggested that the DOJ brief is “not consistent with our historic interpretation” and that OSM never agreed with it or approved it. 69 Fed. Reg. at 1039-40. That is a bold-faced lie. DOJ told the Fourth Circuit that “Attorneys for EPA and OSM are identified on the cover of the federal appellants’ brief as being ‘of counsel’ to this appeal, and the position taken in the brief for the federal appellants represents the unified position of the federal agencies.” Federal Appellants’ Opposition to the Motion of the Intervenor-Defendants to Strike the Brief of the Federal Appellants and to Dismiss Appeal No. 99-2683, p. 2, Attachment 2

zone rule. The uncontested evidence demonstrates that the burial of substantial portions of intermittent or perennial causes adverse environmental effects to the filled stream segments, as such fills eliminate all aquatic life that inhabited those segments.

Id. at 24-25. OSM, EPA and the Corps further stated that “valley fills that disturb intermittent or perennial streams may be approved only if there is a finding that activity will not adversely affect the environmental resources of the filled stream segment.” Id. at 41.

In a May 22, 2000 letter (Attachment 3), Acting OSM Director Kathrine Henry adopted the same position that “the stream buffer zone waiver findings must be made not only for segments downstream of the fill, but also for each segment of an intermittent or perennial stream in which excess spoil is placed.” In its 2004 proposed rule, OSM admitted that this brief and this Acting Director’s letter took the position that the rule applied to valley fills. 69 Fed. Reg. at 1040. However, in its 2007 proposed rule, OSM conveniently omits this material and instead cryptically cross-references it as an “additional discussion of litigation and related matters.” 72 Fed. Reg. at 48896.

Now OSM has completely reversed this position and would totally exempt valley fills, waste impoundments and other stream incursions from the rule. Id. at 48907; DEIS, p. S-2. When an agency reverses its position, its burden of justification increases. In such cases, “an agency changing its course by rescinding a rule is obligated to supply a reasoned analysis for the change beyond that which may be required when an agency does not act in the first instance.” Motor Vehicle Mfrs. Assn. v. State Farm Mut., 463 U.S. 29, 42 (1983). OSM has failed to rationally justify its complete about-face from the position it took in the Bragg case. Indeed, OSM has failed to even consider the alternative of enforcing the rule as written and as OSM interpreted it in the Bragg case.

B. OSM’s Proposal Violates Congressional Intent to Protect the Environment, Including Streams

The first stated purpose of SMCRA is “to protect society and the environment from the adverse effects of surface coal mining operations.” 30 U.S.C. § 1202(a). As the House Report on the 1977 bill explained:

A basic tenet underlying this legislation is the principle that environmental protection and reclamation, at a minimum meeting the standards in this act, are a coequal objective with that of producing coal. The continued selection of mining techniques by engineers whose primary objectives are the most efficient removal of the overburden and transport of the coal is not sufficient to be fully responsive to the purposes and intent of the act.

H. Rep. No. 218, 95th Cong., 1st Sess., p. 96 (1977). Congress recognized the environmental hazards posed by the valley fills associated with mountaintop removal mining: “Serious problems are presented . . . by operations using head-of-the-hollow or valley fill. For such operations, it is uncertain whether spoil can be placed in an environmentally sound manner.” Id. at 157 (quoting Sec. of the Interior Cecil Andrus), reprinted in 1977 U.S.C.C.A.N. 593, 688. See

also *id.* at 615 (“[S]ome mountaintop removal operations have caused serious environmental problems in the Appalachian area. The key cause of these problems has been the ‘valley’ fill or ‘head-of-the-hollow’ fill techniques utilized to dispose of excess spoil material.”). Congress concluded that valley fills “should be limited to the minimum and that strong spoil placement standards are needed to insure that there will be no offsite damages.” *Id.* at 688-689 (quoting Sec. of the Interior Andrus); see also Cong. Rec. 33,314 (Oct. 9, 1973) (statement of Sen. Jackson) (stating that the disposal of spoil from mountaintop removal mining may be authorized only if fills satisfy “very carefully determined conditions precedent”).

The text of SMCRA establishes the “strong spoil disposal standards” required for surface coal mining, including mountaintop removal mining. Several environmental performance standards govern the conditions under which surface mining, including associated spoil disposal, may be authorized. Pursuant to those standards, surface mining operations may be authorized only if the permitting authority finds (1) that the mining operations will “minimize disturbances and adverse impacts . . . on fish, wildlife, and related environmental values”; (2) that “no damage will be done to natural watercourses”; (3) that the excess spoil will be placed in an area that “does not contain springs, natural water courses or wet weather seeps unless lateral drains are constructed from the wet areas to the main underdrains in such a manner that filtration of the water into the spoil will be prevented”; and (4) that the disposal “is compatible with the natural drainage patterns and surroundings.” 30 U.S.C. §§ 1265(b)(10), (22), (24); § 1265(c)(4)(D).

SMCRA mandates that mining operations must “minimize the disturbance to the prevailing hydrologic balance at the mine site and in associated offsite areas.” 30 U.S.C. § 1365(b)(10). By specifying that mining disturbances such as valley fills should minimize environmental harm “at the mine site,” Congress expressed its intent to protect streams where the disturbances occur, *i.e.*, in the footprint of proposed valley fills. By specifying that mining disturbances should minimize environmental harm “in associated offsite areas,” Congress sought to protect affected downstream areas. Furthermore, applying the buffer zone rule to the filled stream segment advances the purpose of the rule, which was enacted to “protect stream channels” (44 Fed. Reg. 15176), and also advances the general purpose of the standards established under SMCRA, which were promulgated “to ensure that all surface mining activities are conducted in a manner which preserves and enhances environmental and other values in accordance with the Act.” 30 C.F.R. § 816.2.

OSM repeatedly cites only one of SMCRA’s thirteen purposes as the defining standard for issuing regulations under that statute. DEIS, pp. 20, 24-25; 72 Fed. Reg. at 48897, 48908, 48909-10, 48911. That one seeks to “strike a balance between protection of the environment and . . . the Nation’s need for coal as an essential source of energy.” 30 U.S.C. § 1202(f). OSM ignores two other purposes that seek to “establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations” and “assure that surface coal mining operations are so conducted as to protect the environment.” *Id.*, § 1202(a), (d). Thus, OSM skews its analysis of SMCRA in favor of resource development to the detriment of the environment.

Furthermore, OSM uses other sections of SMCRA to set up and demolish a strawman argument. OSM argues that, because § 1265(b)(22)(D) mentions placing spoil where “natural water courses” are present, Congress did not intend to create an “absolute prohibition” on placing any mining spoil in streams. 72 Fed. Reg. at 48893-94, 48908. That is true. However, it does not follow from this proposition that all Congress expected was for OSM to “minimize” the placement of mining spoil in streams. OSM uses the “minimize” concept in § 1265(b)(24) as the regulatory standard for defining the maximum amount of environmental protection that it is required to provide. OSM assumes that placing any amount of mining spoil in streams is acceptable so long as the amount is “minimized” “to the extent possible.” OSM then concludes that this “minimization” standard strikes the only “balance” that Congress could have intended in SMCRA, and that no other alternative measures to protect the environment need be considered.. This ignores Congress’ two other purposes to “assure” that the environment is protected from the “adverse effects of surface coal mining.” Congress did not rule out other measures in addition to fill minimization if those measures are needed to ensure protection of the environment.

C. OSM’s Proposal Is Based on a Flawed DEIS

1. The DEIS Fails to Consider All Reasonable Alternatives

In its DEIS, OSM considered only five alternatives in detail: (1) take no action and retain the existing rules, which OSM interprets to allow mining in the SBZ; (2) adopt the proposed excess spoil and SBZ rules, which allows mining in the SBZ; (3) adopt the 2004 SBZ rule, which also allows mining within the SBZ; (4) change only the excess spoil rule; and (5) change only the SBZ rule. DEIS, pp. 17-18. Thus, these alternatives all allow mining in the SBZ without any restrictions except the minimization of excess spoil. OSM did not consider any alternatives that restrict mining in the SBZ. OSM did not consider the alternative of enforcing the SBZ as written and as Judge Haden and OSM interpreted it in 1999 and 2000. Furthermore, OSM did not consider any alternatives that would limit the downstream effects of valley fills (including changes in stream chemistry, temperature, and flow), even though those effects are known to be significant and adverse.

OSM summarily rejected ten alternatives without any detailed analysis. These alternatives would restrict valley fills by type of stream (ephemeral, intermediate or perennial), fill size (area or volume), watershed size (from 35 to 640 acres), stream length (200 to 2000 linear feet), or the percentage of streams filled in a watershed. DEIS, pp. 19-26. OSM uses two types of arguments to dismiss these alternatives: (1) lack of statutory authority; and (2) insufficient scientific data. *Id.* Neither argument has merit.

First, OSM erroneously assumed that considering any other alternatives or adding any other measures to protect the environment would result in an “absolute prohibition” on either stream-filling or coal mining, and would therefore be contrary to Congressional intent. DEIS, pp. 20-21. However, it is obvious that limitations on valley fills are not necessarily an all-or-nothing proposition. Size, area, length or volume restrictions can be set at intermediate amounts between nothing and unlimited development. It is also clear that restricting fill size does not necessarily prohibit all mining. The size can be restricted based on the amount of watershed, the

amount of stream length, or the type of stream that is buried. Cumulative limits based on the amount filled in a larger watershed or region are also possible. An analysis of past NWP 21 authorizations in West Virginia shows that many mines were able to operate without placing fill in intermittent or perennial streams, or both. See Stream Loss Table, below. Thus, stricter environmental measures could still allow substantial amounts of coal mining to continue.

Second, OSM erroneously assumes that, without more scientific information, no limits are possible or appropriate. This is the same argument that was made in the October 2005 PEIS, and OSM references that document to support its decision. DEIS, pp. 24-26. The primary argument advanced in the PEIS for rejecting fill alternatives was that there was insufficient information at that time to draw a “bright line” that works in every situation, and variations between streams and watersheds made it difficult to apply any “bright line” to differing individual situations. The PEIS stated that “[s]cientific data collected for this EIS do not clearly identify a basis (i.e., a particular stream segment, fill or watershed size applicable in every situation) for establishing programmatic or absolute restrictions that could prevent ‘significant degradation.’” PEIS, p. II.D-8. The PEIS therefore posited that since one general rule does not apply in every situation, there is no basis for applying any general rule at all, and the only alternative is to apply a “case-by-case” analysis to every individual situation. PEIS, pp. II.D-1 to II.D-9. The perfect is the enemy of the good, as the PEIS sets up each individual restriction like a straw man and then knocks it down by saying that one problem or another makes it inapplicable in certain situations. *Id.*

This rationale is not a sufficient basis for eliminating alternatives from analysis under NEPA. “[W]hile inconclusive evidence may serve as justification for not *choosing* an alternative, here it cannot serve as a justification for entirely failing to ‘rigorously explore and objectively evaluate *all* reasonable alternatives.’” *The Fund for Animals v. Norton*, 294 F. Supp.2d 92, 110 (D.C. Cir. 2003). In addition, the historical record demonstrates that OSM’s claims of insufficient statutory authority and insufficient information are merely a pretext. In fact, OSM refuses to consider more environmentally-protective alternatives because it made a political calculation to protect the coal industry at the expense of the environment.

The 2001 preliminary draft of the PEIS on mountaintop mining/valley fills, which was drafted by the Clinton Administration, considered three action alternatives that restricted valley fills to ephemeral or intermittent streams and retained the SBZ rule. Attachment 4, pp. ES-6, IV-1. Different versions of these same alternatives were present in later drafts until June 2002. For example, a March 2002 draft stated:

The most significant distinction between the four alternatives is how each one addresses Issue 1, “Direct loss of streams and stream impairment.” The question of what portions of a stream can be legally filled under SMCRA authority was central to the *Bragg v. Robertson* lawsuit. The District Court decision in that case established that the SMCRA stream buffer zone regulations at 30 CFR 816.57 and 817.57 do not allow mining activities (including valley fills) within 100 feet of intermittent or perennial streams. The Fourth Circuit Court of Appeals later vacated the District Court’s decision, but on grounds unrelated to the applicability of the stream buffer zone rule. Because of the

atmosphere of regulatory uncertainty surrounding this issue, and the importance of allowable valley fill size to mine viability and environmental impacts, the agencies developed the EIS alternatives around it. Each alternative proposes different changes to regulatory programs that determine the allowable extent of stream loss through valley filling. The amount of valley filling that is allowable will affect the amount of mining that can occur, which in turn will determine the environmental and economic consequences of selecting a given alternative.

Attachment 5, Att., p. 5 (emphasis added). The Proposed Agenda for a June 18, 2002 Steering Committee meeting describes the four alternatives as follows:

Table IV-1. Mountaintop Mining / Valley Fill EIS Alternative Summary	
<i>Alternative A</i>	No changes to the SMCRA and CWA programs in effect in 1998
<i>Alternative B</i>	Depending on the outcome of a detailed, permit-by-permit baseline data collection; thorough, site-specific, significant adverse impact analyses; and, consideration of alternatives for avoidance and minimization, valley fills could be allowed in ephemeral, intermittent, and perennial stream segments. Mitigation of unavoidable impacts would require in-kind replacement of aquatic functions and values within the watershed.
<i>Alternative C</i>	Valley fills could be located in ephemeral and intermittent streams. Permit-by-permit baseline data collection and site-specific alternatives analyses would be required (although not necessarily as rigorous as in Alternative B) to demonstrate that avoidance and minimization were considered. Mitigation options for unavoidable impacts would be somewhat more varied and thus more flexible than under Alternative B.
<i>Alternative D</i>	Valley fills could be located only in the ephemeral portion of streams. Permit-by-permit baseline data collection would be more limited than under Alternative B, and alternative analyses would demonstrate that minimization of downstream or indirect impacts were considered. Mitigation could include compensation in lieu of in-kind replacement of lost aquatic function and value.

Attachment 6, Proposed Agenda, p. 7. Thus, these alternatives would have restricted valley fills depending on the type of stream.

When the Bush Administration took office, Deputy Secretary of the Interior J. Steven Griles directed OSM to “refocus” the PEIS to “focus on centralizing and streamlining coal mine permitting” and impact “minimization.” 10/5/01 Griles Letter, p. 1, Attachment 7. As a result, the fill-restricting alternatives were abandoned and replaced by process alternatives that merely reshuffled the procedural responsibilities between the various agencies. All of them had the same or very similar environmental impacts and merely sought to streamline permit processing. See 1/5/04 WVHC Comments on the PEIS, pp. 3-6. The final PEIS states that “[a]ll alternatives

... are based on process differences and not directly on measures that restrict the area of mining.” PEIS, p. IV.G-3. The PEIS further admits that “[t]he environmental benefits of the three action alternatives are very similar.” *Id.*, p. II.B-13.

The paper trail for the PEIS shows how this happened. On June 18, 2002, members of the Steering Committee on the PEIS met to consider the scope of alternatives. Attachment 6, Proposed Agenda. EPA and the U.S. Fish and Wildlife Service (FWS) members of the Steering Committee took the position that the PEIS had to consider alternatives to reduce environmental impacts. *Id.* at 8. They believed that “the new framework does not meet the NEPA requirements by providing a contrasting choices [sic] among several clear and distinct alternatives.” *Id.* at 2. As a result of this meeting, the Steering Committee changed the alternative framework, but still recommended inclusion of an alternative that “would represent the suite of actions that would result in the most environmentally-protective alternative (i.e., restricting fills to the ephemeral zone...)” *Id.* at 11. The Steering Committee approved that recommendation. 6/19/02 Hoffman e-mail, Attachment 7. These changes were incorporated into a new alternatives matrix table. 6/26/02 Robinson e-mail, Attachment 9.

However, shortly thereafter, the Steering Committee’s decision was overruled by the Executive Committee. Unnamed higher-level agency “executives instructed the SC to attempt to construct the alternatives for the EIS in a framework based largely on coordinated decision making for SMCRA and CWA—with no alternative restricting fills.” Attachment 10, 9/23/02 Agenda, p. 1. Minutes of a July 14, 2002 Executive Committee meeting show that a new three-alternative approach was adopted. 8/15/02 email, Attachment 11, Attachment: Executive Committee Discussion. As a result, the prior alternatives restricting valley fills were stripped from the PEIS. Instead, the new alternative framework considered only process alternatives.

OSM has now continued this wholesale evisceration of alternatives by refusing to consider similar fill-restricting alternatives in the SBZ DEIS. However, the fact that two federal agencies previously recommended inclusion of those restrictive alternatives demonstrates that they are serious proposals that deserve and require full analysis and consideration.

It is also outrageous that OSM does not even consider the alternative of enforcing the SBZ rule as written and as it was interpreted by OSM itself in its April 2000 federal court brief and Acting Director letter. Instead, OSM reinterprets the existing rule in conformity with the new proposed rule, so that both of them allow valley fills in intermittent and perennial streams. This eliminates most of the difference between the two rules, and makes the “no-action” alternative a pale shadow of the proposed rule. The “no action” alternative in the DEIS merely substitutes OSM’s past practice for its legal mandate to protect streams and the environment generally. A valid “no action” alternative would interpret the SBZ as applying to the footprint of the valley fills, as OSM determined was legally required in 2000.

OSM has failed to analyze a reasonable range of alternatives. All of the alternatives would allow mining activities and valley fills to be placed in any stream without any limitation on the amount of stream that could be buried and destroyed. OSM must consider some

alternatives that restrict filling of streams. Absent such consideration, the EIS fails to frame the true range of choices available to the decisionmaker.

Furthermore, OSM must consider some alternatives that address the cumulative impacts of stream filling. As OSM acknowledges, those cumulative impacts involve damaging or destroying over 1,700 miles of streams in Appalachia. DEIS, p. 117. The DEIS fails to address these cumulative impacts. Fill minimization, by itself, only results in a case-by-case analysis of filling for each separate project. It does not analyze or address cumulative impacts. OSM inexplicably assigns zero value to the loss of thousands of miles of headwater streams.

OSM's failure to consider a reasonable range of alternatives has a predictable result: all of the alternatives would have substantially the same impacts. OSM states that it "would not anticipate a major shift in on-the-ground consequences from any of the alternatives." DEIS, p. 121. The alternatives "would cause no discernable changes to the direct stream impact trend." Id., p. 124. This is unremarkable, since OSM interprets the "no-action" alternative and all the other alternatives to allow continued unlimited filling of the buffer zone. The absence of significantly different impacts demonstrates the artificially narrow range of the alternatives that OSM considered. What is remarkable is that although stream filling in Appalachia is one of the most, if not the most, environmentally destructive practices in the United States today, OSM cannot think of a single reasonable alternative that would result in a "major shift" in the effects of those practices. This inability is based on political considerations, not facts or analysis.

OSM's primary rationale in 2004 for gutting the SBZ rule and eliminating any more restrictive alternatives was its claim that it is "virtually impossible to conduct mining activities within 100 feet of an intermittent or perennial stream without causing some adverse effects," and that "SMCRA recognizes that an absolute standard of 'no adverse impacts' is unattainable." 69 Fed. Reg. at 1043. Similarly, in the DEIS, OSM states that if valley fills were restricted to ephemeral streams, 90.9% of the coal in central Appalachia could not be mined. DEIS, p. 20. OSM also argues that SMCRA does not prohibit filling streams with mine waste, and that it not economically feasible to eliminate such fills. 72 Fed. Reg. at 48891 ("the most economically feasible disposal areas are the upper reaches of valleys"); id. at 48892 ("maintenance of a buffer is neither feasible nor appropriate").

The 92.5% figure is based on the Mountaintop EIS Technical Report in Appendix G of the MTM/VF PEIS. It was based on a study of only ten mines, and did not consider the altered economics of revised mine configurations. MTM/VF PEIS, App. G, Cover Sheet, p. 3. It therefore cannot be extrapolated to all coal mining in central Appalachia. The more comprehensive economic analyses in the MTM/VF PEIS, based on work by RTC and Hill & Associates, showed that restricting valley fills to ephemeral zones would reduce coal production in Appalachia by 20-45%, and would increase coal prices by only two dollars a ton. Id. at 7; MTM/VF PEIS, p. IV-I.3.

Even that analysis is an overstatement of the impacts of the existing rule. We have examined seven recent NWP 21 authorizations issued by the Corps for surface coal mines in West Virginia. If the ephemeral/intermittent/perennial stream delineations used by the Corps to

grant those authorizations are valid, they show that mine operators can place large amounts of mine spoil in valley fills without impacting perennial streams. See OVEC 4/23/04 Comments on Proposed SBZ Rule, Attachment 7.

Mine operator/ Mine Name/ NWP 21 Issuance Date	Valley Fill No.	Water- shed Acres	Stream loss in linear feet		
			Ephemeral	Intermittent	Perennial
Kingston Resources, Inc./ Horse Creek 4/1/2003	1	56	973	600	0
	2	94	2916	500	0
	3	36	1035	315	0
	4	188	1247	2580	0
Horizon Resources, LLC/ Synergy 3/28/2003	1	14	0	0	0
	2	13	0	0	0
	3	121	700	1850	0
	6	160	1837	1500	0
Martin Logan Coal Co./ Phoenix No. 3 5/27/2003	2	76	851	0	0
	3	134	749	1290	0
	4	106	2131	0	0
Hobet Mining, Inc./ Westridge 11/24/2003	1	158	n/a	1800	0
	2	233	n/a	2000	0
Elk Run Coal Co./ West of Stollings 1/5/2004	B	150	310	2655	0
	C	154	778	1662	0
	D	56	600	0	0
	E	124	360	1736	0
Independence Coal Co./ Edwight 1/28/2004	East	517	50	4300	0
	West	497	0	0	0
Hobet Mining, Inc./ Hewitt Creek 2/4/2004	1	<141	1400	900	0
	2	<141	1400	0	0
	3	<141	650	1300	0
	4	<141	1280	0	0
	5	<141	850	0	0
	6	<141	350	0	0
Martin Logan Coal Co./	1	180	670	3803	0

	2	68	1779	0	0
	3	58	1040	0	0
	4	139	2240	0	0
	5	226	1485	2300	0
	6	182	2170	200	0
	7	85	470	400	0
Cumulative Totals	32 fills		30321	31691	0

Thus, none of the 32 fills are in perennial streams, and thirteen of them are only in ephemeral streams. Furthermore, nearly half of the stream length filled is in the ephemeral zone. Even though we believe that filling over 30,000 feet of ephemeral streams causes significant environmental harm, this data clearly refutes OSM’s claim that it is impossible to mine without filling perennial streams, and also shows that significant mining can occur without filling intermittent streams.

Since 59% to 80% of valley fills (depending on the state) are less than 75 acres (MTM/VF PEIS, pp. III.K-41 to K-47), it is likely that the majority of valley fills could be constructed without impacting perennial streams. Furthermore, these valley fills were built or approved before fill minimization requirements were being enforced, and therefore probably understate the number of fills that could be built without intersecting intermittent or perennial streams.

Even if the existing SBZ rule may cause a limited loss of central Appalachia coal, that does not mean that there would be an overall shortage of coal for the nation. Higher mining costs “will result in coal supplies originating from coal basins outside this EIS study area where compliance can occur.” MTM/VF PEIS, p. IV-I.1. In other words, any coal not mined in Appalachia will be replaced by coal mined elsewhere. So overall there will be adequate coal to meet demand and no necessary reduction in overall coal production.

In addition, OSM fails to acknowledge in its rulemaking, unlike its acknowledgment in the MTM/VF PEIS, that “minimizing fills will to some degree also affect mining costs.” MTM/VF PEIS, p. IV-I-3. Indeed, all SMCRA environmental standards have that effect. Consequently, the fact that restrictions on mining in the SBZ will increase mining costs and make some coal unrecoverable is not, in itself, a reason to reject those restrictions. “Where mitigation presents significant costs to the applicant, the economic effect will likely be similar, but possibly less pronounced, to the results of the absolute fill restriction studies, inasmuch as mining methods that reduce the amount of excess spoil (and consequently reduce the size of fills and the amount of mitigation) will be selected.” *Id.*, p. IV.I-4. OSM has not summarily rejected mitigation of fill impacts on the ground that it will reduce the amount of coal recovered, even though that is likely. Consequently, it is irrational to summarily eliminate all restrictive alternatives on that basis.

2. There Is No Evidence that the Preferred Alternative Would Reduce Environmental Impacts

In the DEIS, OSM claims that the preferred alternative, Alternative 1, would reduce the environmental impacts of the current SBZ rule because: (1) the new excess spoil minimization rule would reduce the footprints of the fills; and (2) the minimization analysis would result in “less adverse functional impacts.” DEIS, p. 124. No evidence or studies are presented to support these conclusions. In fact, the change to the SBZ rule is likely to increase environmental harm, because most mining activities that fill streams are being exempted from the rule. This will encourage greater filling of streams, not less.

3. OSM Has No Rational Basis to Conclude that SBZs Are Not BCTA

Section 515(b)(24) requires OSM to use the best technology currently available (BTCA) to minimize disturbances from mining activities on environmental resources. As OSM admits, the existing SBZ rule “manifest[s] an assumption that maintenance of an undisturbed 100-foot buffer around perennial and intermittent streams is the” BTCA. 72 Fed. Reg. at 48902. OSM is now abandoning that assumption, and reversing course, on the ground that “maintenance of a buffer is neither feasible nor appropriate because the activities inherently involve placement of fill material in waters of the United States.” *Id.* at 48892. Thus, OSM claims that, as a factual and technical matter, stream buffer zones are impractical or impossible. However, OSM provides no evidence or studies to support this assertion. In fact, as we have shown above, the PEIS found that mining can feasibly continue even if SBZs are maintained. Even if some mining would be reduced, that is no reason to conclude, as a technical matter, that SBZs are infeasible.

Furthermore, the overwhelming scientific evidence shows that riparian buffer zones consisting of native vegetation communities are the best method for stream protection from disturbances upslope such as mining or logging. When the forests next to a stream are disturbed or destroyed, the streams and aquatic life suffer. Studies show that streams draining grasslands tend to downwaste and are both deeper and narrower than those adjacent to forest regions. Without their surrounding forests, stream runoff is faster, there are no significant litter inputs including woody debris (which help in retention and microbial uptake), and there is less surface area in stream bottoms for secondary production. Furthermore, removing the surrounding forest and changing the vegetation to grass changes the energy base of the natural headwater stream in the Appalachians.⁴

4. The DEIS’ Analysis of Cumulative Effects Is Pathetically Inadequate

⁴ These facts are supported by the comments submitted on this proposed rule by aquatic scientists Pat Mulholland, *et al.*, and by the following studies: Lowrance, R., R. Todd, J. Fail, Jr., O. Hendrickson, Jr., and R. Leonard. 1984. Riparian forests as nutrient filters in agricultural watersheds. *BioScience* 34:374-377; Osborne, L. L. and D. A. Kovacic. 1993. Riparian vegetated buffer strips in water-quality restoration and stream management. *Freshwater Biology* 29:243-258; Peterjohn, W. T. and D. L. Correll. 1984. Nutrient dynamics in an agricultural watershed: observations of the role of the riparian forest. *Ecology* 65:1466-1475; Meyer, Judy L., David L. Strayer, J. Bruce Wallace, Sue L. Eggert, Gene S. Helfman, and Norman E. Leonard. 2007. The Contribution of Headwater Streams to Biodiversity in River Networks. *Journal of the American Water Resources Association (JAWRA)* 43(1):86-103.

OSM's analysis of the cumulative impacts of its proposal is pathetic. It consumes a paltry two paragraphs. DEIS, p. 144-45. OSM argues in one paragraph that no further analysis is necessary because the cumulative impacts of surface coal mining were addressed in its 1979 and 1983 EISs on its SMCRA regulations. Id. at 145.

This argument is ludicrous. Those EISs are more than twenty years old. CEQ guidance provides that an EIS should be supplemented if it is more than five years old. CEQ, NEPA's Forty Most Asked Questions, No. 32, 46 Fed. Reg. 18026 (March 16, 1981). CEQ regulations require supplemental environmental analysis when changed circumstances or significant new information arises after an earlier NEPA evaluation is made. 40 C.F.R. § 1502.9(c)(1)(i), (ii). There is no question that the scope and intensity of mining activities in Appalachia has changed significantly since 1983. The 2005 PEIS states:

Increased public and government agency concern about MTM/VF operations emerged in 1997 and 1998. It appeared that the number of these types of operations had increased in recent years in Appalachia, and that more and more valley fills were being proposed/built. . . . [A] comparison of the fills constructed in the period 1985-1989 with those constructed in 1995-1998 showed that the average fill increased in size by 72 percent, and the average length of stream impacted per fill increased by 224 percent.

PEIS, p. I-5. This PEIS is no substitute for a full analysis in the SBZ EIS. OSM stated in the PEIS that "[t]he stream buffer zone rule proposal and other regulatory program changes were envisioned and sanctioned by the settlement agreement and do not rely on this NEPA document." PEIS, Response to Comments, p. 19.

OSM also argues that its regulations were, and continue to be, environmentally beneficial because they require mitigation. DEIS, p. 145. However, merely requiring mitigation does not mean it will be successful or effective. OSM cannot rationally conclude that mitigation will offset the loss because federal agencies do not fully evaluate the aquatic functions of streams before they are buried and, therefore, do not know what to replace. OVEC, 479 F. Supp.2d at 646. Furthermore, even if the assessment of lost stream functions were sufficient, OSM's finding that mitigation will replace those functions is irrational because OSM has no reasoned analysis of the effectiveness of mitigation. OSM cannot simply assume that mitigation will eliminate cumulative impacts. OVEC, 479 F. Supp.2d at 659.

In the second paragraph, OSM argues that "all regions" in the U.S. have streams "that are in poor and slightly impaired conditions," caused mostly by "natural and man-induced activities," that mining impacts involve mostly acid mine drainage, and that analyses of mines' probable hydrologic consequences (PHC) will "ensure that no material damage resulting from changes in water quantity or quality occur[s]." DEIS, p. 145. These statements are gross generalizations that completely ignore the government's own scientific studies that it spent \$5 million to obtain and that formed the basis for the 2005 MTM/VF PEIS. OSM provides no factual basis for its assertion that burying over a thousand miles of streams is comparable to impaired streams in other parts of the country, or to existing acid mine drainage problems in

Appalachia. These statements reveal a complete ignorance of the biology and importance of headwater streams, the serious adverse effects of valley fills on downstream water quality, and the failure of compensatory mitigation to offset the aquatic functions of lost headwater streams. OSM's analysis of cumulative impacts is both quantitatively and qualitatively pathetic.

Judge Chambers recent decision in the OVEC case examined the Corps' analysis of cumulative effects for the four individual permits under this standard. He found that the Corps' analysis was deficient:

The Corps does not explain how the cumulative destruction of headwater streams already affected by mining in these water in these watersheds will not contribute to an adverse impact on aquatic resources. The Corps fails to "articulate a satisfactory explanation," including a "rational connection," between the facts found and the conclusion reached. [citation omitted] Instead, the Corps recites the data and declares that the cumulative impacts are not significant.

479 F. Supp.2d at 659. Here, OSM has done even less. It cites no data whatsoever and declares that no material damage will occur to streams.

Nor it is enough that OSM has provided a quantitative estimate of the number of valley fills and the number of miles of streams that they have filled. 72 Fed. Reg. at 48891-92. Quantification of affected areas is a necessary, but not a sufficient, analysis of cumulative effects under NEPA. Klamath-Siskiyou Wildlands Center v. Bureau of Land Management, 387 F.3d 989, 995 (9th Cir. 2004) ("A calculation of the total number of acres to be harvested in the watershed is a necessary component of a cumulative effects analysis, but it is not a sufficient description of the actual environmental effects that can be expected from logging those acres.").

II. Under the Clean Water Act, OSM Must Obtain EPA Concurrence for the Final Rule

SMCRA provides that regulations on environmental protection standards cannot be approved by OSM unless it has "obtained the written concurrence" of EPA "with respect to those aspects" of federal regulations "which relate to air or water quality standards promulgated under the" Clean Water and Clean Air Acts. 30 U.S.C. § 1251(b). When it enacted this section, Congress was concerned about direct conflicts between air or water quality standards, and it believed that the EPA concurrence procedure would be sufficient to address such conflicts. The 1977 House Report contains a section entitled "Relation of H.R. 2 to Other Laws" that states, in relevant part:

The committee felt that the requirement for the Secretary of the Interior to obtain the concurrence of the Administrator of the Environmental Protection Agency is necessary to insure that any environmental requirement of this act is consistent with the environmental programs and authorities of EPA and, in particular, those programs authorized under the Clean Air Act, as amended, and the Federal Water Pollution Control Act, as amended. Specifically, the Secretary must obtain the Administrator's concurrence in the coal

surface mining regulations and requirements under the environmental protection and State program approval provisions of the bill, as well as the final approval of any State program. The EPA has been directed by the Congress to insure the environmental well-being of the country. EPA has established water quality standards, air quality standards, and implementation and compliance requirements for the coal mining and processing industry, and issues permits to the industry to insure appropriate pollution abatement and environmental protection. The committee concluded that because of the likeness of EPA's abatement programs and the procedures, standards, and other requirements of this bill, it is imperative that maximum coordination be required and that any risk of duplication or conflict be minimized.

H. Rep. No. 218, 95th Cong., 1st Sess. 142 (1977).

The proposed SBZ clearly implicates the Clean Water Act. OSM has deleted the "adverse effect" test and the requirement to meet water quality standards in the existing rule. As a result, as we explain below, the proposed rule will cause increased valley filling, leading to significant degradation of waters of the United States, in violation of EPA regulations under the CWA. Yet there is no indication in the proposed rule that OSM has sought, or intends to seek, EPA's concurrence. OSM must do so, or else the rule is invalid.

III. EPA Cannot Legally Concur with the Proposed Rule Because It Will Cause Significant Degradation of Streams, in Violation of the CWA

EPA cannot legally concur with the proposed rule because it violates the Clean Water Act. Valley fills are permissible only if they do not result in "significant degradation" to the aquatic ecosystem. 40 C.F.R. § 230.10(c); PEIS, p. II.C-38. By eliminating the adverse effects test in the existing rule, the proposed SBZ rule would implicitly allow effects which are adverse and significant, as long as they are minimized. Even if effects of valley fills are minimized, they are still likely to be significant. Minimizing harm does not ensure its insignificance. The proposed SBZ rule does not prevent significant harm from occurring. Cf. Hazardous Waste Treatment Council v. EPA, 886 F.2d 355, 361 (D.C. Cir. 1989) (RCRA requirement to "minimize" threats to human health and the environment does not require EPA to set treatment standard at levels where no threat to human health and the environment exists).

A. The DEIS Itself Finds that Valley Fills Cause Significant Degradation

The evidence that valley fills cause significant degradation is clear from the DEIS itself. Headwater streams "serve a number of important ecological functions including . . . improving water quality." DEIS, p. 109. Valley fills have already permanently filled over 700 miles of headwater streams in Appalachia, and are expected to fill 367 more miles. *Id.* at 117. When streams are buried by valley fills, "those segments no longer exist and all stream functions are lost." *Id.* This degradation must be deemed significant. There is no evidence showing that buried streams can be recreated successfully elsewhere on mined sites. The DEIS states that "the state of the art in creating smaller headwater streams has not reached the level of reproducible success." *Id.* at 111. "Attempts to reestablish the functions of headwater streams on the groin

ditches on the sides of fills have achieved little success to date.” *Id.* at 117. “Past efforts at compensatory mitigation have not achieved a condition of no-net loss of stream area or functions.” PEIS, p. III.D-17. Consequently, this loss is permanent and irreversible.

Valley fills also cause significant harm to downstream water quality. They increase downstream concentrations of sulfate, total dissolved solids, total selenium, total calcium, total magnesium, hardness, total manganese, dissolved manganese, specific conductance, alkalinity, total potassium, acidity, and nitrite/nitrate. DEIS, p. 118. Sulfate doubled in 13 of 52 basins and quintupled in five basins. *Id.* at 119. Valley fills cause water temperatures to be warmer in the winter and cooler in the summer than for unmined areas. *Id.* at 120.

B. The Available Scientific Evidence Demonstrates that Surface Coal Mining Activities Are Causing Significant Degradation of Streams in Appalachia.

Other available scientific evidence demonstrates that coal mining activities and valley falls are causing significant degradation. In its comments on the proposed 2002 NWP 21, EPA stated that coal mining and valley fill operations in Appalachia cause “significant ecological damage to the headwater stream systems.” 10/9/01 EPA Letter, Enclosure, p. 8, Attachment 12. FWS similarly stated that it “believes that surface coal mines often adversely affect large areas of upland and wetland habitat.” 7/2/01 FWS Letter, pp. 1-2, Attachment 13. FWS described the environmental impact of coal mines in Appalachia on aquatic and terrestrial ecosystems as “unmitigatable” and “unprecedented.” 9/20/01 FWS Letter, p. 1, Attachment 14. FWS said it knew “of no other single type of activity, whether authorized by individual or general permit, with such significant individual and cumulative adverse environmental impacts as those currently authorized by NWP 21.” *Id.*, p. 2. FWS described the consensus of scientists working in the field that “small first order streams form the heart and soul of the functional stream ecosystem in . . . every watershed that has been carefully studied. . . . Clearly, any discussion of destroying even one first order stream is out of order. . . .” *Id.*, p. 4. “These experts asserted that stream loss is unacceptable from a biological standpoint, and that there is no scientific basis on which to develop an acceptable loss threshold.” *Id.*, p. 5.

In addition, 43 “senior aquatic scientists,” including “members of the National Academy of Sciences and its scientific Boards,” “president[s] of national scientific organizations, and leading authors on the ecology, water quality, and biota of streams and rivers,” stated in their comments on the proposed 2002 NWP 21 that:

The available scientific evidence clearly demonstrates that the length of headwater streams in the landscape has been significantly reduced because of the mining and development activities that have been permitted under this program. . . . This loss of headwater streams has profoundly altered the structure and function of stream networks, just as eliminating fine roots from the root structure of a tree would reduce its chances of survival.

10/5/01 Univ. of Georgia Comments, p. 1, Attachment 15. These scientists supported their conclusion by citing and attaching thirty articles in scientific journals. *Id.* In addition, in her

recent testimony in OVEC v. Bulen, Civil No. 3:05-784 (S.D.W.Va.), Dr. Margaret Palmer, plaintiffs’ expert on stream restoration, stated that in terms of conservation priorities, headwater streams are “at the top of the list” of areas that need to be preserved. Bulen Trial Transcript (hereafter “Bulen Tr.”) 6:102-03, Attachment 16.

1. Stream degradation is significant. The PEIS demonstrates that significant degradation of the aquatic and terrestrial ecosystem in Appalachia has likely occurred, and is continuing to occur. Significant stream degradation caused by valley fill and mining activities is best documented for watersheds in West Virginia. In OVEC v. Bulen, Civil No. 3:05-0784 (S.D.W.Va.), expert analysis of GIS data showed that present and pending surface mining permit operations and valley fills conservatively cover the following percentages of streams in these watersheds:

Watershed/Subwatershed	% of total streams covered	% first order streams covered
Upper Guyandotte	7.4	9.5
Dingess Run	19.9	19.5
Coal River	12.0	14.5
Laurel Creek	28.0	37.3
Upper Kanawha	7.9	10.2
Cabin Creek–Headwaters	22.9	32.1

Expert Report of Douglas P. Pflugh, May 16, 2006, Summary, p. 2, Attachment 17. The Corps reviewed this data and found it to be “very reliable.” Mullins Testimony, Bulen Tr. 3:202, Attachment 16. In the headwaters of Spruce Fork in West Virginia, surface mine permits and valley fills cover 35.5% of total stream length and an alarming 44% of first order stream length. FEIS, Spruce Mine No. 1, p. 2-180 (September 2006), Attachment 18. In OVEC v. Bulen, Civil No. 3:05-0784 (S.D.W.Va.), plaintiffs’ expert aquatic ecologist, Dr. Bruce Wallace, testified in October 2006 that impacts of this magnitude were “astounding,” a “danger signal,” and meant lost headwater stream functions in these areas. Wallace Testimony, Bulen Tr. 2:32-34, Attachment 16. Plaintiffs’ stream restoration expert, Dr. Margaret Palmer, similarly testified that a loss of 29% of the watershed and 18% of the first order streams in a watershed were “incredibly significant.” Palmer Testimony, Bulen Tr. 2:134, Attachment 16. She said that this loss was so huge that it was questionable whether the stream could ever be restored. Id. at 2:135-36.

2. Water quality degradation is significant. In its June 16, 2006 comments on the Draft EIS for the Spruce No. 1 mine, EPA stated “existing data from Spruce Fork ...indicates MTM/VF activities have degraded streams to the point where they are considered impaired using the West Virginia Stream Condition Index (WVSCI). Considering that water leaving the mined and filled areas in Spruce Fork is degraded, additional caution is necessary in future permitting

and mitigation requirements. The Final EIS should consider the strong and statistically significant relationships found between biological condition and these water quality parameters as summarized in Table 1 and supporting data. (see Attachment 2).” FEIS, Spruce No. 1 Mine, p. 2-98, Attachment 18.

In addition, the PEIS stated that valley fills have the following adverse effects on downstream waters:

Stream chemistry showed increased mineralization and a shift in macroinvertebrate assemblages from pollution-intolerant to pollution-tolerant species. Water temperatures from valley fill sites exhibited lower daily fluctuations and less seasonal variation than water temperatures from reference sites. . . .

The EPA Water Chemistry Report found elevated concentrations of sulfate, total and dissolved solids, conductivity, selenium and several other analytes in stream water at sampling stations below mined/filled sites.

PEIS, p. IV.B-4. In fact, the EPA Water Chemistry Report found that conductivity was “clearly impacted by MTM/VF [mountaintop/valley fill] mining.” PEIS, App. D, EPA 2002b, p. 2. “Conductivity at Filled sites can be 100 times greater than that at Unmined sites.” *Id.* at 45. “Unmined sites have a consistently low conductivity no matter what the flow. Filled sites have a broad range of conductivity much higher than Unmined sites indicating that MTM/VF mining increases specific conductance in streams.” *Id.* at 46. Conductivity is generally five to nine times greater below valley fills than below unmined sites. Wallace Testimony, Bulen Tr. 2:34-35, Attachment 16. Sulfates were 41 times greater; calcium, magnesium and hardness were 21 times greater; total dissolved solids were 16 times greater, and selenium was 7.8 times greater. *Id.* at 2:35. These chemical changes have a significant effect on the aquatic ecosystem. *Id.* Dr. Wallace called them a “witches’ brew.” *Id.* at 2:37, 95. EPA found that “[t]he highest values [for conductivity] are consistently at the Sediment Control Structure (MT-24) which is on a reclaimed MTM/VF mine.” PEIS, App. D, EPA 2002b, p. 45. The PEIS also found that mining impacts on the nutrient cycling function of headwaters streams “are of great concern.” PEIS, App. I, p. 74.

Coal mining and valley fills in WV are also causing significant degradation of the aquatic environment due to selenium contamination. OSM’s DEIS confines its discussion of selenium to the following four sentences:

Selenium concentrations from the “filled” category sites were found to exceed AWQC for selenium at most (13 of 15) sites in this category. No other site categories had violations of the selenium limit.

In the USEPA (2002a) stream chemistry study in West Virginia, selenium was found at elevated levels below several streams where excess spoil fills were constructed. Elevated selenium concentrations may impact aquatic biota and possibly higher order organisms that feed on aquatic organisms [EPA 2003, p.III.D-7].

DEIS, pp. 118, 132. This is grossly inadequate, and omits reference to newer and more disturbing scientific data.

Subsequent to the issuance of the PEIS, the FWS released a study that confirms the seriousness of the selenium problem. During the spring and summer of 2003, FWS conducted a survey of selenium in fish, water, and sediments in streams in southern West Virginia. In a January 16, 2004 letter to the West Virginia Department of Environmental Protection (Attachment 19), the Supervisor of FWS' Pennsylvania Field Office, David Densmore, concludes that:

- Selenium was present in all fish samples.
- Selenium concentrations in fish in three watersheds exceeded the toxic effect threshold level for whole fish.
- Selenium is bioavailable in West Virginia streams, and 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.

Fish tissue from Sugartree Branch and Stanley Fork contained selenium ranging from 4.13 ppm to 6.85 ppm, which are above Lemly's 4 ppm toxic effect threshold. July 16, 2004 Letter from Chapman to Mullins re: Phoenix No. 4 Surface Mine, p. 11, Attachment 20. FWS has also stated that the total number of fish species was dramatically higher in unmined streams than in either streams with valley fills and no selenium or streams with valley fills and detectable selenium. Id.

In November 2005, WVDEP began a fish tissue study of the impacts of selenium downstream from areas where high selenium coal is being mined. WVDEP's preliminary findings indicate significant bioaccumulation of selenium in downstream lakes and streams (April 28, 2006 powerpoint presentation: DEP Selenium Study, Background and Progress, available at www.dep.state.wv.us/item.cfm?ssid=11&sslid=747, Attachment 21):

Stream	Location	Avg. Water Column SE (ppb)	Average Fish Tissue Se (ppm)
Beech Creek	Logan County, WV	11.0	10.7
Pond Fork	Near Bob White, WV	1.8	3.8
White Oak Creek	Near Orgas, WV	15.3	5.7

Seng Creek	Garrison, WV	34.0	8.6
Hughes Fork	Near Dixie, WV	5.6	10.1
Upper Mud River Reservoir	Lincoln County, WV	3.9	33.9

The levels found at these sites greatly exceed levels where toxic effects in sensitive species begin to occur, which is 4 ppm. See A. Dennis Lemly, “Selenium in Aquatic Ecosystems: A Guide for Hazard Evaluation and Water Quality Criteria,” Springer 2002, p. 31, Attachment 22. In fact, the fish tissue selenium level in the Upper Mud River Reservoir, which is a lake downstream from the Hobet 21 mining complex, exceeds this threshold by 850%.

In general, “[t]he most widespread human-caused sources of selenium mobilization and introduction into aquatic ecosystems in the U.S. today are the extraction and utilization of coal for generation of electric power and the irrigation of high-selenium soils for agricultural production.” Bryant, G., McPhilliamy, S., and Childers, H., 2002, A survey of the water quality of streams in the primary region of mountaintop / valley fill coal mining, October 1999 to January 2001, *in* PEIS, App. D, Stream chemistry final report, p. 74. “[I]n the region MTM/VF mining, the coals can contain an average of 4 ppm of selenium, normal soils can average 0.2 ppm, and the allowable limits in the streams are 5 ug/L (0.005 ppm). Disturbing coal and soils during MTM/VF mining could be expected to result in violations of the stream limit for selenium.” *Id.*

FWS states in its comment letter on the Hollow Mountain project, “The Service believes that it is unlikely that toxic materials can be isolated indefinitely from weathering and in the long-term there will likely be leaching of toxic materials.” July 9, 2004 FWS Letter to ACOE, p. 3, Attachment 23. Further, it is clear that prevention is key in controlling selenium contamination of surface water. Dr. A. Dennis Lemly stated in a January 5, 2004, white paper on selenium issues in West Virginia:

The lessons from Belews Lake, supported by over two decades of research findings from many other locations throughout North America (Lemly 1997b, 1999, 2002b; Skorupa 1998a, Hamilton 2004), underscores the need to take a preventive approach to selenium pollution rather than attempting to deal with it after contamination has taken place. With respect to coal mining this means pre-mine assessment. Failure to adopt this approach can only worsen the selenium pollution and associated ecological risks that have emerged in West Virginia.

Attachment 24, p. 2. The risk of significant ecological harm from selenium contamination in the West Virginia coal fields is real and has been confirmed not only by the PEIS but also by studies conducted by the FWS. “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.” *Id.*, pp. 2-3. More recently, USGS sampling of fish tissue in April 2006 from five bluegill fish taken from the upper Mud River Reservoir near Palermo, WV showed concentrations of 15.1 to 40.1 ug/g in whole body samples and 21.4 to 34.9 ug/g in ovary samples. Attachment 30.

These scientific studies demonstrate that selenium concentrations are already occurring from existing valley fills and are causing significant degradation of water quality. “If mining, permitting and mitigation trends stay the same, an additional thousand miles of direct impacts could occur in the next ten years.” MTM/VF PEIS, App. I, pp. 66-67. The proposed rule does nothing to address the selenium issue and would permit more significant degradation to occur, and therefore would violate the CWA.

3. Water quantity and community impacts are significant. OSM has also failed to consider the major adverse effects of valley fills on hydrology. A USGS study found that runoff is 1.75 times greater per unit surface area from mined than unmined catchments. PEIS, App. H, p. 3. Even worse, EPA has found that “base flows of streams with valley fills are 6 to 7 times greater than the base flows of unmined areas.” PEIS, App. D, 2002 EPA Water Chemistry Study, p. 86. This means not only that areas downstream from valley fills will experience much higher flows, but also higher loadings of the excessive and harmful chemicals mentioned above. 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. PEIS, p. IV.H-3 (noise and vibration caused by mountaintop mining near populated areas generate “relatively high numbers” of complaints). The DEIS fails to consider these hydrological and community effects.

4. Degradation of aquatic diversity is significant. Headwater streams can be responsible for 90 percent of the biodiversity in an entire watershed. Palmer Testimony, Bulen Tr. 2:176. Valley fills reduce biodiversity by favoring pollutant-tolerant macroinvertebrate species over pollution-intolerant species. The coal industry’s own water quality expert admitted in OVEC v. Bulen that valley fills cause a dramatic reduction in mayfly taxa in downstream waters, with a shift to more pollution-tolerant taxa. Kirk Testimony, Bulen Tr. 5:88. Dr. Donald Cherry, an expert in aquatic ecotoxicology from Virginia Tech (Bulen Tr. 5:111), testified in OVEC v. Bulen about his research involving water discharges from valley fills in southern West Virginia. Bulen Tr. 5:114-16. His study found a shift in the benthic community to a more tolerant type. *Id.* at 5:120, 125, 165-66. He agreed that the created streams would not be the functional equivalent of the streams buried by valley fills. *Id.* at 5:145-46. Indeed, he rated the streams below valley fills as “terrible” with scores well below the score for the reference stream. *Id.* at 5:152-53. Those streams showed “significant stress.” *Id.* at 5:174. Dr. Wallace stated that there is a well-established correlation between conductivity levels and the loss of sensitive benthic organisms. Wallace Testimony, Bulen Tr. 6:31-36. High conductivity is contributing to major problems with benthic invertebrates. *Id.* Some of the worst conditions were found below fill sites. *Id.*

The loss of biodiversity from this loss of benthic taxa is significant. *Id.* at 6:67-68. Other organisms cannot make up for this loss of biodiversity because they serve different functions.

Palmer Testimony, Bulen Tr. 6:103-06. Different species are not necessarily interchangeable. Id. The functions of filled first and second-order headwater streams cannot be replaced in the larger order streams downstream. Wallace Testimony, Bulen Tr. 6:41. Those functions include nutrient retention, water purification, and energy production functions. Id. at 6:43-47; Palmer Testimony, Bulen Tr. 6:101-02.

The only significant vertebrate animal in headwater streams is the salamander. Wallace Testimony, Bulen Tr. 1:258. The Central and Southern Appalachians contain the greatest abundance of species of salamanders in the world. Id. at 1:242, 6:39. Salamanders are being buried by valley fills and not replaced downstream. Id. at 6:40; Cherry testimony, Bulen Tr. 5:166-67. Forest loss associated with mountaintop mining and valley fills has the potential to adversely impact over 1.2 billion salamanders, or 3.4% of the entire four-state population in Appalachia. PEIS, App. I, pp. 92-93.

According to the PEIS, from 1992 through 2002, mountaintop removal mining and associated valley fills in Appalachian have destroyed 380,547 acres of forest (an area almost ten times larger than the District of Columbia). PEIS, pp. III.D-2, IV.C.1. If current trends continue, that amount will double by 2012. Accordingly, in its June 16, 2006 comments on Spruce Mine No. 1, EPA stated that, “[o]f the largely forested mountaintop mining study area, the Final PEIS estimated that approximately 761,094 acres have been or may be affected by recent and future (1992-2012) mountaintop mining. To date, these impacts have not been successfully mitigated, resulting in the impairment of significant natural resources at the watershed level.” FEIS, Spruce Mine No. 1, pp. 2-64 to 2-65. In addition, the cumulative effects of past, present and anticipated surface mines in individual watersheds are even greater. For example, in the Coal River watershed, mining activities cumulatively impact 12% of that area, or 72,969 out of 570,713 acres. OVEC v. Bulen, Expert Report of Douglas P. Pflugh, May 16, 2006, Summary, p. 1, Attachment 17.

This forest destruction is profound and permanent because “unlike traditional logging activities associated with management of hardwood forest, when mining occurs, the tree, stump, root, and growth medium supporting the forest are disrupted and removed in their entirety.” PEIS, p. IV.C-1. Mountaintop mining causes “fundamental changes to the terrestrial environment,” and “significantly affect[s] the landscape mosaic,” with post-mining conditions “drastically different” from pre-mining conditions. Id., App. I, pp. v, 23, 93. One recent study has found that “[a]t this point in time, reestablishment of forest on these postmining sites appears questionable. Neither mountaintop removal sites nor the contour mines support a vegetation composition or structure that is likely to resemble regional forests.” Edmonds and Loucks, “Woody Establishment Patterns Following Mountaintop Removal in the Coal River Valley,” available at www.mcrcc.osmre.gov/PDF/Forums/Reforestation/Poster/P-1.pdf, Attachment 25.

Mining impacts to habitat of interior forest bird species could have “extreme ecological significance.” PEIS, App. I, p. 90. A study of cerulean warbler habitat changes due to mountaintop removal mining stated, “[p]reference for ridges suggests that MTMVF may have a greater impact on Cerulean Warbler populations than other sources of forest fragmentation since ridges are removed in this mining process. Generally, our data indicate that Cerulean Warblers

are negatively affected by mountaintop mining from loss of forested habitat, particularly ridgetops, and from degradation of remaining forests (as evidenced by lower territory density in fragmented forests and lower territory density closer to mine edges).” Weakland and Wood, “Cerulean Warbler (*Dendroica Cerulea*) Microhabitat and Landscape-level Habitat Characteristics in Southern West Virginia in Relation to Mountaintop Mining/Valley Fills,” Final Project Report, December 2002, p. 1, Attachment 26. Mining could impact 244 terrestrial species. PEIS, App. I, pp. 86. The loss of the genetic diversity of these affected species “would have a disproportionately large impact on the total aquatic genetic diversity of the nation.” *Id.*, App. I, p. 78.

FWS has described the impacts of MTM/VFs on forest loss and fragmentation in its comments on the Phoenix 4 Mine in West Virginia:

Habitat changes will occur in the study area and these changes will involve a shift from forest dominated landscape to a fragmented landscape with considerably more mining lands and eventually grassland habitat. This shift should lead to a shift in the floral and faunal components of the ecosystem. For example, dry grassland species will dominate the once post- mine and forest harvested sites. This will result in an overall reduction in the native woody flora as well as a reduction in the spring herbs and other vegetative components characteristic to the study area.

Wildlife shifts will include a shift from forest to grassland species. The abundance of grassland birds will likely increase while many forest interior, neotropical migrant species will suffer losses in terms of number. There will likely be an increase in game species such as whitetail deer and turkey due to an increase in grasslands and diversification of the habitats. The herpetofauna will likely undergo a shift from mesic favoring salamander dominated communities along the riparian corridors of the small headwater streams and in the litter of the forest floor to a snake dominated grassland fauna...Two species, short-tailed shrew (*Blarina brevicauda*) and eastern chipmunk (*Tamias striatus*), were more abundant in intact forest than fragmented forest.

Populations of forest birds will be detrimentally impacted by loss and fragmentation of mature forest habitat in the mixed mesophytic forest region, which has the highest bird diversity in forested habitats in the eastern United States. Fragmentation-sensitive species such as the cerulean warbler, Louisiana water thrush (*Seiurus motacilla*), worm-eating warbler (*Helmitheros vermivorous*), black-and-white warbler (*Mniotilta varia*), and yellow-throated vireo (*Vireo falvifrons*) will likely be negatively impacted as forested habitat is lost and fragmented from mountaintop/valley fill mining.

The cerulean warbler, with the highest conservation rating (this species is listed as Action II by Partner-In-Flight (PFI)—in need of immediate management or policy rangewide) was found to be positively related to percent slope and percent canopy from >6-12 m. Based on habitat preference, it is reasonable to conclude that continued mountaintop/valley fill mining will negatively impact cerulean warbler abundance in southwestern West Virginia.

...mountaintop/valley fill mining has become a major method of vast landscape change where golden-winged and cerulean warblers may disappear with the changing proportion of mature forest to cleared land...The highest priority bird species other than the golden-winged warbler (*Vermivora chrysoptera*), in this region are forest-breeder (cerulean warbler, worm-eating warbler, and Louisiana waterthrush) whose center of global importance is along the Appalachian ridges most affected by mountain/valley fill mining.

Attachment 20, pp. 4-5. The FWS continues by commenting on a statement commonly made in mining environmental assessments:

It is stated in the EID that ‘bird and amphibian species richness increased significantly on more fragmented stands...and in study plots containing more edge.’ This is true but there is failure to acknowledge that the increased richness is achieved by adding widespread generalist species that are taking over most of the landscapes, and the sensitive forest species are negatively affected. This is a common and misleading application of fragmentation and edge studies. This flaw is not that fragmentation will increase diversity; the flaw is that increased diversity is not necessarily desirable, especially if it comes at the expense of a sensitive species such as the cerulean warbler.”

Attachment 20, pp. 5-6.

The EPA and FWS scientists who commented on the draft PEIS agreed that significant degradation is occurring. An EPA scientist stated that:

EPA’s studies and other studies have found that the strongest and most significant correlations are between biological condition and conductivity. We do know that the stream segments downstream of some of the fills are impaired, and we believe the impairments are due to water chemistry changes, based on the strong correlations.

12/20/02 Comments by EPA Wheeling Staff, Attachment 27. A FWS scientist objected to the “no significant degradation” statement in that draft PEIS (p. II.D-9), stating that “If impaired aquatic life, and selenium above water quality standards, resulting in streams being placed on the 303(d) list don’t constitute significant degradation, what would?” 4/21/03 Rider email, attached file: chIVcomments.wpd, p. 2, Attachment 28.

5. OSM’s DEIS Evades Its Obligation to Analyze Significant Degradation.

OSM tries to avoid the significant degradation issue by arguing that the proposed rule would not make the current situation worse. It claims it “would not anticipate a major shift in on-the-ground consequences from any of the alternatives.” DEIS, p. 121. Similarly, it states that the alternatives “would cause no discernable changes to the direct stream impact trend.” *Id.* at 124. OSM repeatedly states that it “anticipates that the proposed regulatory language changes to the stream buffer zone rule would essentially be ‘impact neutral.’” *Id.* at 126-27, 128, 131, 133, 135, 142.

That is not enough to satisfy the “no significant degradation” requirement in 40 C.F.R. § 230.10(c). OSM assumes it only has to assess the change in impacts between the status quo and the proposed rule. However, OSM must determine whether significant degradation is already occurring and is likely to continue if activities are maintained at the current pace.

OSM’s proposed rules do not have adequate procedural mechanisms to ensure that such degradation does not occur. OSM’s proposed rules that summarize the relationship between SMCRA permitting actions and Clean Water Act requirements merely require the applicant to identify the authorizations it needs under the CWA and the steps it has taken or will take to obtain them. 72 Fed. Reg. at 48901. That procedural step does nothing to ensure that significant degradation is assessed or avoided. Nor will the parallel processing of CWA § 404 permits ensure that significant degradation does not occur, since the Corps takes the position that it need not assess the SMCRA-related impacts of mining activities on streams. 72 Fed. Reg. at 11115 (“Impacts associated with surface coal mining and reclamation operations are appropriately addressed by the Office of Surface Mining or the appropriate state agency.”). Furthermore, § 402 discharge permits for mining operation only cover discharges from downstream sediment ponds and do not address the permanent loss of stream functions from the filling of headwater streams.

OSM’s procedural mechanisms to avoid significant degradation are also inadequate because OSM is removing the existing requirement for a finding that the activity “will not cause or contribute to the violation of applicable State or Federal water quality standards and will not adversely affect the water quantity and quality or other environmental resources of the stream.” 72 Fed. Reg. at 48902. By removing this requirement, OSM will allow activities that can cause such violations or adverse water quality effects without any analysis of their propensity to do so. OSM also specifically disavows any effort to “pass judgment on . . . the adequacy of the steps that the applicant proposes to take” to comply with the CWA. *Id.* OSM would intentionally blind itself to the potential, indeed the likelihood, of significant degradation. OSM’s “minimization” standard is completely untethered to any analysis or measurement of actual adverse effects. Indeed, OSM asserts that “the appropriate standard is *minimization* of adverse impacts . . . , not absolute avoidance of all adverse effects.” *Id.* at 48902-03 (emphasis in original). See *id.* at 48906 (SMCRA establishes a minimization standard rather than an absolute ‘will not adversely affect’ standard”). “[S]ome adverse effects . . . are unavoidable . . .” *Id.* at 48903. OSM cannot read the word “minimize” as a license to allow some unknown but potentially significant adverse environmental effects, so long as those effects are minimized.

OSM attempts to finesse CWA requirements by including a catch-all provision that “discharges of water from disturbed areas ‘be made in compliance with all applicable State and Federal water quality laws and regulations.’” *Id.* at 48903. This is merely a generalized requirement that the project applicant comply with the law. It does nothing to monitor, assess, measure or determine whether significant degradation is occurring or will occur. It is therefore wholly inadequate to satisfy OSM’s independent and mandatory duty to ensure that its actions do not supersede, amend, modify or repeal the CWA. 30 U.S.C. § 1292(a)(3).

OSM's procedures are also insufficient to ensure CWA compliance because its standard for stream restoration does not meet CWA standards. Stream channel diversions are subject to § 404 of the CWA because they cause discharges of fill material into streams. In order to decide whether discharges will cause or contribute to significant degradation of the affected streams, the § 404(b)(1) Guidelines require a determination of "the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms." 40 C.F.R. § 230.11(e) (emphasis added). According to the Corps' May 7, 2004 guidance on "Mitigation for Impacts to Aquatic Resources from Surface Coal Mining," "[t]he Clean Water Act, and the Corps implementing regulations and policies, requires that compensatory mitigation projects replace aquatic functions lost as a result of authorized activities." However, OSM has proposed a performance standard for restoration after stream diversions that does not require restoration of aquatic functions, and instead focuses only on stream structure. OSM would only require that restoration:

be designed and constructed using natural channel design techniques so as to restore or approximate the premining characteristics of the original stream channel, including the natural riparian vegetation and the natural hydrological characteristics of the original stream, to promote the recovery and enhancement of the aquatic habitat and to minimize adverse alteration of stream channels on and off the site, including channel deepening and enlargement, to the extent possible.

72 Fed. Reg. at 48906. Thus, this standard focuses on restoring stream structure and merely "promoting" recovery of aquatic habitat. It does not require restoration of the lost aquatic functions. As the Court recently found in OVEC v. U.S. Army Corps of Engineers, 479 F. Supp.2d 607, 635 (S.D. W.Va. 2007), the federal government must make "a full assessment of the streams' ecological functions before [it] may conclude that the structure and function of the resources buried by the valley fills is offset by the imposed mitigation measures." OSM fails to explain how it would make this assessment or how it would replace lost aquatic functions. Without such an explanation or assessment, OSM cannot rationally conclude that its methodology would prevent or avoid a significant degradation of aquatic functions.

C. The Proposed Rule Will Result in Significant Degradation of the Stream Segments Between the Toes of the Valley Fills and the Sediment Pond Embankments, Which Are "Waters of the United States"

OSM's proposed rule would only require sedimentation ponds to be constructed "as close to the toes of the fill as practicable." 72 Fed. Reg. at 48909. This will always leave an unprotected stream segment between the mining activity (the toe of the fill) and the downstream outfall of the sedimentation pond. OSM takes the position that this segment is not a water of the United States and instead falls under the "waste treatment system" exclusion of an EPA regulation. OSM relies on a March 1, 2006 letter from EPA to support its position. *Id.* However, on June 13, 2007, a federal court rejected that EPA letter and held that the "waste treatment system" exclusion is inapplicable to the stream segments below the valley fills. OVEC v. U.S. Army Corps of Engineers, 2007 WL 2200686 (S.D. W.Va. 2007). Consequently, OSM has no legal basis for exempting these segments from the requirement to obtain a NPDES permit

for discharges of pollutants into waters of the United States. Without such a permit and treatment of the discharges, these discharges are extremely likely to cause significant degradation. Indeed, the whole purpose of the downstream sedimentation pond is to intercept and collect that pollution.

IV. The Existing SBZ Rule is Consistent with the CWA

OSM has taken the position that applying the plain language of the existing SBZ to prohibit fills in intermittent and perennial streams would be inconsistent with existing CWA requirements allowing valley fills, and would therefore violate section 702 of SMCRA, 30 U.S.C. § 1292(a)(2), which provides that SMCRA does not supersede, amend or repeal the CWA. 69 Fed. Reg. at 1044.

EPA's Office of Water expressed concern in December, 2002 that this argument in the MTM/VF draft PEIS is incorrect, commenting that:

There are fairly sweeping legal conclusions here that the stream buffer zone rule could not be used to determine allowable stream segments for filling because doing so would supercede the CWA, something [C]ongress precluded in SMCRA. The lawyers need to look at this more closely. I'm uncomfortable with the breadth of this argument...

1/7/03 Neugeboren e-mail, OGC water law office comments, p. 1, Attachment 29.

Furthermore, OSM's position is directly inconsistent with the position that it took in the Bragg litigation. In its brief in the Fourth Circuit, the United States stated, on behalf of OSM and other federal agencies:

WVDEP has argued that because SMCRA cannot supersede, amend, modify, or repeal the CWA, SMCRA cannot be construed to prohibit any activity that would be allowed by the CWA. That argument is without merit. ... SMCRA section 702 provides merely that SMCRA does not alter the existing regulatory schemes adopted by Congress in the CWA and other environmental statutes. ...

When Congress has intended that one statute should take precedence over another statute in the regulation of a particular activity, it has done so with language very different and much clearer than SMCRA section 702. ...

While WVDEP has asserted that it would create an impermissible statutory "conflict" to read the buffer zone rule to establish a stricter standard than that established by the 404(b)(1) guidelines, such a statutory construction does not create any such "conflict" as that term is understood in the law. As the Supreme Court has held, two statutes can be said to conflict only when it is impossible to comply with both. See Freightliner Corp. v. Myrick, 514 U.S. 280, 287 (1995). No such conflict arises if SMCRA is construed to prohibit some activities that would be authorized by the CWA, since it is possible to

comply with both statutes by engaging in only those activities authorized by both statutes.

Where an activity is regulated under the CWA and SMCRA – i.e., a surface mining activity that involves the discharge of pollutants from point sources into U.S. waters — regulation of the activity is governed by the usual principles that courts apply to reconcile overlapping statutes. Under those principles, “when two statutes are capable of co-existence, it is the duty of the courts, absent a clearly expressed congressional intention to the contrary, to regard each as effective. ‘When there are two acts upon the same subject, the rule is to give effect to both if possible.’” Morton v. Mancari, 417 U.S. 535, 551 (1974) (quoting United States v. Borden Co., 308 U.S. 188, 198 (1939)). See also 2A Sutherland Statutory Construction § 51.05 (4th ed. 1984). An activity governed by both the CWA and SMCRA must therefore satisfy the requirements of both statutes.

U.S. Br. 45-49, Attachment 1. Consequently, the existing SBZ rule does not violate section 702, and there is no need to revise the rule to address OSM’s presumed violation of that section.

XI. OSM’s Deletion of the Requirement That Activities that Disturb the SBZ Must Comply With Water Quality Standards Is an Illegal Attempt to Exempt Activities From Water Quality Standards

OSM proposes to delete language in the existing rule that allows a variance only if surface mining activities “will not cause or contribute to the violation of applicable State or Federal water quality standards.” 30 C.F.R. § 816.57(a)(1). This change “is intended to avoid the possibility that the SBZ rule could be misinterpreted to supersede the CWA by prohibiting an activity because of water quality standards that would otherwise be authorized under the CWA.” 69 Fed. Reg. at 1043. OSM does not explain how such a conflict could occur. As we have explained above, OSM rejected the notion of such a conflict in its appellate brief in Bragg.

OSM’s deletion of this language is even more perplexing in light of its statement in the EA that “this proposed change would be impact neutral because, whether or not OSM regulations include this statement, an applicant or operator would still be subject to applicable Federal and State water quality requirements and enforcement concerning matters such as effluent limits, in-stream water quality standards, storm water run-off, and anti-degradation.” EA, p. 23 (emphasis added). Thus, OSM wants to throw away its cake and eat it too. It purports to delete a requirement, yet advises the regulated community that it still applies.

Regardless of what OSM says, the effect of its proposal is to imply that although water quality standards still apply, they will not be violated if valley fills are minimized. Otherwise, there is no reason to delete the language in the existing rule. As we show below, this attempted exemption violates the Clean Water Act.

In CWA §§ 301 and 404(t), Congress placed clear limitations on the placement of fill material. Pursuant to those two sections, § 404 fills must comply with water quality standards.

The placement of waste material that eliminates substantial portions of waters of the United States necessarily violates those standards, and therefore violates the clear intent of Congress.

The CWA states in its very first sentence that “[t]he objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251 (emphasis added). The Conference Committee described this objective as the “sole purpose of the Act.” 118 Cong. Rec. 33700 (1972). The Senate Report stated that “this legislation would clearly establish that no one has the right to pollute and that pollution continues because of technological limits, not because of any inherent rights to use the nation’s waterways for the purpose of disposing of wastes.” S. Rep. No. 414, 92nd Cong., 1st Sess., p. 42 (1971). “The use of any river, lake, stream or ocean as a waste treatment system is unacceptable.” *Id.* at 7. This section “simply mean[s] that streams and rivers are no longer to be considered part of the waste treatment process.” 118 Cong. Rec. 33693-94 (1972) (remarks of Sen. Muskie). The Conference Committee stated that it “expects [EPA and the Corps] to move expeditiously to end the process of dumping dredged spoil in water” and to use land-based alternatives, because “the economic argument alone is not sufficient to override the environmental requirements of fresh water lakes and streams.” *Id.* at 33699.

To implement these statutory purposes, Congress wrote several important provisions into the Act. In particular, “§ 301(b)(1)(C) expressly identifies the achievement of state water quality standards as one of the Act’s central objectives.” *Arkansas v. Oklahoma*, 503 U.S. 91, 105-06 (1992). Section 301(b)(1)(C) is designed to ensure compliance with these standards. *PUD No. 1 v. Washington Dept. of Ecology*, 511 U.S. 700, 712-13 & n. 3 (1994). It provides that “[i]n order to carry out the objective of this Act there shall be achieved . . . any . . . limitation . . . necessary to meet water quality standards . . . established pursuant to any State law . . . or any other Federal law or regulation . . .” 33 U.S.C. § 1311(b)(1)(C)(emphasis added).³ To carry out this statutory requirement, EPA’s 404(b)(1) Guidelines expressly require § 404 discharges to comply with water quality standards. 40 C.F.R. § 230.10(b)(1) (“No discharge of dredged or fill material shall be permitted if it: (1) Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard”). Thus, this is a “Federal . . . regulation” that must be “achieved” under § 301(b)(1)(C).

Furthermore, Congress added § 404(t) of the CWA in 1977 to reaffirm that state water quality standards are applicable to § 404 discharges. It provides that:

Nothing in this section shall preclude or deny the right of any State or interstate agency to control the discharge of dredged or fill material in any portion of the navigable waters within the jurisdiction of such State, including any activity of any Federal agency, and each such agency shall comply with such State or interstate requirements both substantive and procedural to control the discharge of dredged or fill material to the same extent that any person is subject to those requirements.

³State water quality standards under the CWA must “protect the public health or welfare, enhance the quality of water and serve the purposes of this chapter.” *Id.*, § 1313(c)(2)(A).

33 U.S.C. § 1344(t) (emphasis added). The issuance of a SBZ variance by OSM or a primacy state is covered by this section.

The legislative history of § 404(t) fully supports this conclusion. “[U]nder section 404(t) and the amendments to section 313, every Federal activity is subject to State and Federal procedural requirements, including permits, as well as substantive requirements.” 123 Cong. Rec. 39189 (1977) (remarks of Sen. Muskie). The “basic thrust of subsection (t)” is that “[t]he Corps of Engineers, like any other Federal agency, in performing maintenance dredging or undertaking other activities, is to comply with State substantive and procedural requirements.” *Id.* The intent of the 1972 CWA “was not to exempt the U.S. Army Corps of Engineers or any other public or private agency from State water quality standards . . .” *Id.*

Valley fills that eliminate waters of the United States solely for the purpose of waste disposal cannot meet water quality standards. Water quality standards “define[] the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses.” 40 C.F.R. § 130.3 (emphasis added). See also 40 C.F.R. § 130.2(d) (water quality standards “consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses”) (emphasis added). EPA’s regulations on water quality standards have provided since 1983 that “[i]n no case shall a State adopt waste transport or assimilation as a designated use for any waters of the United States.” 40 C.F.R. § 131.10(a) (emphasis added). EPA has stated that “[a] basic policy of the standards program throughout its history has been that the designation of a water body for the purposes of waste transport or waste assimilation is unacceptable.” 48 Fed. Reg. 51400, 51408-09 (Nov. 8, 1983).

Valley fills that bury waters of the United States with millions of tons of waste cannot achieve this water quality standard. As Judge Haden has stated, “valley fills are waste disposal projects so enormous that, rather than the stream assimilating the waste, the waste assimilates the stream.” *Bragg*, 72 F. Supp. 2d at 662.

This violation of water quality standards is especially clear in West Virginia. West Virginia has several “designated uses” for state waterbodies. These uses include public water supply, propagation and maintenance of fish and other aquatic life, and water contact recreation, among others. See 46 C.S.R. § 1-6. The state water quality standards clearly state, however, that “[w]aste assimilation and transport are not recognized as designated uses.” 46 C.S.R. § 1-6.1.a. Also notable is that water quality standards do not allow “[m]aterials in concentrations which are harmful, hazardous, or toxic to man, animal or aquatic life.” 46 C.S.R. § 1-3.2.e. Furthermore, “industrial wastes. . .cause pollution and are objectionable in all waters of the state.” 46 C.S.R. § 1-3.1. In addition, no “industrial wastes” shall cause or materially contribute to conditions such as “distinctly visible. . .settleable solids,” “deposits. . .on the bottom” of streams, “materials in concentrations which are harmful, hazardous or toxic to. . . aquatic life,” adverse alterations of “the integrity of the waters,” or “significant adverse impact to the chemical, physical, hydrologic or biological components of aquatic ecosystems.” 46 C.S.R. § 1-3.2. “Industrial wastes” are defined as “any. . .solid or other waste substance. . .from or incidental to the development,

processing or recovery of any natural resources. . .” W. Va. Code § 22-11-3(12). Accordingly, mining spoil is industrial waste pursuant to West Virginia law. Additionally, the act of filling a stream segment with overburden not only deposits waste and creates distinctly settleable solids, but also destroys the stream segment. Placing mining waste in streams, therefore, violates West Virginia water quality standards by materially contributing to the adverse conditions set forth in 46 C.S.R. § 1-3.2. Neither can the fills comply with the antidegradation provisions of the West Virginia water quality standards.

In short, although compliance with water quality standards is a “central objective” and requirement of the CWA, valley fills designed solely to eliminate waters of the United States and replace them with waste are incapable of such compliance. Evasion of a statute’s core mandate and purpose is not a reasonable interpretation, and therefore is not entitled to deference. See, e.g., U.S. Army Engineer Center v. FLRA, 762 F.2d 409, 414 (4th Cir. 1985) (“[C]ourts must not ‘rubber stamp . . . administrative decisions that they deem inconsistent with a statutory mandate or that frustrate the congressional policy underlying a statute.’”) (citation omitted); Whitman v. American Trucking Ass’ns., 531 U.S. 457, 481 (2001) (reversing under Chevron step two an EPA interpretation that “goes beyond the limits of what is ambiguous and contradicts what in our view is quite clear”); Natural Resources Defense Council v. Daley, 209 F.3d 747, 753 (D.C. Cir. 2000) (rejecting under Chevron step two an agency interpretation that “diverges from any realistic meaning” of the statute).

OSM is trying to use its SMCRA rulemaking power illegally to override the CWA. SMCRA does not preempt the Clean Water Act. Section 702(a)(3) of SMCRA provides that nothing therein “shall be construed as superseding, amending, modifying, or repealing the . . . Clean Water Act, the State laws enacted pursuant thereto, or other Federal laws relating to the preservation of water quality.” 30 U.S.C. § 1292(a)(3). Thus, this savings clause specifically preserves the CWA’s prohibition against waste assimilation. If SMCRA were construed to authorize waste assimilation in streams, it would not be consistent with, and would be preempted by, the CWA.

For these reasons, the proposed rule should be withdrawn.

Sincerely,

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**Attachments to WVHC, Sierra Club, Earthjustice, OVEC, CRMW, and Waterkeeper
Alliance Comments on Proposed Rule on Excess Spoil Minimization/Stream Buffer Zones**

- 1 Brief for the Federal Appellants, 4th Cir., No. 99-2683, April 17, 2000 (excerpts).
- 2 Federal Appellants' Opposition to the Motion of the Intervenor-Defendants to Strike the Brief of the Federal Appellants and to Dismiss Appeal No. 99-2683, p. 2.
- 3 Letter dated April 17, 2000 from Kathrine Henry, Acting Director, OSM and John D. Leshy, Solicitor, U.S. Department of the Interior, to Michael C. Castle, Director, West Virginia Division of Environmental Protection.
- 4 Preliminary Draft EIS on MTM/VF in Appalachia, pp. ES-6, IV-1.
- 5 3/25/02 Email from Cindy Tibbott re: Purpose & need/alternatives write-ups, with Attachment: I. Purpose and Need for Action and IV. Alternatives.
- 6 6/14/02 Email from Mike Robinson re: Agenda and Handout for 6/18 SES Issue, with Attachment: Mountaintop Mining/Valley Fill Environmental Impact Statement, Senior Executive Issue Resolution Meeting, Interior South Building Room 332, June 18, 2002, Proposed Agenda; Handout for SES/Steering Committee Issue Resolution Meeting, Refresh on Teleconference Meeting Decisions, May 21, 2002.
- 7 10/5/01 Letter from J. Steven Griles to CEQ, OMB, EPA, COE re: Mountaintop Mining/Valley Fills Issues.
- 8 6/19/02 Email from William Hoffman re: out of office, with Attachment: Proposed EIS Alternative Framework.
- 9 6/26/02 Email from Mike Robinson re: Mock-up of Proposed new Alternative Framework, with Attachment: Mountaintop Mining/Valley Fill EIS Alternative Framework (June 26, 2002 v.).
- 10 Email dated September 20, 2002 from Mike Robinson, OSM, re: Executive Conference Call Agenda—9/23/02, 9-10 am, with Attachment: MTM/VF EIS Executive Meeting

- Agenda, September 23, 2002 Conference Call Letter dated July 12, 1999 from Michael V. Shingleton, Asst. Chief Coldwater Management, West Virginia Division of Natural Resources, to Tony Barnett, West Virginia Division of Environmental Protection.
- 11 8/15/02 Email from Gregory Peck re: Executive Committee Discussion, with Attachment: Alternatives Matrix for Draft MTM/VF PEIS.
 - 12 October 9, 2001 Letter from EPA to U.S. Army Corps of Engineers re NWP 21.
 - 13 July 2, 2001 Letter from FWS to U.S. Army Corps of Engineers re NWP 21.
 - 14 Letter dated September 20, 2001, from Jeffrey K. Towner, Field Supervisor, West Virginia Field Office, U.S. Fish and Wildlife Service, to Colonel John D. Rivenburgh, District Engineer, Huntington District, re: comments on 2002 NWPs.
 - 15 Letter dated October 5, 2001 from The University of Georgia, Institute of Ecology, to Headquarters, U.S. Army Corps of Engineers, re: comments on 2002 NWPs..
 - 16 Trial Transcript, OVEC v. Bulen, Civil No. 3:05-784 (S.D.W.Va.), October 2006 (excerpts).
 - 17 Expert Report of Douglas P. Pflugh in OVEC v. Bulen, May 16, 2006, Summary, pp. 1-2.
 - 18 FEIS, Spruce Mine No. 1, pp. 2-98, 2-180 (September 2006).
 - 19 Letter dated January 16, 2004 from David Densmore, U.S. Fish and Wildlife Service, to Allyn Turner, West Virginia Department of Environmental Protection, re: Selenium Survey in southern West Virginia streams.
 - 20 Letter dated July 13, 2004 to Ginger Mullins, Chief, Regulatory Branch, Huntington District, ACOE. From Thomas R. Chapman, Field Supervisor, USFWS Elkins, WV, Field Office. Re: Public Notice 200400604 and EID, Coal Mac, Inc., Phoenix No. 4 Surface Mine.
 - 21 April 28, 2006 powerpoint presentation: DEP Selenium Study, Background and Progress, available at .
 - 22 A. Dennis Lemly, "Selenium in Aquatic Ecosystems: A Guide for Hazard Evaluation and Water Quality Criteria," Springer 2002, p. 31.
 - 23 July 9, 2004 FWS Letter to U.S. Army Corps of Engineers re: Hollow Mountain Project.
 - 24 Report by A. Dennis Lemly, Ph.D, "Recommendations for Pre-Mine Assessment of Selenium Hazards Associated with Coal Mining in West Virginia," January 5, 2004..

- 25 Edmonds and Loucks, "Woody Establishment Patterns Following Mountaintop Removal in the Coal River Valley," available at .
- 26 Weakland and Wood, "Cerulean Warbler (*Dendroica Cerulea*) Microhabitat and Landscape-level Habitat Characteristics in Southern West Virginia in Relation to Mountaintop Mining/Valley Fills," Final Project Report, December 2002, p. 1.
- 27 Email dated December 23, 2002 from John Forren, EPA Region 3, re: Comments on Draft EIS for MTM/VF, with Attachment: Comments on the Draft EIS for MTM/VF Coal Mining (Dec 2002) from ESD, OEP, Wheeling Staff 12/20/02.
- 28 4/21/03 Email from David Rider re: Ch 14 edits, with Attachment: DEIS, Ch. IV.J., Threatened and Endangered Species, pp. IV.J-1 to IV.J-2.
- 29 Email dated January 7, 2003 from Steve Neugeboren, EPA, re: MTM legal issues, with Attachment: OGC water law office comments on mountaintop mining EIS 12/26/02.
- 30 USGS, Water-Data Report 2006, 380930082033101 Upper Mud River Reservoir near Palermo, WV.