Bringing People Together To Protect the Land, Air, Water and Communities of the Central and Southern Appalachians

December 1, 2010

Administrator Lisa Jackson Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, DC 20460

Re: Docket ID No. EPA-HQ-OW-2010-0315 Guidance on Improving EPA Review of Appalachian Surface Coal Mining Operations Under the Clean Water Act, National Environmental Policy Act, and the Environmental Justice Executive Order

Dear Administrator Jackson:

Appalachian Voices and Waterkeeper Alliance hereby submit the following comments on the "Guidance on Improving EPA Review of Appalachian Surface Coal Mining Operations Under the Clean Water Act, National Environmental Policy Act, and the Environmental Justice Executive Order" (hereinafter "Guidance"). Appalachian Voices is a regional non-profit organization that brings people together to solve the environmental problems having the greatest impact on the central and southern Appalachian Mountains. Our mission is to empower people to defend our region's rich natural and cultural heritage by providing them with tools and strategies for successful grassroots campaigns. Waterkeeper Alliance is an international nonprofit environmental advocacy organization incorporated in New York State that is headquartered at 50 S. Buckhout St., Suite 302, Irvington, New York 10533. Waterkeeper connects and supports over 180 local Waterkeeper programs to provide a voice for their waterways and communities and advocates on environmental issues common to the Waterkeeper programs.

On behalf of our many members in the Central Appalachian region and across the country, we first want to express our sincere appreciation for the efforts EPA has made to curb some of the most devastating impacts of mountaintop removal and related forms of surface mining in the region. The guidance, even as initially drafted, represents the most significant effort ever made by a federal agency to protect Appalachian communities and headwater streams from the impacts of surface coal mining. However, there remains much room for improvement to the guidance to ensure that it fulfills your stated goal of "[reducing] the substantial environmental and human health consequences of surface coal mining in Appalachia, and [minimizing] further impairment of already compromised watersheds." Our comments are focused on three main areas of concern, which include:

1. The guidance needs to be informed by a real-world view of how the Clean Water Act is actually being monitored and enforced at the state level and EPA must seek to address any short-comings in a direct and proactive manner;

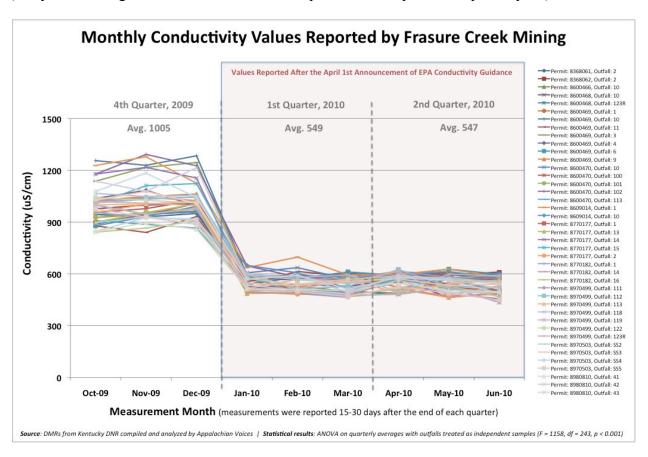
191 Howard Street • Boone, NC 28607 828-262-1500 877-APP-VOICE



- 2. Preliminary indications suggest that the guidance is not being adequately applied by regional EPA staff. To correct this problem, both regional and national staff require (1) better information on the overall population of active and pending mine permits across the region and (2) access to independent engineering expertise to inform their work on individual permits;
- 3. The guidance must provide specific details on addressing environmental justice concerns, "public interest review," NEPA processes, and "important social or economic development" concerns in the NPDES permitting for Tier 2 streams.

1. The guidance should address current problems with state agency enforcement of the CWA and shortcomings in self-monitoring of effluents under NPDES permits.

It is essential that the EPA take a realistic view of how mining companies are self-reporting their monitoring of "effluent standards or limitations." The chart below, showing how one company has reported conductivity levels at NPDES discharge locations both before and after the April 1st announcement of the Guidance demonstrates why EPA should not rely solely on Discharge Monitoring Reports to conduct "trends analysis" as recommended for BMPs in the Guidance (analyses showing similar trends for other companies will be provided upon request):



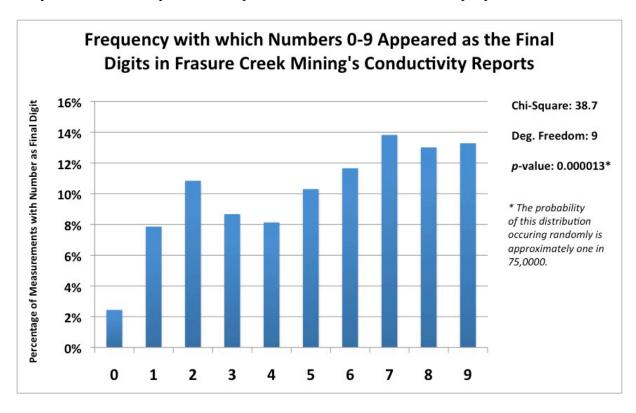
The graph shows monthly conductivity measurements at 41 outfalls as reported in DMRs submitted to the Kentucky Division of Surface Mining, Reclamation and Enforcement following

the fourth quarter of 2009 and the first and second quarters of 2010. While the reporting forms changed between 2009 and 2010, the values plotted represent individual monthly values from a single reported grab sample in 2009 and the reported maximum value from multiple monthly grab samples in 2010. As can be seen in the chart, even the *highest* maximum conductivity levels reported in 2010 are lower than even the *lowest* levels reported in 2009. There is clearly no natural explanation for this difference. It is particularly notable that all of the 2010 measurements were reported after EPA's April 1st announcement of the new guidance (because the reports were submitted several weeks after the end of each quarter).

In addition to these worrisome trends in conductivity reporting, there is abundant evidence of additional problems with this and other companies' reporting of effluents under NPDES permits. Appalachian Voices, Waterkeeper Alliance and allies recently filed a 60-day notice of intent to sue three coal operators in Kentucky for, among other violations:

- Submission of False/Fraudulent DMR Data:
- Failure to Accurately Sample and Test Effluent; and
- Self-Reported Exceedances/Violations of Effluent Limitations

The images of actual DMRs shown on the following page demonstrate the direct evidence we found of false or fraudulent reporting of DMR data. In addition, there is evidence that false or fraudulent reporting of DMR data is considerable more widespread, as shown in this "forensic" analysis of conductivity numbers reported in DMRs for the same company:



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES) COAL ONLY DISCHARGE MONITORING REPORT (COAL ONLY DMR)

Name: ICG Knott County, LLC.	KPDES NUMBER:	KYG045000
Address: 1021 Tori Drive	DSMRE NUMBER:	860-9011
Hazard, Kentucky 41701	MONITORING PERIOD:	1ST QUARTER
Facility:		2009
ocation:	COUNTY	Knott

Historicky 4170 Houseld, Kennicky 4170								The state of the s	DSMIKE NUSIBER	1108-000	
	4	azard, Ker	ntucky 417	101				MONITO	SRING PERIOD:	1ST QUARTER	TER
TYPE OF OTERATION Sear Carrier for the formage Efficient Columning	Facility:									2009	
. 71.0W hs Tas as allow months of the following the Architecture of the Common of the	Location:								COUNTY	Knott	
Trans Tras State Infriend Chlemochristics Activities Activ	UTFALL 81		TYPE OF	OPERATION	Nee-Cas	freiled Surface Mine	Draitage				
71.00 71.3 9 0.03 1.44 0 0.07 7.22 8 0.04 1.44 0 0.11 7.33 7 0.02 1.48 0		B	100 E	No. of	S. Ing. St.	Effluent	Characteristi		Mark Color	SEC. PRESENT	100 ON 10
0.09 7.22 8 0.03 1.44 0 0.17 7.33 7 0.02 1.48 0	DATE	MOM	£	TSS .	2	мом	DELLO NOTES	Me	ACTREETY	ALKALDITY	PRECONTATION
0.09 7.22 8 0.04 1.44 0.11 7.33 7 0.02 1.48	1/14/2009	0.07	7.3	on		0.03		1.4	0	75	
0.11 7.33 7 0.02 1.48	1/28/2009	60.0	7.22	80		0.04		1.44	0	84	
	2/14/2009	0.11	7.33	7		0.02		1.48	0	88	
0.12 7.36 10	2/28/2009	0.12	7.36	10		0.03		1.55	0	94	

DATE PLOW P. TSS SS BON DATE DATE	TALLE		TYPE OF	OPERATION:	Non-Cont	TYPE OF OPERATION: Non-Controlled Surface Mine Drahage	e Drahage				
0.11 7.22 11 0.06 1.52 0.15 7.3 12 0.05 1.52 0.15 7.3 12 0.05	The state of the s		A. 1885	2012 CO	Section 1	Effluent	Characteristic	State State	Sec. 10. 10.	200000000000000000000000000000000000000	S1806-1998-10983
0.11 7.22 11 0.06 0.15 7.3 12 0.05	DATE	NO.	((SSY)	252	18	MON	DROW (TR.)	á	мерши	ALKALDUTY	PRECENTATION
0.15 7.3 12 0.05		0.11	7.22	11		90.0		1.52	0	85	
	3/28/2009	0.15	_	12		0.05		1.56	0	66	

eren. And hand on my inquiry of those incheolasts immediately responsible for there are isprinkent penaltes for submaining the information including the may include fines up to \$23,000 per day of violation or by impriorment for net	
obstainly entire people, the what I have personally examined and an familiar with the information submission berein. And based on an impairly of those inchrolosals irre- obstainly de information. Heleve be turbined information is true, accruate and complete. Less assure the factor are injusticent penalties for submissing this informa- positionly of fire and imprincation. As and IXAS 524.9-0-10; (Penalties mode those sources may include fines up to \$23,000 per day of volution or less one year and not more than five years or by both).	
I certify under penalty obtaining the informa possibility of fine and less one year and not	

Don Gibson-Power-of. Attorney	Don Dist	(606) 432-	4/15/09
NAME THAT PROCESS, EXECUTAR OPPOSE.	Sthurtes	TELESCOR	Town
		2699	
MARKY AND EXPLANATION OF ANY VIOLATIONS (NA	former all studentess here;	PR	Ties.
		29	ÇEJ
		Δ	VE

Jo

Page 13

DOW COAL DMR-01SA

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES) COAL ONLY DISCHARGE MONITORING REPORT (COAL ONLY DMR)

Old Vessit County 110	KPDES NUMBER: KYG045000	YG045000
ICG Kilon County, page	COR	00000
1031 Tasi Daise	DSMRE NUMBER: 660-9011	1108-00
Address: 1941 Ion Lane	C True	PACALICA
Housed Kentucky 41701	MONITORING PERSON	200
Hacero, removey	2009	600
	COUNTY! Knott	nott

		TYPE OF O	IVPE OF OPERATION:	Nes-Contr	Nea-Controlled Surface Mine Drainings	Dealings				The second second
	N. Carlo	100	1 Table 2	19 EAST-02	Efficients	Characteristic	4 CONTRACTOR	25000 PETE		
DATE PL	MON	£	287	8	IBON	DROW (TR)	Ma	ACDITY	ALKALDITY	евиситатом
+	200	7.3	a		0.03		1.4	0	75	
+	9	4 33	a		0.04		1.44	0	84	
+	80.0	7 23	1		0.02		1.48	0	88	
5/28/2009 0	_	7.36	10		0.03		1.55	0	91	

		TYPEOF	OPERATION:	New-Costs	TYPE OF OPERATION: New-Centrolled Surface Mine Drainage	Dyalauge				
	-	1	A STATE OF THE PARTY OF THE PAR	1000	Effluent	Characteristic	# CO. Co. Co.	SHEET WATER	STATE STATE OF THE	
BATE F	WOLF	£	128	8	IBON	mos (mo	4	ACIBITY	ALKALINITY	PRECIPITATION
BOOCAFIA	0.11	7 22	11		90.0		1.52	0	85	
т	0.48	7.3	12		0.05		1.56	0	86	
T	2									

2 2	
2 異 3	
11 11 11	
9 2 2	
學明明	
ting dist	
多世を	
160	
Se il	
533	
of B. E.	
音用 章	
見報を	
9 50 70	
1000	
o S	
0 T 0	
2 2 2	
8 4 8	
A gr de	
5 8 8	
2 4 5	
9 9 5	
and and	
4 5 8	
8 1 4	
8 - 8	
10 6 4	
the of the	
400	
1 20	
F 20	
1 3 8	
6 4 2	
9 5 5	
7 5 7	
of the S	
100	*
400	E
Man 2	2
8 4 9	0.8
2 9 3	2 3
200	2
34	
123	4
200	100
4 1 7	7
don do	2 2
2 4 4	1 8
8 4	1
Lordy usder peadly of the that I have personally examined and an familiar with the information pubmitted horior. And based on my hearty of from individuals immediately responsible for obtaining the development of the personal personal personal personal to the acceptance of the personal pers	less one year and not more than five years or by both).
5 2	10
0	. A.

Marl of			
tionymen	TO THE PERSON	TRAPRICIES	DATE
HOWARD TO THE PARTY OF THE PART	-	н	
	postures	poolitus	TELEPHONE.

13 Jo 13 Page DOW COAL DMR-01SA



In a typical dataset each digit, from 0 to 9, should be the final digit roughly ten percent of the time. As stated in a classic paper on this issue by Jaroslav Mohapl in the journal *Environmental Monitoring and Assessment:*

"... under normal conditions, the last digits of the observed data can usually be considered as uniformly distributed random numbers. Failures or deliberate changes in the observation mechanism can be detected if particular digits occur more frequently than the others."

The enormous departure from a uniform distribution of final digits in conductivity measurements reported in Frasure Creek Mining's DMRs raises serious concerns about the accuracy and reliability of their reporting. Similar problems can be seen in the conductivity reports of additional companies operating in Kentucky (additional analysis will be provided upon request).

Our intention in raising these issues is not to point the finger at specific companies for inaccurate reporting, but to show why specific sections of the Guidance need to proactively address the weaknesses in self-reporting if the goals of the Guidance are to be realized. While EPA does express concerns about the accuracy of ambient water quality monitoring in support of permitting, many of the recommendations of the Guidance rely specifically on DMR and/or industry collected data to ensure that permits are drafted so as to adequately protect water quality. Sections that rely on accurate reporting include:

- III. A. Completion of Required Reasonable Potential Analyses and III. B. Incorporation of Numeric Water Quality Standards in Terms of NPDES Permits. In section III A, EPA states: "Where effluent data are available (i.e., for existing discharges), EPA's expectation is that permitting authorities will use all valid and representative data to determine whether the discharge causes, has the reasonable potential to cause, or contributes to an excursion of numeric and/or narrative water quality criteria and standards." Section III B states: "Data may be secured through evaluation of similarly situated facilities in adjacent watersheds or similar practices in the same ecological or geological setting." If these analyses are based on inaccurate and potentially fraudulent "representative data," the value of reasonable potential analyses is seriously compromised.
- III C. 1. Documentation on How States Will Derive Effluent Limits Based on Narrative Water Quality Standards. In this section, EPA states: "In circumstances where conductivity levels in waters proposed for new mining related discharges already exceed 500uS/cm, EPA will coordinate with the permitting authority on a site-specific basis to ensure these new discharges will not cause or contribute to a violation of water quality standards." If the regulators' understanding of current water quality at sites proposed for new discharges is based upon erroneous or fraudulent reports that understate the degree of contamination, this could lead to the permitting of activities that exacerbate the problem
- IV BMP #1 Sequencing Multiple Valley Fills for Projects Proposing More Than One Fill. In its recommendations for sequencing of fills, EPA states "Many of the

proposed best management practices associated with the design of mining operations are currently unproven in their effectiveness to protect water quality and to prevent significant degradation." The suggestion is that initial fills will serve as a sort of experiment to test the effectiveness of unproven BMPs. However, after looking at the evidence presented above, would any scientist really expect to effectively answer experimental questions if their "field assistants" exhibited the credibility and track record of Frasure Creek mining?

- Moreover, one of the most worrisome aspects of the trends in conductivity values shown in the first chart is that there appears to be substantial "wiggle room" in companies' reporting of conductivity measurements based on the 45% reduction in conductivity measures reported in Frasure Creek Mining's DMRs between Q4 of 2009 and Q2 of 2010. Even a much smaller amount of "wiggle room" would allow companies to manipulate trends in a manner that ensured adaptive management plans are never triggered and that thresholds that would prevent construction of additional fills are never exceeded.

In order to correct these problems and ensure effective implementation of the Guidance, Appalachian Voices and Waterkeeper Alliance recommend three specific remedies that should be incorporated into the guidance. These are:

- 1. Enhanced Quality Control by the EPA Conduct widespread and frequent random independent sampling and validation of reported effluent levels at NPDES outfalls conducted by EPA itself or independent contractors answerable to the EPA. Require all applicants to use EPA certified laboratories for water quality testing and implementation of a quality assurance project plan (QAPP) before beginning testing so that the desired quality in sample collection, laboratory analysis, data validation and reporting, and documentation and record keeping is achieved and maintained.
- 2. **Enhanced Availability of Data** Provide specific guidance for states to ensure that DMR data is made accessible online within a week or two after it is reported to ensure independent analysis of these data can be conducted on a timeframe that is useful for commenting on permitting decisions.
- 3. **Statistical Analysis of DMRs** While it is no substitute for direct QC measures suggested in #1, our "forensic analysis" of the final digits of conductivity measurements is the kind of analysis that EPA could conduct with minimal investment of resources and yet would be exceedingly useful for detecting fraud and other problems with DMRs. In addition, applying a pattern recognition routine to datasets of DMR data would easily identify submission of false or fraudulent DMRs (i.e., the same reports are resubmitted with different dates), as was discovered in numerous cases by Appalachian Voices staff.
- 2. Preliminary indications suggest that the guidance is not being adequately applied by regional EPA staff. To correct this problem, both regional and national staff require (1) better information on the overall population of active and pending mine permits across the region and (2) access to engineering expertise to inform their work on individual permits;

The November 2nd letter from EPA Region 4 to the ACOE in regard to the proposed Premier

Elkhorn permit in Pike County, Kentucky, presents a confusing picture as to how the guidance is currently being applied to 404 permit applications. Of particular concern are inconsistencies in EPA's letter that suggest staff did not have the confidence, or feel sufficiently empowered, to apply elements of the Guidance that should clearly have been applied by the facts they presented. For instance, the letter states:

"Based on our preliminary review of available water quality data, we believe that the proposed project may cause or contribute to exceedances of WQ in streams that are already known or suspected to be impacted by mining-related (and other) causes."

The Guidance makes clear that a project that inspired such conclusions by EPA staff could not be approved. Admittedly, it is not yet clear yet whether the ACOE will require sufficient changes to the permit to alleviate EPA's expressed concerns and if not, whether EPA will proceed to a "veto" under the 404(q) MOA and/or Section 404(c) provisions (as stated clearly in the Guidance that it should). However, the degree to which this application fails to meet the criteria expressed in the Guidance should warrant an explicit warning of the possibility of a "veto" unless very substantial changes are required by ACOE and agreed to by the applicant.

Similarly it is puzzling that EPA would indicate that there are any conditions under which it would allow the permit to proceed under Kentucky's general NPDES permit, given that the project involves discharge into a 303(d) listed stream, which is specifically prohibited by that permit. While we anticipate that EPA will veto this permit should it be approved by the ACOE, the situation makes clear that the Guidance could be improved and could also avert much confusion if EPA staff were encouraged to express their intention to veto permits if they are approved by ACOE in a manner that, by EPA's own analysis, violates the Clean Water Act.

A second concern raised by the November 2^{nd} letter stems from a footnote that stated, "EPA would be satisfied with using the $500 \,\mu\text{S/cm}$ benchmark as a numeric interpretation of narrative [conductivity] standards... This value represents best-available scientific information on the relationship between conductivity levels and aquatic life in Central Appalachian streams."

Nowhere in the guidance is it said that a level of $500 \,\mu\text{S/cm}$ represents best available scientific information; to the contrary, the Guidance references EPA's draft report, *A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams*, which "concludes that genus-level impacts to the biological community occur at conductivity levels of $300 \,\mu\text{S/cm}$ "

In short, it appears that EPA Region 4 is engaged in some backpedaling from the specific recommendations of the Guidance, which, given the decline in conductivity values reported subsequent to the announcement of the Guidance (e.g., a 45% reduction in conductivity in Frasure Creek Mining's DMRs), now appear only minimally protective. Ascertaining and addressing the reasons for this is crucial if the final guidance is going to be effective.

One of the obvious barriers for regional EPA staff to adopt a strong negotiating position and ensure that permits meet the standards set out in the Guidance is a lack of expertise in mine engineering. Because the lack of such expertise requires them to rely heavily on the mining engineers working on behalf of the applicant, it is undoubtedly difficult to enforce the

requirement that companies choose (or even identify) the least environmentally damaging practicable alternative. To alleviate this situation, the Guidance should specify that EPA staff engaged in permit negotiations with other MOU agencies and applicants should have the support of EPA staff or contractors that have expertise in mine engineering and who do not have their own vested interest in promoting the interests of mining companies over the need to prevent additional deterioration of already stressed Central Appalachian watersheds.

A related concern is the lack of access that EPA, OSM, ACOE, the public and the media have to comprehensive and credible data on all active and pending permits in the region. Crucial information that must be compiled include mine-level production and employment information, information on whether permits include valley fills, mine-throughs, stream diversions and instream sediment ponds, mine acreage and the length of impacted stream segments, mine ownership, etc... All of these data are publically available but are exceedingly difficult and time consuming to compile. Moreover, ensuring the credibility of such a dataset requires the involvement of a government agency.

Because no comprehensive dataset is currently available there is no way that EPA regional staff, Administrator Jackson or even President Obama can understand and evaluate the impacts that regulations, legislation and the Guidance would have on coal production and employment in the region. This creates two major problems.

The first problem is that, without a credible alternative, outrageous estimates by coal companies and trade groups like the National Mining Association that have suggested EPA's actions could eliminate all Appalachian coal mining and cost as many as 72,000 jobs remain unchallenged and are given undue credibility by media and decision-makers. While there is no requirement that a guidance such as the one proposed consider these types of impacts, it would be naïve to think that they don't play a significant role in the ultimate decisions made by EPA and other government agencies.

A second problem is that, in the absence of a comprehensive dataset, EPA and other agencies are basing decisions and providing analysis to legislators based on data they have available, such as the permits involved in the "Enhanced Coordination Procedure" (ECP), which are not representative of the overall population of surface mines. For instance, Appalachian Voices recently conducted an analysis showing that the 79 ECP permits were radically different in scale and environmental impact than an unbiased sample of 78 surface mine permits from all four Central Appalachian mining states that were approved by state agencies in 2009. Most notably, fewer than half of the permits approved in 2009 required 404 permits for valley fills or minethroughs, while all surface permits on the ECP list did. Furthermore, there were on average twice as many fills associated with ECP permits than with the subset of 2009 permits that had fills (these data are not published but will be made available on request).

The fact that more than half of the Central Appalachian surface coal mine permits approved in 2009 required no 404 valley fill permits leads to a very different perception than the one promoted by coal industry trade groups that EPA restrictions on valley fills threaten the entire Appalachian coal industry. In order to ensure that the impacts of EPA's actions are better understood both within and outside the agency, we strongly recommend that the final Guidance

require EPA regions to collaborate in constructing a comprehensive, standardized, continuously updated and publicly available dataset of all active and pending coal mine permits in Appalachia.

3. The guidance must provide specific details on addressing environmental justice concerns, "public interest review," NEPA processes, and "important social or economic development" concerns in the NPDES permitting for Tier 2 streams.

We very much appreciate how much emphasis the Guidance puts on the need to address environmental justice concerns and that it encourages EPA to engage in non-EPA administrative processes such as the ACOE's "public interest review" process pursuant to 33 CFR Section 320.4(a). We are concerned however, that the Guidance offers almost no specificity on the manner in which EPA should engage in these processes. As such, there is a substantial risk that the Guidance will encourage EPA staff to address environmental justice concerns with rhetoric only, rather than actually providing effectual input and analysis.

We believe there are two areas in which EPA can play a substantive and unique role that should be stated explicitly in the guidance. Specifically, EPA should:

A. Use and conduct comparative socioeconomic analyses in evaluating environmental justice concerns, weighing in on public interest reviews and ensuring that the state agencies have made the finding that allowing lower water quality for high quality streams is "necessary to accommodate important social or economic development in the area in which the waters are located." 40 CFR Section 131.12(a)(2); and

B. Take a proactive approach to engage residents that are likely to be directly impacted by specific permitting actions to ensure environmental justice concerns are addressed.

A. Applying Comparative Socioeconomic Analysis

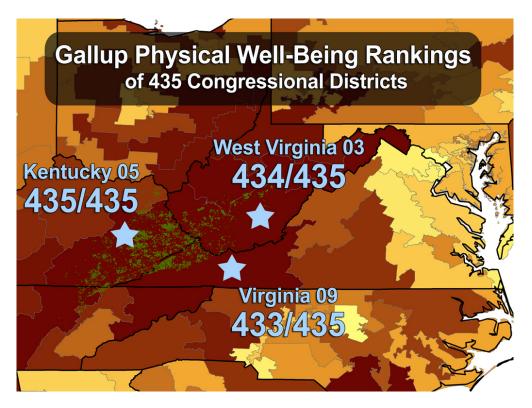
Permitting processes such as the development of community impact statements for mine permits typically incorporate a narrow view of the economic and social impacts of proposed permitting actions. In terms of economic impacts, generally only short-term positive impacts from jobs that would be created by the proposed operation, combined with questionable indirect job estimates based on an input-output model, are enumerated. The problem is that this type of analysis has no value in determining whether a proposed action is in the long-term economic best interest of a community. The only valid way to address that question is to conduct a comparative analysis of how economic conditions have changed over time in communities where similar projects have been conducted compared to representative communities where projects did not occur.

Based on numerous portions of the Guidance, it is clear that EPA is well aware of the importance of conducting representative analyses, though EPA discusses this in the context of projecting future impacts of mining on ambient water quality, not on the projecting impacts to the economy. Nevertheless, the exact same principles apply to economic analysis and, because of its commitment to science, EPA is uniquely positioned to apply comparative socioeconomic analysis in permitting processes of other agencies.

Fortunately, comparative analyses of Appalachian communities are increasing available in regard to the impacts of coal mining on the economy and health of communities. Specific examples include comparative studies published by Michael Hendryx at WVU on the general health and life expectancy in Appalachian coal communities, with a particular focus on impacts of surface mining. In an article publication in the academic journal *Environmental Justice* in 2008 Dr. Hendryx stated:

"The argument is often made that coal mining is an important economic contributor to the areas of Appalachia where mining takes place, and therefore that mining should be protected and encouraged. The first part of this argument is correct, but the second part is fallacious. Coal mining perpetuates poverty, environmental degradation, economic underdevelopment, and premature death. That it is an important part of a perpetually weak economy is no endorsement for its continuation. Coal mining remains an important part of these economies because underdeveloped infrastructure, blasted landscapes, poorly educated workforces, environmental health hazards, and chronically unhealthy populations perpetuate themselves over time and present strong discouragement to new business and population immigration."

Another source of valuable information is provided annually through the Gallup-Healthways Well-Being IndexTM, which incorporates six different measures of well-being including physical, emotional and "life assessment." The graph below provides a striking picture of how physical health correlates with surface mine extent in Central Appalachia. The three districts where mountaintop removal is most prevalent scored the lowest in the physical well-being rankings of all 435 Congressional districts in 2008 and 2009. Moreover, Kentucky's 5th district and West Virginia's 3rd – the two districts where almost all mountaintop removal has occurred, ranked last and second to last in the overall rankings (see http://www.ahiphiwire.org/WellBeing/):



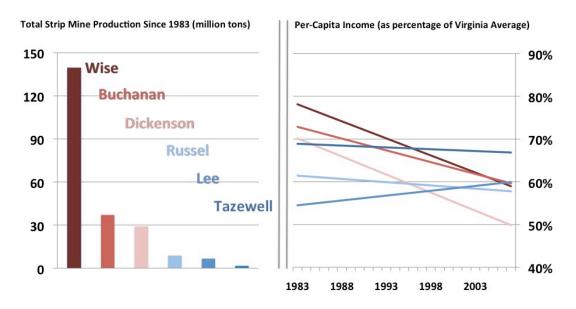
From a purely economic perspective, the Appalachian Regional Commission (ARC) published a study in 2005 that examined long-term trends in economic distress in all counties across Appalachia (Wood 2005). One of the key findings of the report was:

"Of all the regions in this analysis, Central Appalachia has been one of the poorest performers in relation to the ARC's economic distress measure over time. Furthermore, and unlike all other regions in the U.S., current and persistent economic distress within the Central Appalachian Region has been associated with employment in the mining industry, particularly coal mining."

Finally, in regard to surface mining in particular, one of the most common economic and social justifications for large-scale surface mining is the claim that communities located in the steep slopes of the Appalachian coalfields have a need for more flat land. This contention is also quite easy to test through comparative analysis – if true, then mining communities with more surface mining should exhibit better economic performance over time than mining communities where most of the mining is underground.

Appalachian Voices conducted just such an analysis for its testimony before the Virginia General Assembly on the proposed "Stream-Saver" bill in 2009. The graph below shows both the total surface mine production and trends in per-capita income between 1983 and 2008 for the six coal producing counties in Southwest Virginia:

Strip Mine Production and Income Trends in VA Coal Counties



It's abundantly clear from this analysis that counties with large amounts of surface mining have actually exhibited far worse economic performance over time compared to counties where only a small amount of surface mining has occurred. In fact, we are unaware of any comparative analysis that has ever demonstrated a positive correlation between Appalachian surface mining and long-term improvement in economic or social conditions. This suggests that the typical

economic analyses used in mine permit proceedings provide a deeply misleading impression of the economic costs and benefits of permitting actions.

EPA has a unique role to play in ensuring that valid statistical analysis is applied in mine permitting processes. Moreover, fulfilling that role would go a long way toward accomplishing the objectives laid out in the Guidance to promote environmental justice. However, without specific discussion of roles EPA should play, the Guidance will likely prove ineffective in fulfilling those objectives.

B. Proactive engagement of residents that are likely to be directly impacted by specific permitting actions

Despite the strong and laudable emphasis placed on environmental justice in the language of the guidance, there is little evidence that those concerns are translating into specific actions by EPA staff in the regional offices. For instance, while it's clear that there has been regular communication between regional EPA offices and coal companies in regard to negotiations over ECP permits, we are unaware of any attempt by EPA staff to contact residents likely to be impacted by such permits. Specifically, if the language in the Guidance is sincere, then potential impacts on the homes and water supplies of low-income residents near proposed operations should be considered alongside any analysis of practicability by the applicant.

We are concerned that, without specific guidance on how EPA staff engaged in negotiations over permitting should apply principles of environmental justice in their fact-finding, negotiations and decision-making, nothing more than rhetoric will result from the mandate in the Guidance to ensure environmental justice. The final guidance should specifically encourage EPA staff to proactively meet with local residents to learn about their concerns and conditions, represent their views in negotiations with mining companies and other agencies permits, and provide equal weight to the concerns of impacted residents that they provide to the economic practicability concerns of mining companies in their decision-making.

Conclusion

The EPA's Detailed Guidance represents an ambitious and laudable effort to reduce the impacts of surface coal mining on the waterways and communities of Appalachia. The focus on effluent limitations for specific conductivity is appropriate, but demonstrably vulnerable to "gaming the system" if proactive approaches aren't taken to ensure the accuracy and integrity of self-reporting by coal companies. In addition, the success of EPA's other objectives laid out in the Guidance require more specific recommendations for staff in regard to ensuring environmental justice and adequate public interest review in the permitting process. Finally, the lack of expertise in mining engineering among EPA staff and the lack of credible data to evaluate the impacts on coal production and employment of EPA's actions threaten to undermine the implementation of the Guidance unless specific measures are taken to ensure the availability of independent expertise and credible information on coal mine permitting.

These comments are respectively submitted by Appalachian Voices on our own behalf and on behalf of the Waterkeeper Alliance