STATE PERSPECTIVES ON THE STATUS OF COOPERATING AGENCIES FOR THE OFFICE OF SURFACE MINING'S STREAM PROTECTION RULE

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON NATURAL RESOURCES U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

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OVERSIGHT HEARING ON STATE PERSPEC-TIVES ON THE STATUS OF COOPERATING AGENCIES FOR THE OFFICE OF SURFACE MINING'S STREAM PROTECTION RULE

Wednesday, May 20, 2015
U.S. House of Representatives
Subcommittee on Oversight and Investigations
Committee on Natural Resources
Washington, DC

The subcommittee met, pursuant to notice, at 2:15 p.m., in room 1334, Longworth House Office Building, Hon. Louie Gohmert [Chairman of the Subcommittee] presiding.

Present: Representatives Gohmert, Lamborn, Labrador,

Westerman, Radewagen, Mooney; and Dingell.

Mr. GOHMERT. The Subcommittee on Oversight and Investiga-

tions will come to order.

The subcommittee is meeting today to hear the testimony on "State Perspectives on the Status of Cooperating Agencies for the Office of Surface Mining's Stream Protection Rule." Under Committee Rule 4(f), any oral opening statements at hearings are limited to the Chairman and Ranking Member and the Vice Chair and a designee of the Ranking Member. This will allow us to hear from our witnesses sooner and help Members to keep to their schedules.

Before I ask unanimous consent, all other Members' opening statements will be made part of the hearing record if they are submitted to the Subcommittee Clerk by 5:00 p.m. today. Hearing no objection, it is so ordered.

At this time I would like ask everyone in the hearing room to please silence your cell phones. This will keep distractions to a minimum for our Members, witnesses, and attendees, and ensure that we can get as much information as possible from our witnesses.

At this time I will now recognize myself for an opening statement.

STATEMENT OF THE HON. LOUIE GOHMERT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. GOHMERT. This Subcommittee on Oversight and Investigations is meeting today to hear directly from states impacted by what appears to be another harmful Federal regulation made by yet another Federal agency that is not following the law.

Since 2009, the Office of Surface Mining Reclamation and Enforcement, or OSM, has been trying to issue a new rule to regulate mountaintop mining. I say trying because it is now 6 years and millions of dollars later, and OSM still does not even have a proposed rule to show for the millions of dollars.

In the course of trying to make this new rule, the Stream Protection Rule, the Department of the Interior and the OSM have run roughshod over the very states that they were supposed to be working with, according to the law the Department and OSM ap-

pear to have been violating.

The states that are represented here today entered into agreements with OSM that recognized them, and I quote this term because it is in the law, as "cooperating agencies" under NEPA. "Cooperating agencies" under NEPA are entitled to participate, the language says, throughout the environmental review process.

But instead of including the states, OSM has systemically excluded them from the process. In fact, Secretary Jewell herself recently testified before Congress that the states would have a chance to comment on the proposed rule after it is published, and then her words were, "just like everyone else." Let's see the video of that, and maybe hear it, too.

[Video played.]

Mr. GOHMERT. All right. So that is deeply troubling, that the Secretary herself thinks states should be heard from after they come up with a rule, and that is not what the law says. They are

supposed to be heard from throughout the process.

States are legally entitled to participate in the NEPA process throughout this particular process. They have local expertise and practical experience with mining operations in their states that can and should actually form the basis of OSM's rulemaking process, particularly since they normally have more experience in these matters than those creating the rules from their cubicles. This is part of the reason that the cooperating agency process was created and even exists in the first place.

This unfortunately seems to give substance to the view across much of the country that Washington arrogance is exceeded only by its ignorance of what it regulates, and that, once again, more regulations are promulgated that damage states without actually

taking the states' expertise and damage into account.

States are understandably frustrated after years of trying to work with OSM and having OSM ignore their concerns. This Natural Resources Subcommittee on Oversight is likewise quite frustrated at the improprieties of the Interior Department's re-

sponses to this committee's legitimate request.

The subcommittee sent a letter to Director Pizarchik back on April 2 requesting documents and information on this topic, including copies of the memoranda of understanding that OSM signed with the states. Coincidentally, OSM produced copies of those MOUs last night—last night—over a month after the documents

To be clear, the majority of the subcommittee's requests remain unfulfilled, and we will continue to seek the outstanding documents from OSM. We are also hopefully approaching a time, finally, once again, when an agency or department that inappropriately responds or is not properly responsive to congressional oversight requests loses a significant amount of funding in the next year.

This oversight hearing is entitled, "State Perspectives on the Status of Cooperating Agencies for the Office of Service Mining's Stream Protection Rule." As I began looking into these issues recently and then began preparing for this hearing, I learned a great deal of information about this issue that we simply had not dealt with in my own district.

That is why I am particularly grateful for our witnesses before us here today and their expertise, and look forward to hearing about their experiences as cooperating agencies.

[The prepared statement of Mr. Gohmert follows:]

PREPARED STATEMENT OF THE HON. LOUIE GOHMERT, CHAIRMAN, SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

The Subcommittee on Oversight and Investigations is meeting today to hear directly from states impacted by what appears to be another harmful Federal regulation made by yet another Federal agency that is not following the law.

Since 2009, the Office of Surface Mining Reclamation and Enforcement ("OSM") has been trying to issue a new rule to regulate mountain-top mining. I say "trying," because it's now 6 years and millions of dollars later and OSM still doesn't even have a *proposed* rule to show for the millions of dollars.

In the course of trying to make this new rule—the Stream Protection Rule—the Department of the Interior and OSM have run roughshod over the very states that they were supposed to be working with, according to the law the Department and OSM appear to have been violating.

The states that are represented here today entered into agreements with OSM that recognized them as "cooperating agencies" under NEPA. "Cooperating agencies" are entitled to participate *throughout* the environmental review process.

But instead of including the states, OSM has systematically excluded them from the process.

In fact, Secretary Jewell herself recently testified before Congress that the states would have a chance to comment on the proposed rule after it's published, "just like everyone else." Let's see the video of that.

The problem is that these states aren't "just like everyone else." They are legally entitled to participate in this NEPA process throughout the process.

They have local expertise and practical experience with mining operations in their states that can and should actually form the basis of OSM's rulemaking process, particularly since they normally have more experience in these matters than those creating the rules in their cubicles. This is part of the reason that the cooperating agency process was created and even exists in the first place.

This unfortunately seems to give substance to the view across much of the country that Washington arrogance is exceeded only by its ignorance of what it regulates, and that, once again, more regulations are promulgated that damage states without actually taking the states' expertise and damage done into account.

In any event, today, now that we have heard the statement of Secretary Jewell by video, we will provide an opportunity for the states to be heard. We will also welcome compliant responses to our prior requests from the Department of Interior soon after the hearing today. If the Department wishes to respond to comments made by representatives of the three states represented here today, they are welcome to do so when they supply the answers we requested in April.

This oversight hearing is entitled "State Perspectives on the Status of Cooperating Agencies for the Office of Surface Mining's Stream Protection Rule." As I began looking into these issues recently, and then began preparing for this hearing, I learned a great deal of information about this issue that we simply had not dealt with in my own district. That is also why I am particularly grateful for our witnesses before us here today and their expertise. I look forward to hearing about their experiences as "cooperating agencies."

The states are understandably frustrated after years of trying to work with OSM and having OSM ignore their concerns.

This Natural Resources' Subcommittee on Oversight is likewise quite frustrated at the improprieties of the Interior Department's responses to this committee's legitimate requests.

This subcommittee sent a letter to Director Pizarchik on April 2 requesting documents and information on this topic, including copies of the MOUs that OSM signed with the states. Coincidentally, OSM produced copies of the MOUs only last night—LAST NIGHT—over a month after the documents were due. To be clear, the majority of the subcommittee's requests REMAIN unfulfilled, and we will continue to seek the outstanding documents from OSM.

We are also hopefully approaching a time finally, once again, when an agency or department that inappropriately responds or is not properly responsive to congressional oversight requests loses a significant amount of funding in the next year. Some of us believe very strongly that if a bureaucracy is not adequately respond-

Some of us believe very strongly that if a bureaucracy is not adequately responding to congressional oversight of the people's funds, then those funds should stop being sent by Congress to that nonresponsive bureaucracy. I believe we are quickly reapproaching that day, and I, for one, look forward to it.

With that, I would recognize the Ranking Member, Mrs. Dingell.

STATEMENT OF THE HON. DEBBIE DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mrs. DINGELL. Thank you, Mr. Chairman. And thank you to all the witnesses for being here today. It is always good to be in a hearing with you.

This hearing is about the Stream Buffer Protection Rule. An earlier version of the rule was promulgated by the Bush administration on its way out the door in 2008, which was vacated by the D.C. District Court. They found that the administration's determination that the weakened rule would have no impact on threatened or en-

dangered species was not a rational conclusion.

The new version, as we saw the Secretary talk about, is now being reviewed by the Office of Management and Budget. The Administration is actively looking at this rule, and I think we are all looking forward to reviewing it soon; but today we are talking

about a rule that is yet to be promulgated.

As a new Member of Congress, I am learning something new every day. Last night, as I was studying at my normal 2:00 a.m., I learned that the Majority has been investigating the Stream Buffer Protection Rule for nearly 4 years. It has resulted in two subpoenas, production of 13,500 pages of documents, 25 hours of audio recordings, a Majority staff report, three oversight hearings, and a legislative hearing on a bill to weaken protections for communities coping with mountaintop mining. This is the fourth oversight hearing being held on this issue; but for several of us here, it is the first, so we are all learning.

We will hear concerns today about the process of developing the rule and the environmental impact statement attached to it. I want to express my concern that we cannot get to the bottom of these

complaints if we do not hear from both sides of the story.

The Office of Surface Mining Reclamation and Enforcement, or OSM, which is the primary agency we will hear about today, was not invited to testify, to give their side of the story, or answer any questions. I hope that future hearings will allow for a fuller exploration of the issues with them included.

But we can talk about procedure today. One witness, Mr. White, will talk about the failure of state regulators to protect the health of people in his community. That matters. The West Virginia Department of Environmental Quality is the subject of a Section 733 petition under SMCRA that was filed by a broad coalition of organizations. These petitions permit OSM to intervene if a state regulator is not living up to its obligations.

OSM found five separate complaints worthy of investigation in response to this petition. And for me personally, that points to

what this hearing is really about. It is about people, families, and the effect that mountaintop removal mining has on their lives.

Research has proven that it affects the health of communities located near mountaintop removal mines. Many cancers, including: lung, colon, kidney, bladder, and leukemia, have all been linked to mountaintop removal mines. Birth defect rates were 42 percent higher in affected counties between 2000 and 2003 compared to non-mining communities. Mountaintop removal mines were also linked to increased rates of depression.

The very least we should be able to do for the hardworking people in these communities is to give them the protections to which they are entitled. I look forward to reading OSM's results of their investigation prompted by the community's petition. But we also owe it to them to issue a strong Stream Buffer Protection Rule and

to give that rule a fair evaluation when it is released.

Thank you, Mr. Chairman, and I yield back the balance of my

[The prepared statement of Mrs. Dingell follows:]

PREPARED STATEMENT OF THE HON. DEBBIE DINGELL, RANKING MEMBER, SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

Mr. Chairman, thank you for the recognition, and thank you to all of our

witnesses for being here today.

This hearing is about the Stream Buffer Protection Rule. An earlier version of the rule promulgated by the Bush administration on its way out the door in 2008 was vacated by the D.C. District Court. They found that the administration's determination that the weakened rule would have no impact on threatened or endangered species was "not a rational conclusion."

A new version of the rule is now being reviewed by the Office of Management Budget. The Administration is actively looking at this rule and we are all looking

forward to reviewing it soon.

As a new Member of Congress, I am learning something new every day. And I recently learned that the majority has been investigating the Stream Buffer Protection Rule for nearly 4 years. It has resulted in two subpoenas, production of over 13,500 pages of documents, 25 hours of audio recordings, a majority staff report, three oversight hearings, and a legislative hearing on a bill to weaken protections for communities coping with mountaintop mining. This is the fourth oversight hearing being held on this issue.

We will hear concerns today about the process of developing the rule and the Environmental Impact Statement attached to it. But we cannot get to the bottom of these complaints if we don't hear both sides of the story. The Office of Surface Mining Reclamation and Enforcement, or OSM, which is the primary agency we will hear about today, was not invited to testify to give their side of the story or answer any questions. I hope that future hearings will allow for a fuller exploration of the

We can certainly talk about procedure today. One witness, Dustin White, will talk about the failure of state regulators to protect the health of people in his community. The West Virginia Department of Environmental Quality is the subject of a section 733 petition under SMCRA, that was filed by a broad coalition of organizations. These petitions permit OSM to intervene if a state regulator is not living up to its obligations. OSM found five separate complaints worthy of investigation in response to this petition.

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The very least we should be able to do for the hardworking people in these communities is to give them the protections to which they are entitled. I look forward to reading OSM's results of their investigation prompted by the community's petition. But we also owe it to them to issue a strong Stream Buffer Protection Rule and to give that rule a fair evaluation when it is released.

Thank you, Mr. Chairman, and I yield back the balance of my time.

Mr. GOHMERT. Thank you. I appreciate the statement.

At this time we will now introduce the witnesses. Our first witness today is Dr. Randall Johnson. He is the director of the Alabama Surface Mining Commission. We also have Mr. Gregory Baker, who is the Reclamation Program Manager at the Virginia Department of Mines, Minerals and Energy. Next is Mr. Dustin White, a community organizer with the Ohio Valley Environmental Coalition.

I am going to hold up introducing our fourth witness until Mr. Mooney gets here, and that should be before Mr. Hunter speaks. With that, let me remind the witnesses that under our

Committee Rules, oral statements are limited to 5 minutes. You have a time clock there. You get a yellow light with a minute to go. When your time expires, that is when the statement needs to stop, even if you are not finished.

Of course, your full written statements are part of the record. So, if you would care to deviate, then the oral testimony will be in addition to what we already will have in the record from your written statement.

With that, the Chair now recognizes our first witness, Dr. Johnson, to testify for 5 minutes.

STATEMENT OF RANDALL JOHNSON, Ph.D., DIRECTOR, ALABAMA SURFACE MINING COMMISSION, JASPER, ALABAMA

Dr. Johnson. Mr. Chairman, good afternoon. My name is Randall Johnson. I am Director of the Alabama Surface Mining Commission. My agency is the delegated agency for regulation of coal mining in the state of Alabama and under the Surface Mining Control and Reclamation Act of 1977. I have been employed with the agency for more than 34 years, and I have served as its Director for 29 years.

Alabama is one of nine states that signed Memoranda of Understanding with the Office of Surface Mining, or OSM, in 2010 to serve as cooperating agencies related to the preparation of an environmental impact statement that was to support the revised Stream Protection Rule.

Following a very brief period of engagement in late 2010 and early 2011, we have essentially been shut out of that process as OSM moved forward with the EIS. OSM shared three chapters of the draft EIS with us between September of 2010 and 2011. In each case, comment periods were extremely short, and while reconciliation meetings were supposed to be held on each of the chapters based on our comments, only one such hearing was held on one chapter.

Following the receipt of state comments on the third chapter that was shared with us in January of 2011, we once again requested additional time for review. Despite our request for more time, we were told that the deadlines were going to be met and they were

firm, and the schedule for the publication of the EIS in 2011 would be met.

As of today, the proposed rule and the draft EIS have still not been published. Since that time, we understand that OSM has significantly revised the entire draft EIS, and that several new rule alternatives have been considered. We have seen none of this.

We have sent three letters to OSM Director Joseph Pizarchik expressing concerns with the EIS process and our role as cooperators. The first was on November 23, 2010, shortly after the second chapter was provided to us. We expressed concerns about the quality, completeness, accuracy, constrained time frames for comments, the lack of a reconciliation process, and the need for additional comment on revised chapters.

Two years after that last engagement with cooperating states, a second letter was sent to the Director on July 3, 2013. We requested an opportunity at that time to re-engage with the EIS process. The Director never responded to this letter, and no further opportunities have been provided for participation. In fact, OSM has on several occasions verbally indicated that it does not envision re-engaging the states on the draft EIS.

And yet a third letter was submitted to the Director on February 23 of this year. We concluded that OSM had not provided for meaningful participation by the cooperating states. Four states, at the time of my writing this testimony, including Alabama, have formally withdrawn as cooperating agency states and requested termination of our MOUs. OSM has yet to respond or acknowledge my letter of withdrawal dated February 10 of this year.

The role of cooperating agencies in the National Environmental Policy Act, or NEPA, process is well-documented in Federal regulations as well as Council on Environmental Quality documents and memoranda. The Federal courts, too, have recognized the importance of providing state agencies an opportunity for meaningful participation in the NEPA process.

It is clear that NEPA recognizes that Federal agencies are not the sole repository of all wisdom and knowledge concerning their areas of regulatory responsibility. As such, it mandates that Federal agencies reach out to states and other governmental agencies to solicit input in the EIS process. It also anticipates that this process will provide for meaningful participation.

It is unfortunate, from my perspective, that circumstances have deteriorated to the point where my state and others felt obliged to withdraw. Our inability to participate fully and meaningfully from February 2011 to the present time casts considerable doubt on whether OSM has fully complied with the NEPA process in developing the EIS.

I thank you for the opportunity to present this testimony. Copies of my more detailed written statement have been provided, with exhibits. I also have additional copies of the three letters that we sent to OSM for the record. And I will be happy to answer any questions you may have.

[The prepared statement of Dr. Johnson follows:]

PREPARED STATEMENT OF DR. RANDALL C. JOHNSON, DIRECTOR, ALABAMA SURFACE MINING COMMISSION

Good afternoon. My name is Dr. Randall Johnson and I am Director of the Alabama Surface Mining Commission. My agency is responsible for the regulation of coal mining operations within the state pursuant to our approved regulatory program under the Surface Mining Control and Reclamation Act of 1977 (SMCRA). I have been employed with the Surface Mining Commission for more than 34 years and have served as its Director for more than 29 years. I was directly involved in securing primacy in 1982 for the state of Alabama under Title V of SMCRA. I coauthored or authored all of Alabama's regulations promulgated, and some of the legislation enacted by the state, during the last 34 years, including those submitted for initial program approval. During my tenure at the agency, there have been 20 Directors or Acting Directors of the U.S. Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSMRE). I have dealt directly with all of them except one. Our involvement in the state and Federal regulatory process has always been proactive. Over the years, we have developed a regulatory program in our state that is among the best in the country and we take immense pride in that.

I and my colleagues appreciate the opportunity to appear before you today to discuss a disturbing chapter in Federal-state relations under SMCRA. Alabama is one of nine states that signed Memoranda of Understanding (MOUs) with OSMRE to serve as a cooperating agency related to the preparation of an environmental impact statement (EIS) by OSMRE to accompany a rulemaking under SMCRA concerning stream protection. The MOUs were developed pursuant to the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's (CEQ) implementing regulations at 40 CFR 1501.6 and 1501.8, as well as CEQ's January 30, 2002 Memorandum for the Heads of Federal Agencies regarding cooperating agencies. Although we anticipated a robust opportunity to work with OSMRE as cooperators in the development of this critical EIS, following a brief period of engagement in late 2010 and early 2011, the cooperating states have essentially been shut out of the process and been relegated to the sidelines as OSMRE moved forward with the EIS

Some historical perspective may be instructive. During the summer of 2010, OSMRE Director Joseph G. Pizarchik offered the opportunity to states to participate as cooperating agencies as part of the development of an EIS to accompany a new rule on stream protection that would replace the 2008 Stream Buffer Zone Rule. OSMRE committed to replacing this rule as part of an interagency effort to address stream protection as it relates to mountaintop mining operations in Appalachia. (See the July 11, 2009 Memorandum of Understanding between the U.S. Environmental Protection Agency, the Office of Surface Mining and the U.S. Army Corps of Engineers). OSMRE also agreed to propose a new rule on stream protection pursuant to a settlement agreement with several environmental groups that had challenged the 2008 rule. The settlement agreement was approved by a U.S. District Court in Washington, DC on April 2, 2010. The Court vacated the 2008 rule and OSMRE published a notice vacating the 2008 rule and reinstating the previous version of the rule on December 22, 2014

version of the rule on December 22, 2014.

Ten states (UT, NM, KY, TX, MT, WY, WV, AL, IN and VA) originally agreed to serve as cooperating agencies, with the state of Ohio agreeing to participate as a state commenter in the process. MOUs were negotiated with nine of these states and the first chapter of the draft EIS (Chapter 2) was shared with the states for comment in September of 2010. Chapter 3 was shared with the states in October of 2010 and Chapter 4 was shared with the states in January of 2011. In each case, comment periods were exceedingly short and, while "reconciliation meetings" were supposed to be held on each of the chapters, only one such meeting was held. Following the receipt of state comments on Chapter 4 in January of 2011, the remaining chapters of the draft EIS were given to the states with only 8 days to review and comment. Despite requests for more time, we were told that the deadlines were firm and that the schedule for publication of the EIS in 2011 would be met. As of today, the draft rule and draft EIS have still not been published. Since that time, we understand that OSMRE has significantly revised the entire draft EIS and that several new rule alternatives have been considered. We have not seen these revisions.

The cooperating agency states have sent three letters to OSMRE Director Joseph Pizarchik expressing their concerns with the EIS process and their role as cooperators. The first, on November 23, 2010, expressed concerns about the quality, completeness and accuracy of the draft EIS; the constrained time frames for the submission of comments on draft EIS chapters; the reconciliation process; and the need for additional comment on revised chapters.

Over 2 years after the last engagement by OSMRE with the cooperating states, the states sent a second letter to OSMRE Director Pizarchik on July 3, 2013, requesting an opportunity to re-engage with the EIS development process. We requested an opportunity to review revised chapters of the draft EIS, and expanded time frames for commenting on the chapters; an opportunity to review any attachments and exhibits that are appended to the chapters; a meaningful, robust reconciliation process; and a timetable for review of draft chapters. OSMRE never reconciliation process; and a timetable for review of draft chapters. OSMRE never responded to this letter, and no further opportunities have been provided by OSMRE for participation by the cooperating agency states. In fact, OSMRE has, on several occasions, verbally indicated that it does not envision re-engaging with the states on the draft EIS and, at most, would provide a briefing, coincident with release of the draft EIS and proposed rule, regarding how the comments originally submitted by the states were addressed in the final draft EIS.

The role of cooperating agencies in the NEPA process is well documented in the Federal Regulations at 40 C.F.R. Sections 1501.6 and 1508.5 as well as in the Federal Regulations at 40 C.F.R. Sections 1501.6 and 1508.5 as well as in the Council on Environmental Quality Memorandum for the Heads of Federal Agencies entitled "Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act" dated January 30, 2002. The Federal Courts, too, have recognized the importance of providing state agencies the opportunity for "meaningful participation" in the NEPA process. As an example, I refer you to the U.S. District Court for the District of Wyoming in International Snowmobile Manufacturers Association et al. v. Norton, 340 F. Supp. 2d 1249 (D.Wyo. 2004). In that ruling, the court states "the purpose of having cooperating agencies is to emphasize agency cooperation early in the NEPA process. 40 C.F.R. § 1501.6 (2004). Federal agencies are required to invite the participation of impacted states and provide them with an opportunity for participation in preparing the EIS. 40 C.F.R. reueral agencies are required to invite the participation of impacted states and provide them with an opportunity for participation in preparing the EIS. 40 C.F.R. §1501.7 (2004)." Further, the Court cites an earlier ruling in Wyoming v. USDA, 277 F. Supp. 2d 1197, 1219 (D. Wyo. 2003) that states, "When a Federal agency is required to invite the participation of other governmental entities and allocate responsibilities to those governmental entities, that participation and delegation of duty must be meaningful."

Given this, the cooperating agency states concluded in yet a third letter submitted to Director Pizarchik on February 23, 2015, that OSMRE has not provided for meaningful participation by the cooperating agency states in the preparation of the EIS and is unlikely to do so prior to release of the draft EIS and proposed rule this spring. The cooperating agency states were therefore left with a decision about whether and when to withdraw from the process in order to protect their interests and to craft an appropriate statement for inclusion in the draft EIS regarding their participation and decision to withdraw. CEQ's regulations provide ample reasons for a cooperating agency to end its status as a cooperator, which include: the cooperating agency is unable to identify significant issues, eliminate minor issues, identify issues previously studied, or identify conflicts with the objectives of regional, state and local land use plans, policies and controls in a timely manner; is unable to assist in preparing portions of the review and analysis and resolving significant environmental issues in a timely manner; is unable to consistently participate in meetings or respond in a timely fashion after adequate time for review of documents, issues and analyses; is unable to accept the lead agency's decisionmaking authority regarding the scope of the analysis, including the authority to define the purpose and need for the proposed action or to develop information/analyses of alternatives they favor or disfavor; or is unable to provide data and rationale underlying the analyses or assessment of alternatives.

While the cooperating agency states were, for the most part, actually able and willing to do all of these things, OSMRE's unwillingness to share revised and new draft chapters of the EIS with the states, as well as background and supporting documents, has precluded the states from accomplishing these tasks and hence has undermined their status as cooperating agencies and the meaningfulness of their participation. Consequently, since that time, four states, including Alabama (See letter from Johnson to Pizarchik dated February 10, 2015), have formally withdrawn as cooperating agency states and requested termination of their MOUs with OSMRE. I must also add that OSMRE has yet to respond or acknowledge our letter

of withdrawal.

It is clear the National Environmental Policy Act recognizes that Federal agencies are not the sole repository of all wisdom and knowledge concerning their areas of regulatory responsibility. As such, NEPA mandates that the agencies reach out to states and other Federal agencies to solicit input in the EIS process. It also anticipates that the process will provide for meaningful participation. It is unfortunate from my perspective that circumstances have deteriorated to the point where my state and others felt obligated to withdraw from this process given the importance of the EIS and the related rule for our programs. I for one do not want my state's name used to validate the EIS process since our input was limited to the extent that it was. In the end, we will be the ones who must implement any new rule and it was for this reason that our input and expertise were sought initially, and willingly offered, I might add. Our inability to participate fully and meaningfully from February 2011 to the present date casts considerable doubt as to whether OSMRE has complied fully with the NEPA process in developing the EIS.

Thank you for the opportunity to present this testimony. Copies of my written statement and exhibits have been provided to you. I will be happy to answer any questions you may have.

Attachments

LETTERS SUBMITTED AS SUPPLEMENTARY TESTIMONY BY RANDALL C. JOHNSON

November 23, 2010

Hon. Joseph G. Pizarchik Director Office of Surface Mining, Reclamation and Enforcement U.S. Department of the Interior 1951 Constitution Avenue, N.W. Washington, DC 20540

Dear Director Pizarchik:

We are writing to you as cooperating agencies that are participating in the Office of Surface Mining's development of a draft Environmental Impact Statement (EIS) to accompany a soon-to-be-proposed rule on stream protection. Our role as cooperating agencies, as defined by the memoranda of understanding that each of us entered into with your agency, is to review and comment on those Chapters of the draft EIS that are made available to us (at present, Chapters 2 and 3). Based on our participation to date, we have several serious concerns that we feel compelled to bring to your attention for resolution.

Without rehashing our previously articulated concerns about the need and justification for both the proposed rule and the accompanying EIS, we must object to the quality, completeness and accuracy of those portions of the draft EIS that we have had the opportunity to review and comment on so far. As indicated in the detailed comments we have submitted to date, there are sections of the draft EIS that are often nonsensical and difficult to follow. Given that the draft EIS and proposed rule are intended to be national in scope, we are also mystified by the paucity of information and analysis for those areas of the country beyond central Appalachia and the related tendency to simply expand the latter regional experience to the rest of the country in an effort to appear complete and comprehensive. In many respects, the draft EIS appears very much like a cut-and-paste exercise utilizing sometimes unrelated pieces from existing documents in an attempt to create a novel approach to the subject matter. The result so far has been a disjointed, unhelpful exercise that will do little to support OSM's rulemaking or survive legal challenges to the rule or the EIS.

We also have serious concerns regarding the constrained timeframes under which we have been operating to provide comments on these flawed documents. As we have stated from the outset, and as members of Congress have also recently noted, the ability to provide meaningful comments on OSM's draft documents is extremely difficult with only five working days to review the material, some of which is fairly technical in nature. In order to comply with these deadlines, we have had to devote considerable staff time to the preparation of our comments, generally to the exclusion of other pressing business such as permit reviews. While we were prepared to reallocate resources to review and comment on the draft EIS Chapters, additional time would have allowed for a more efficient use of those resources and for the development of more in depth comments.

There is also the matter of completeness of the draft Chapters that we have reviewed. In the case of both Chapters 2 and 3, there are several attachments, exhibits and studies that were not provided to us as part of that review. Some of these are critical to a full and complete analysis of OSM's discussion in the chapters. OSM has developed a SharePoint site that will supposedly include many of the draft materials, but to date the site is either inoperable or incomplete.

As part of the EIS process with cooperating agencies, OSM committed itself to engage in a reconciliation process whereby the agency would discuss the comments received from the cooperating agencies, especially for purpose of the disposition of those comments prior to submitting them to the contractor for inclusion in the final draft. The first of those reconciliations (which was focused on Chapter 2) occurred via conference call on October 14. The call involved little in the way of actual reconciliation but amounted to more of an update on progress concerning the draft EIS. There was talk about another reconciliation session, but to date this has not occurred. There were also several agreements by OSM during the call to provide additional documents to the states for their review, including a document indicating which comments on Chapter 2 from cooperating agencies were accepted and passed on to the contractor, as well as comments provided by OSM. OSM also agreed to consider providing us a copy of a document indicating those comments that were not accepted. To date, neither of these documents has been provided to us. And even though a draft of Chapter 3 has now been distributed and comments have been provided to OSM, we are still awaiting a reconciliation session on this chapter.

Frankly, in an effort to provide complete transparency and openness about the disposition of our comments, we believe the best route is for OSM to share with us revised versions of the Chapters as they are completed so that we can ascertain for ourselves the degree to which our comments have been incorporated into the Chapters and whether this was done accurately. We are therefore requesting that these revised Chapters be provided to us as soon as practicable.

We understand that OSM is considering further adjustments to the time table for review of additional Chapters of the draft EIS. We are hopeful that in doing so, the agency will incorporate additional time for review by the cooperating agencies, especially given the size and complexity of Chapter 4 and the full draft EIS. Pushing back the time for the completion of these drafts by OSM without additional time being provided for review by the cooperating agencies would be wholly inappropriate. We request that you please provide us with these new time tables as soon as possible so that we can begin our own internal planning.

You should know that, as we continue our work with OSM on the development of the draft EIS, some of us may find it necessary to reconsider our continued participation as cooperating agencies pursuant to the 30-day renegotiation/termination provision in our MOUs. Under the NEPA guidance concerning the status of cooperating agencies, some of the identified reasons for terminating that status include the inability to participate throughout the preparation of the analysis and documentation as necessary to meet process milestones; the inability to assist in preparing portions of the review and analysis and help resolve significant environmental issues in a timely manner; or the inability to provide resources to support scheduling and critical milestones. As is evident from much of the discussion above, these are some of the very issues with which many of the cooperating agencies are struggling given OSM's time schedule for the EIS and the content of the documents distributed to date. We continue to do our best to meet our commitments under the MOUs but based on our experience to date, this has become exceedingly difficult.

Finally, as you have likely noted throughout the submission of comments by many of the cooperating agencies, there is great concern about how our comments (limited as some of them are due to time constraints for review) will be used or referred to by OSM in the final draft EIS that is published for review. While the MOUs we signed indicate that our participation "does not imply endorsement of OSM's action or preferred alternative", given what we have seen so far of the draft EIS we want to be certain that our comments and our participation are appropriately characterized in the final draft. Furthermore, since CEQ regulations require that our names

¹We also understand that OSM had planned to contact the states to provide estimates of the additional time and resources that would be required to review/process a permit under the proposed rule. This information would be used by OSM to prepare at least one of the burden analyses that are required by various executive orders as part of federal rulemakings. We now understand that OSM plans to generate these estimates on its own. We are somewhat mystified about how OSM intends to accomplish this without direct state input and urge the agency to reconsider the methodology under which they are currently operating.

appear on the cover of the EIS, it is critical that the public understand the purpose and extent of our participation as cooperating agencies.

As it is now, the states are wrestling with the consequences of their names appearing on the EIS, as it would assume tacit approval independent of the comments that have/have not been incorporated into the document. And while the cooperating agency has the authority to terminate cooperating status if it disagrees with the lead agency (pursuant to NEPA procedures and our MOUs), the states realize the importance of EIS review and the opportunity to contribute to, or clarify, the issues presented. We therefore request an opportunity to jointly draft a statement with you that will accompany the draft EIS setting out very specifically the role that we have played as cooperating agencies and the significance and meaning of the comments that we have submitted during the EIS development process.

Sincerely,

Randall C. Johnson, Director, Alabama Surface Mining Commission

Carl E. Campbell, Commissioner, Kentucky Department for Natural Resources

John Baza, Director, Utah Division of Oil, Gas and Mining

Thomas L. Clarke, Director,
Division of Mining & Reclamation,
West Virginia Department of
Environmental Protection

Bruce Stevens, Director,
Division of Reclamation, Indiana
Department of Natural Resources

John Caudle, Director, Surface Mining and Reclamation Division, Railroad Commission of Texas

Bradley C. Lambert, Deputy Director, Virginia Department of Mines Minerals and Energy

John Corra, Director, Wyoming Department of Environmental Quality

July 3, 2013

Hon. Joseph G. Pizarchik Director Office of Surface Mining, Reclamation and Enforcement U.S. Department of the Interior 1951 Constitution Avenue, N.W. Washington, DC 20540

Dear Director Pizarchik:

We are writing to you as cooperating agencies that are participating in the Office of Surface Mining's development of a draft Environmental Impact Statement (EIS) to accompany a proposed rule on stream protection. Our role as cooperating agencies, as defined by the memoranda of understanding that each of us entered into with your agency, is to review and comment on those chapters of the draft EIS that are made available to us. Since the initiation of the EIS process in 2010, the states have had the opportunity to comment on three initial draft chapters (numbers 2, 3 and 4).

Over the course of the past two years, OSM's draft EIS development process has seen several fits and starts, largely due to issues related to the work of various contractors OSM engaged to assist the agency with the draft EIS. Our understanding is that OSM has now addressed these issues and is once again moving forward with the development of the draft EIS. As a result, we would like to re-engage with the process and request an opportunity to review draft chapters and other related documents as they become available, pursuant to the MOU's we have in place with the agency. In doing so, we have a few requests.

In the past, we had serious concerns regarding the constrained timeframes under which we were operating to provide comments on draft documents. As we have stated from the outset, and as members of Congress have also noted, the ability to provide meaningful comments on OSM's draft documents is extremely difficult with limited working days to review the material, some of which can be fairly technical in nature. In order to comply with the deadlines, we have to devote considerable staff time to the preparation of our comments, generally to the exclusion of other pressing business. While we are prepared to reallocate resources to review and comment on the draft EIS Chapters, adequate time will allow for a more efficient use of those resources and for the development of more in depth comments.

There is also the matter of completeness of the draft chapters that we will review. In the case of Chapters 2, 3 and 4, several attachments, exhibits und studies were not provided to us as part of that review. Some of these were critical to a full and complete analysis of OSM's discussion in the chapters. It is important for us to receive all applicable documents that are referenced in draft chapters in order to conduct a meaningful review.

As part of the EIS process with cooperating agencies, OSM committed itself to engage in a reconciliation process whereby the agency would discuss the comments received from the cooperating agencies, especially for purpose of the disposition of those comments prior to submitting them to the contractor for inclusion in the final draft. Our experience with the reconciliation process to date has not been particularly positive or meaningful. We are hopeful that as we reinitiate the EIS review and comment process, OSM will engage in a robust reconciliation process. Among other things, we believe it should include an explanation of which comments were accepted, which were not, and why. Frankly, in an effort to provide complete transparency and openness about the disposition of our comments, we believe the best route is for OSM to share with us revised versions of the Chapters as they are completed so that we can ascertain for ourselves the degree to which our comments have been incorporated into the Chapters and whether this was done accurately. We are therefore requesting that the revised Chapters be provided to us as soon as practicable after their completion.

As OSM considers re-initiation of the review process for cooperating state agencies, it would be helpful if the agency would provide us with new time tables as soon as possible so that we can begin our own internal planning.

Finally, as we noted during the submission of comments by many of the cooperating agencies in the early rounds of the EIS development process, there is great concern about how our comments will be used or referred to by OSM in the final draft EIS that is published for review. While the MOUs we signed indicate that our participation "does not imply endorsement of OSM's action or preferred alternative", we want to be certain that our comments and our participation are appropriately characterized in the final draft. Furthermore, since CEQ regulations require that our names appear on the cover of the EIS, it is critical that the public understand the purpose and extent of our participation as cooperating agencies.

As it is now, the states are uncertain whether their names will appear on the draft EIS, which was originally anticipated. This of course would imply tacit approval independent of the state comments that have/have not been incorporated into the document. And while the cooperating agency has the authority to terminate cooperating status if it disagrees with the lead agency (pursuant to NEPA procedures and our MOUs), the states realize the importance of EIS review and the opportunity to contribute to, or clarify, the issues presented. We therefore request an opportunity to jointly draft a statement with you that will accompany the draft EIS setting out very specifically the role that we have played as cooperating agencies and the significance and meaning of the comments that we have submitted during the EIS development process.

In order to move forward expeditiously, we would appreciate a response to our request to re-engage with the EIS process no later than July 10. If we have not heard from you by then, we will contact via phone to further discuss the matter.

Sincerely.

Randall C. Johnson, Director,

Alabama Surface Mining Commission

Steve Hohmann, Commissioner, Kentucky Department for Natural Resources

John Baza, Director, Utah Division of Oil, Gas and Mining

Thomas L. Clarke, Director, Division of Mining & Reclamation, West Virginia Department of Environmental Protection Bruce Stevens, Director,
Division of Reclamation, Indiana
Department of Natural Resources

John Caudle, Director, Surface Mining and Reclamation Division, Railroad Commission of Texas

Bradley C. Lambert, Deputy Director, Virginia Department of Mines Minerals and Energy

Todd Parfitt, Director, Wyoming Department of Environmental Quality

February 23, 2015

Hon. Joseph G. Pizarchik Director Office of Surface Mining, Reclamation and Enforcement U.S. Department of the Interior 1951 Constitution Avenue, N.W. Washington, DC 20540

Dear Director Pizarchik:

We are writing to you as cooperating agency states pursuant to the Memoranda of Understanding that we negotiated with your agency concerning the development of an environmental impact statement (EIS) to accompany a proposed rule on stream protection expected to be published by the Office of Surface Mining (OSM) sometime this spring. As you know, during the summer of 2010, OSM offered the opportunity to states who were interested in participating as cooperating agencies as part of the development of an EIS to accompany a new rule on stream protection that would replace the 2008 stream buffer zone rule. OSM committed to replace this rule as part of an interagency effort to address stream protection as it relates to mountaintop mining operations in Appalachia. (See the June 11, 2009 Memorandum of Understanding between the U.S. Environmental Protection Agency, the Office of Surface Mining and the U.S. Army Corps of Engineers.) OSM also agreed to propose a new rule on stream protection pursuant to a settlement agreement with several environmental groups that had challenged the 2008 rule. The settlement agreement was approved by a U.S. District Court in Washington, DC on April 2, 2010. More recently, the Court vacated the 2008 rule and OSM last month published a notice vacating the 2008 rule.

Ten states (UT, NM, KY, TX, MT, WY, WV, AL, IN and VA) originally agreed to serve as cooperating agencies, with the state of Ohio agreeing to participate as a state commenter in the process. MOUs were negotiated with most of these states and the first chapter of the draft EIS (Chapter 2) was shared with the states for comment in September of 2010. Chapter 3 was shared with the states in October of 2010 and Chapter 4 was shared with the states in January of 2011. In each case, comment periods were exceedingly short and, while "reconciliation meetings" were supposed to be held on each of the chapters, only one such meeting was held. Following the receipt of state comments on Chapter 4 in January of 2011, no additional outreach to the cooperating agency states has occurred. Since that time, OSM has significantly revised the draft EIS and we understand that several new alternatives are being considered and that each of the chapters has been significantly revised.

The cooperating agency states have sent two letters to you expressing our concerns with the EIS process and our role as cooperators. The first, on November 23, 2010, expressed concerns about the quality, completeness and accuracy of the draft

EIS; the constrained timeframes for the submission of comments on draft EIS chapters; the reconciliation process; and the need for additional comment on revised chapters. The letter also alerted OSM to the potential of some states reconsidering their continued participation as cooperating agency states pursuant to NEPA guidance concerning the status of cooperators. The letter also expressed concern about how the comments of the cooperating agency states will be used or referred to by OSM in the final draft EIS and requested the opportunity to draft an appropriate statement to accompany the draft EIS setting out the role that the states have played as cooperating agencies. OSM responded to this letter on January 24, 2011 and made a number of commitments regarding continued, robust participation by the cooperating agency states in the EIS development process. However, shortly

thereafter, the agency terminated that involvement without explanation.

The cooperating agency states sent a second letter to you on July 3, 2013 requesting an opportunity to re-engage with the EIS development process following several fits and starts by OSM, largely due to issues related to the work of the various contractors OSM engaged to assist the agency with the draft EIS. In requesting an opportunity to review revised draft chapters of the draft EIS, the states requested expanded timeframes for commenting on the chapters; an opportunity to review any attachments and exhibits that are appended to the chapters; a meaningful, robust reconciliation process; and a timetable for review of draft chapters. The letter reiterated the concern of the states regarding how their comments will be used or referenced by OSM in the final draft EIS, including an appropriate characterization of their comments and participation. OSM never responded to this letter and to date no further opportunities have been provided by OSM for participation by the cooperating agency states. In fact, OSM has, on several occasions (at meetings of the Interstate Mining Compact Commission and other OSM/state meetings), indicated that it does not envision re-engaging with the states on the draft EIS and at most would provide a briefing, coincident with release of the draft EIS and proposed rule, regarding how the comments that were originally submitted by the states were addressed in the final draft EIS. Even this latter opportunity for engagement now appears to have evaporated.

As noted in a Memorandum for the Heads of Federal Agencies dated January 30, As noted in a Memorandum for the Heads of Federal Agencies dated January 30, 2002 entitled "Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act", the Council on Environmental Quality (CEQ) regulations addressing cooperating agency status (40 C.F.R. Sections 1501.6 and 1508.5) specifically implement the NEPA mandate that Federal agencies responsible for preparing NEPA analyses and documentation do so "in cooperation with State and local governments" and other agencies with jurisdiction by law or special expertise. The Memorandum goes on to note that the benefits of enhanced cooperating agency participation in the preparation of NEPA analyses include: disclosing relevant information early in the analytical process; applying available technical expertise and staff support; avoiding duplication with other Federal, State, Tribal or local procedures; and establishing a mechanism for addressing intergovernmental issues. Other benefits of enhanced cooperating agency participation include fostering intra- and inter-governmental trust and a common understanding and appreciation for various governmental roles in the NEPA process, as well as enhancing agencies' ability to adopt environmental documents.

In litigation interpreting how the federal government must meet its obligation to cooperating agencies, the U.S. District Court for the District of Wyoming in International Snowmobile Manufacturers Association et al v. Norton, 340 F. Supp. 2d 1249 (D.Wyo. 2004) ruled as follows:

the purpose of having cooperating agencies is to emphasize agency cooperation early in the NEPA process. 40 C.F.R. Section 1501.6 (2004). Federal agencies are required to invite the participation of impacted states and prowide them with an opportunity for participation in preparing the EIS. 40 C.F.R. Section 1501.7 (2004). "When a federal agency is required to invite the participation of other governmental entities and allocate responsibilities to those governmental entities, that participation and delegation of duty must be meaningful." Wyoming v. USDA, 277 F. Supp. 2d 1197, 1219 (D.Wyo. 2003).

Based on our experience to date with OSM's development of the draft EIS for the stream protection rule, we assert that OSM has not provided for meaningful participation by the cooperating agency states in the preparation of the EIS and it seems unlikely that the agency will do so prior to release of the draft EIS and proposed rule this spring. The cooperating agency states are therefore left with a decision about whether and when to withdraw from the process in order to protect our interests and to craft an appropriate statement for inclusion in the draft EIS regarding the nature and level of our participation and our decision to withdraw. CEQ's regulations provide sample reasons for why a cooperating agency might end its status as a cooperator, including that the cooperating agency is unable to identify significant issues, eliminate minor issues, identify issues previously studied, or identify conflicts with the objectives of regional, State and local land use plans, policies and controls in a timely manner; is unable to assist in preparing portions of the review and analysis and resolving significant environmental issues in a timely manner; is unable to consistently participate in meetings or respond in a timely fashion after adequate time for review of documents, issues and analyses; is unable to accept the lead agency's decision making authority regarding the scope of the analysis, including authority to define the purpose and need for the proposed action or to develop information/analysis of alternatives they favor or disfavor; or is unable to provide data and rationale underlying the analyses or assessment of alternatives.

While the cooperating agency states were, for the most part, actually able and willing to do all of these things, OSM's unwillingness to share revised and new draft chapters of the EIS with the states has precluded the states from doing so and hence has undermined their status as cooperating agencies and the meaningfulness of their participation. Consequently, the states appear to have more than adequate reasons for withdrawing from the process and terminating their status as cooperators based on CEQ's regulations. We are therefore alerting you that, by separate actions pursuant to the provisions of our respective MOU's with your agency, several of us are seriously contemplating withdrawing from the EIS development process. Regardless of individual state determinations regarding withdrawal, we hereby request that the attached statement be included in a conspicuous place at the front of the draft EIS explaining the role of the cooperating agency states and any individual state decisions to withdraw. It is also likely that those states who choose to continue on as cooperating agency states will request that their state seal not appear on the cover of the draft EIS. We welcome the opportunity to discuss and potentially adjust this statement, but it is critical that we receive assurances from you that the statement will appear in the draft EIS at an appropriate place.

Should you have any questions or wish to discuss the matter further, please communicate with Greg Conrad, Executive Director of the Interstate Mining Compact Commission, who is assisting us with the matter.

Sincerely,

Randall C. Johnson, Director, Alabama Surface Mining Commission

Steve Hohmann, Commissioner, Kentucky Department for Natural Resources

Fernando Martinez, Director, Division of Mining and Minerals, New Mexico Department of Energy, Minerals & Natural Resources

John E. Caudle, Director, Surface Mining and Reclamation Division, Railroad Commission of Texas

Bradley C. Lambert, Deputy Director, Virginia Department of Mines, Minerals & Energy

Todd Parfitt, Director, Wyoming Department of Environmental Quality Steve Weinzapfel, Director,
Division of Reclamation, Indiana
Department of Natural Resources

Ed Coleman, Chief,
Industrial and Energy Minerals
Bureau, Montana Department of
Environmental Quality

Lanny Erdos, Chief,
Division of Mineral Resources
Management, Ohio Department of
Natural Resources

John Baza, Director, Utah Division of Oil, Gas and Mining

Harold Ward, Acting Director,
Division of Mining and Reclamation,
West Virginia Department of
Environmental Protection

Attachment

ATTACHMENT

Statement from Cooperating Agency States

Pursuant to Memoranda of Understanding with the Office of Surface Mining, Pursuant to Memoranda of Understanding with the Office of Surface Mining, several states that implement regulatory programs under the Surface Mining Control and Reclamation Act of 1977 (SMCRA) have participated as cooperating agencies in the development of this draft environmental impact statement for the proposed stream protection rule. These states include: Alabama, Indiana, Kentucky, New Mexico, Texas, Utah, Virginia, West Virginia and Wyoming. The state of Montana and Ohio have also participated in an unofficial review role during the process. Early in the development of the draft EIS in late 2010 and early 2011, the cooperating agency states were provided an opportunity to review three initial draft 2010. Since January of 2011, the cooperating agencies states have not been involved in the EIS development process, despite requests to re-engage with the agency. (See letter dated July 3, 2013). Some of this was due to difficulties encountered by OSM with its contractors, which resulted in a full scale revamping of the draft EIS. But in large measure, OSM simply chose not to pursue further involvement of the cooperating states in the process, in direct contravention of the states' MOUs with the agency, as well as the Council of Environmental Quality (CEQ) regulations and guidelines concerning the role of cooperating agencies. As a result, some cooperating agency states, via letters dated [list dates of individual state letters], formally withdrew from the EIS process as cooperators. Others [list the states] remained as cooperators, but only to preserve their rights as cooperating agencies. As a result of these decisions, any reference to the role of the cooperating agency states should be understood to embrace only the early, limited opportunities provided to them to comment on draft chapters 2, 3 and 4 in late 2010 and early 2011. It should also be noted that the states did not have an opportunity for full reconciliation regarding their comments and have not been informed of how and to what extent their comments were taken into account and incorporated in the draft EIS. This limited, constrained role of the cooperating agency states must be understood as such and should not be read as an endorsement of any portion of the draft EIS.

STATE OF ALABAMA SURFACE MINING COMMISSION JASPER, ALABAMA

February 10, 2015

Hon. Joseph G. Pizarchik Director Office of Surface Mining, Reclamation and Enforcement U.S. Department of the Interior 1951 Constitution Avenue, N.W. Washington, DC 20540

Dear Director Pizarchik:

On August 24, 2010, the Alabama Surface Mining Commission signed a Memorandum of Understanding (MOU) to participate as a Cooperating Agency in the development of an Environmental Impact Statement (EIS) to support a proposed stream protection rule. Since that time we have participated diligently in that process, but with increasing concern and reservation.

We and other state cooperating agencies have expressed concerns regarding the piece-meal approach, the lack of adequate time for review and comment, the overall quality of the product, major deficiencies, inconsistencies, and missing reference material evidenced in the draft documents. Federal cooperating agencies have verbally echoed similar concerns during reconciliation conference calls. Almost four years have now passed since our last interaction on the EIS.

I have concluded that it is no longer in the best interest of the Alabama Surface Mining Commission to continue as a cooperating agency. I hereby give notice to you of my decision to terminate the MOU. I request that any references to our participation as a cooperating agency be removed from the proposed EIS and its notice prior to publication in the Federal Register.

Sincerely,

RANDALL C. JOHNSON, Director.

Mr. GOHMERT. Without objection, those letters will be admitted as part of the record. Thank you, Dr. Johnson.

At this time we will now hear from Mr. Baker. You are recognized for 5 minutes.

STATEMENT OF GREGORY BAKER, RECLAMATION PROGRAM MANAGER, VIRGINIA DEPARTMENT OF MINES, MINERALS AND ENERGY, BIG STONE GAP, VIRGINIA

Mr. Baker. My name is Greg Baker. As you said, I am a Reclamation Program Manager as a permitting supervisor with the Virginia Department of Mines, Minerals and Energy, or the DMME.

Mr. GOHMERT. Sir, would you mind moving your microphone a little closer to you? There you go. Good. Thank you.

Mr. BAKER. I appreciate the opportunity to present this testimony to the subcommittee regarding our views on the status of cooperating agencies for the Office of Surface Mining's Stream Protection Rule.

Virginia first implemented rules to address coal mining and reclamation in 1966, and following the passage of the Federal Surface Mining Control and Reclamation Act, Virginia sought and obtained primacy in December of 1981 from OSM to serve as a primary regulatory authority for the surface coal mining.

This resulted in a significant expansion and enhancement of Virginia's regulatory program. Virginia's program is recognized across the Nation as a leader and an innovator. Many states have benchmarked with Virginia on areas such as electronic permitting, underground mine mapping, and the development of a GIS database that includes all surface mining as well as abandoned mine lands.

Beginning in 2009, OSM embarked on an effort to impose a drastic change in state programs regarding stream protection. Despite our several requests, OSM has still not provided reliable information to the states as to why it is revising the 1983 Stream Buffer Zone Rule. Nothing in the states' annual evaluation report indicates that states are doing a poor job of enforcing current surface mining laws, including the stream buffer zone requirement.

As a part of its rulemaking effort, OSM is also preparing an environmental impact statement. Early in the development of the draft EIS, OSM invited several states, including Virginia, to participate as cooperating agencies under the National Environmental Policy Act, or NEPA.

In preparing the EIS, OSM hired a contractor from outside the coal mining regions who had no mining background. Cooperating

state agencies voiced their concern about the contractor and its ability to prepare the draft EIS.

We recommend that before moving forward with the draft EIS and a proposed rule, that OSM seriously consider other alternatives available to the Agency for addressing stream protection. However, to date, a request for discussing these potential approaches has been ignored.

Following a limited opportunity to provide comments on a few early chapters of the draft EIS in late 2010/early 2011, Virginia and other cooperating state agencies have been excluded from the process. During the time we were involved, the cooperating state agencies voiced several concerns regarding the constrained time frames under which we were operating to provide comments on the draft documents.

As we stated from the outset, and as Members of Congress have also noted, the ability to provide meaningful comments on OSM's draft documents was extremely difficult. We had limited working days to review the material, some of which were fairly technical in nature.

There is also a matter of completeness of the draft chapters that we reviewed. Several attachments, exhibits, and studies were not provided to us as part of reviewing Chapters 2, 3, and 4. Some of these were critical to a full and complete analysis of OSM's discussion in the chapters.

As an example, since Virginia reviewed the early EIS chapters in 2010, the production and job numbers included therein have drastically changed. Coal production in Virginia peaked at 47 million tons in 1990, but it has dropped significantly. Production for 2014 was approximately 15 million tons. Jobs are also decreasing. In 2009, 4,230 people worked in the coal mining industry. That number has dropped to 3,723 in 2014.

As it is now, some of the cooperating agency states have withdrawn from the process, and others are uncertain whether they still desire their names to appear on the draft EIS. I would like to reiterate Virginia's interest in continuing to engage in this process, as we realize the importance of reviewing the draft EIS and the opportunity to contribute to or clarify the issues presented.

As a cooperating agency, our intention has been to ensure that the most up-to-date data is utilized during the process. For this reason, Virginia intends to remain on as a cooperating agency.

Moving forward, we would like the opportunity to work with OSM to draft a joint statement that will accompany the draft EIS, outlining very specifically our role as a cooperating agency and the significance and meaning of the comments that we have submitted during the EIS development process. It is also important to us that OSM re-engage with Virginia, and we welcome the subcommittee's assistance in making this a reality.

Thank you for this opportunity to testify today, and I would be happy to answer any questions you might have.

[The prepared statement of Mr. Baker follows:]

PREPARED STATEMENT OF GREGORY BAKER, VIRGINIA DEPARTMENT OF MINES, MINERALS AND ENERGY

Good afternoon. Chairman Gohmert, Ranking Member Dingell, members of the subcommittee, thank you for giving me the opportunity to testify before you today on the Stream Buffer Zone Rule and its implications to the Commonwealth of Virginia. My name is Gregory Baker and I serve as the Permit Review Supervisor at the Virginia Department of Mines, Minerals, and Energy (DMME) and I hope to share with you today background on the importance of Virginia's coal industry, the Stream Buffer Zone Rule, and our continued interest in engaging in the rulemaking

process as a cooperating agency.

First, I would like to provide you with background information about the Virginia coal industry and our agency. Since colonial days, coal production has been integral to Virginia's economic development. The first commercial coal production in the United States occurred in 1748 from the Richmond Coal Basin just west of our State Capital in Richmond, Virginia. During the Civil War much of the coal industry in Virginia was destroyed; however, commercial coal mining rebounded in our south-western most counties in the 1880s and mining in those areas continues today. We recognize that coal is on the decline as it is currently only produced in five of the Virginia counties that were traditionally named the coalfields.

The Commonwealth first implemented rules to address coal mining and reclamation issues in 1966; however, the minimal requirements of the early law and regulations failed to keep pace with the rapid expansion of surface mining activities in the Appalachian region. Following the passage of the 1977 Federal Surface Mining Control and Reclamation Act, Virginia sought and on December 1981 Virginia obtained primacy from the U.S. Office of Surface Mining (OSM) as the primary reg-

ulatory authority for coal surface mining. Regulatory authority resulted in a significant expansion and enhancement of the Virginia regulatory program.

As OSM moved forward to create the Stream Buffer Zone Rule, Virginia, chose to participate as a cooperating agency, in order to ensure that we were included in the process. We had the opportunity to review and comment on the initial proposed rule; however, since that time, Virginia, as a cooperating agency, has not been given the opportunity to review the most current version of the rule. This is concerning as the economic impact numbers we previously submitted have drastically changed Coal production in Virginia peaked at 47 million tons in 1990, but it has dropped significantly in recent years. Production for 2014 was approximately 15 million tons, which has resulted in a decrease in the number of coal mining jobs. In 2009, there were 4,230 people working in the coal mining industry in the Commonwealth and in 2014, that number dropped to 3,723. We are concerned with OSM using outdated data from the Commonwealth.

Virginia coal is of a higher British Thermal Unit (BTU) and lower sulfur content than the national average. This quality has made Virginia coal more desirable for metallurgical production as well as for the export market. We understand that there has been a reduction in coal production and the coal-producing areas of south-western Virginia will continue to see a decline in their economy. We are concerned with the potential impact the draft rule will have on the economy of these regions in Virginia. This may be further exacerbated by the inability to engage in the rule

process and the continued use of outdated and inaccurate information.

Virginia's regulatory program is recognized across the Nation as a leader and an innovator. Many states have used Virginia as an example in areas such as electronic permitting, underground mine mapping and the development of a GIS database that includes all surface mining areas as well as abandoned mined lands. We continue to work on making this information public through an outward facing Web site. Through our electronic permitting system, other state and Federal agencies can access coal mining permit data and applications and provide comments using the elec-

tronic application.

For years, states have been administering stellar regulatory programs, including the protection of streams. However, beginning in 2009, OSM embarked on an effort to impose a drastic change in state programs. To date, OSM has not provided information to states as to the reason for revising the Stream Buffer Zone Rule now termed the "Stream Protection Rule." Nothing in the states' Annual Evaluation Report indicates that the states are doing a poor job of enforcing current surface mining laws. The U.S. Department of the Interior, U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (ACOE) signed a Memorandum of Understanding (MOU) in 2009, which appears to be the basis for the effort by OSM to change the Stream Buffer Zone Rule. While, the purpose of the 2009 MOU was to implement an interagency action plan to reduce harmful envi-For years, states have been administering stellar regulatory programs, including the 2009 MOU was to implement an interagency action plan to reduce harmful environmental consequences of surface coal mining in six states; states were not

engaged in the process and were not asked to be a part of the MOU but rather join

as cooperating agencies.

One significant item resulting from the MOU was the intention to propose a new Stream Protection Rule. As previously stated, early in the development of the draft rule OSM invited several states, including Virginia, to participate in the development of the Draft Environmental Impact Statement (DEIS) as "cooperating agencies" under the National Environmental Policy Act (NEPA). In preparing the DEIS, OSM hired a contractor from outside the coal mining regions and cooperating agencies vaiced their concern with the contractor's lack of knowledge in mining. The cocies voiced their concern with the contractor's lack of knowledge in mining. operating agencies recommended that, before moving forward with the DEIS and proposed rule, OSM seriously consider the other alternatives available to the agency for addressing stream protection. The cooperating agencies believe that there are opportunities for the states and the affected Federal agencies (OSM, EPA, the ACOE and the U.S. Fish and Wildlife Service) to work cooperatively together to address stream protection concerns. However, to date, our requests for arranging such meetings have been ignored. We believe that there are a variety of tools, protocols, policies and other measures available to us as state and Federal agencies that, with some coordination, could lead to a comprehensive and effective approach to protecting streams.

Following a limited opportunity to provide comments on a few early chapters of the DEIS in 2010, Virginia and the other state cooperating agencies have not been

involved in the review of comments of the draft or any other portion of the DEIS. On July 3, 2013, the cooperating agencies sent a letter to Director Pizarchik reminding him that the role of the cooperating agencies, as defined by the original memoranda of understanding, included an opportunity to review and comment on the chapters of the DEIS that are made available to us.

The cooperating state agencies have had several concerns regarding the constrained time frames under which we were operating to provide comments on the draft documents that were provided to us in 2010. As we have stated from the outset, and as Members of Congress have also noted, the ability to provide meaningful comments on OSM's draft documents has been extremely difficult with limited working days to review the material, some of which can be fairly technical in nature. In order to comply with the deadlines, we have devoted considerable staff time to the preparation of our comments, generally to the exclusion of other press-ing business such as reviewing citizen complaints, permit reviews, and AML project design.

We also have concerns regarding the lack of feedback from states in drafting final chapters to date. We noted that several attachments, exhibits and studies were not provided to us as part of reviewing Chapters 2, 3, and 4. Having the opportunity to review these documents is critical to ensuring our ability to provide a full and complete analysis of OSM's discussion in these chapters. It is important for us to receive all applicable documents that are referenced in draft chapters in order to

conduct a meaningful review.

As part of the DEIS process with cooperating agencies, OSM committed itself to engage in a reconciliation process whereby the agency would discuss the comments received from the cooperating agencies, especially for purpose of the disposition of those comments prior to submitting them to the contractor for inclusion in the final draft. Our experience with the reconciliation process to date has not been particularly positive or meaningful. We are hopeful that as we reinitiate the DEIS review and comment process, OSM will engage in a robust reconciliation process. Among other things, we believe it should include an explanation of which comments were accepted, which were not, and why. In an effort to provide complete transparency and openness about the disposition of our comments, we believe the best route is for OSM to share with us revised versions of the chapters as they are completed so that we can ascertain for ourselves the degree to which our comments have been incorporated into the chapters and whether this was done accurately.

As we noted during the submission of comments by many of the cooperating agencies in the early rounds of the EIS development process, there is great concern about how our comments will be used and referred to by OSM in the final DEIS that is published for review. Our concern is that we have not been afforded the ability to fully engage in the process as we believe was originally agreed upon. We remain interested in engaging in this process and while the MOU we signed as cooperating agencies indicates that our participation "does not imply endorsement of OSM's action or preferred alternative," we want to be certain that our comments and our participation are appropriately characterized in the final draft. Furthermore, since CEQ regulations require that our names appear on the cover of the DEIS, it is critical that the public understand the purpose and extent of our partici-

pation as cooperating agencies.

To date, many of the cooperating agency states are uncertain whether they still desire their names to appear on the DEIS, which was originally anticipated. I would like to reiterate Virginia's interest in continuing to engage in this process; however, the appearance of a state's seal on the cover of the DEIS would imply tacit approval, regardless of whether and to what extent state comments have been incorporated into the document. While cooperating agencies have the authority to terminate cooperating status if it disagrees with the lead agency (pursuant to NEPA procedures and our MOUs), Virginia realizes the importance of DEIS review and the opportunity to contribute to, or clarify, the issues presented. For this reason, Virginia intends to continue to engage on this proposed rule and remain on as a cooperating agency. Moving forward, we would like the opportunity to work with OSM to draft a joint statement that will accompany the DEIS outlining, very specifically, our role as a cooperating agency and the significance and meaning of the comments that we have submitted during the EIS development process.

Thank you for the opportunity to testify before you today. As a cooperating state, Virginia is committed to being constructive partners in the rulemaking process. Our intention has been and will continue to be to stay engaged to ensure that the most up-to-date data is utilized during this process. It is important to us that OSM reengage Virginia in the process and we welcome the committee's feedback or assistance in making this a reality. I look forward to answering any questions you may have.

HISTORY AND BACKGROUND OF THE STREAM BUFFER ZONE RULE

On December 12, 2008, OSM issued a news release titled "Office of Surface Mining Issues New Mining Rule Tightening Restrictions on Excess Spoil, Coal Mine Waste, and Mining Activities in or Near Streams." In the words of OSM, the agency stated, "We believe that the new rule is consistent with a key purpose of the Surface Mining Law, which is to strike a balance between environmental protection and ensuring responsible production of coal essential to the Nation's energy supply." The statement from the release was from then Assistant Secretary of the Interior, Land and Minerals Management C. Stephen Allred. Mr. Allred is speaking of the 2008 Stream Buffer Zone Rule. He goes on to say that this new rule will clarify the Stream Buffer Zone Rule and resolve any long-standing controversy over how the rule should be applied. He is referring to the issues raised with disturbances along stream buffer zones as far back as 1983. There have been several challenges to the Stream Buffer Zone Rule over the past several decades. OSM and state agencies felt as though the 2008 Buffer Zone Rule was a rule that would finally meet the goal of environmental protection while ensuring coal production that would meet the energy needs of the Nation.

The development of the 2008 rule was a 5-year process. OSM solicited public

The development of the 2008 rule was a 5-year process. OSM solicited public input throughout the process. The agency received over 43,000 comments and held four public hearings that were attended by approximately 700 people. The rule was to take effect on January 12, 2009. However, before the rule was implemented it was suspended. The states had no opportunity to amend our programs to adopt that rule. We believe the 2008 rule contained provisions that would allow disposal of excess spoil in such a manner that would ensure stream protection. Even though Virginia has not formally adopted the 2008 rule, some portions of the rule have been incorporated into coal surface permit review and approval. Alternative analysis and fill minimization are two items from the rule now incorporated into our permitting process. The number of fills has been reduced, as well as the number of cubic yards being placed in fills. VA tracks these numbers as part of overall performance measures on the success of our program.

The data and information we are familiar with (including OSM oversight reports) indicates that the states have been implementing stream protection requirements in a fair, balanced and appropriate manner that comports with the requirements of SMCRA and our approved regulatory programs. It would therefore be helpful if OSM would finally clarify its goals and the problems it hopes to address in the rulemaking process and provide information to states on why the 2008 rule would not be protective of streams.

Mr. GOHMERT. Thank you very much, Mr. Baker. At this time we will hear from Mr. Dustin White. Mr. White, you are recognized for 5 minutes.

STATEMENT OF DUSTIN WHITE, COMMUNITY ORGANIZER, OHIO VALLEY ENVIRONMENTAL COALITION, HUNTINGTON, WEST VIRGINIA

Mr. White. Thank you for the opportunity to speak today. My name is Dustin White and I am a community organizer for the Ohio Valley Environmental Coalition, or OVEC. For the record, I am neither an engineer nor a scientist, so I will hold the technical

jargon to a minimum.

As an organizer and lifelong resident of West Virginia, native to one of the top coal-producing counties in the state, I have personally been witness to the impacts of mining that include entire communities depopulated and bulldozed; increased flash flooding in areas surrounding mountaintop removal; and even streams and rivers that run a wide variety of colors, ranging from orange, red, turquoise, black, and even white due to mine-related incidents. In some cases, streams disappear altogether when they are buried by valley fills. Known toxins even leach off mine sites and contaminate the streams and ground waters for communities.

In addition, high rates of health issues such as cancers, gastrointestinal illnesses, kidney problems, and gallbladder issues, just to name a few, can also be found in these communities. Residents throughout the Appalachian region will attest that these illnesses are not just isolated incidences, but are all too common in areas with heavy mining. There have also been many peer-reviewed scientific studies published that even more directly show the link

between mountaintop removal and these health issues.

Most of the Appalachian states with mountaintop removal have their own regulatory agencies that are supposed to be the first line of defense for communities when coal companies violate the law. These agencies exist in Kentucky, Virginia, and West Virginia. In West Virginia, we know them as the DEP, or Department of Environmental Protection.

But for many in West Virginia, they say DEP stands for something else, Don't Expect Protection, as citizens often find themselves doing the job of DEP to monitor the impacts of mining. We have found that state regulatory agencies often issue mining permits against objections of citizens and sometimes without the proper environmental surveys required by law. They often allow coal companies, that are habitual violators of the law, to operate with little to no interruption. Fines issued for violations are little more than pocket change for coal companies.

In at least West Virginia and Kentucky, the regulatory agencies and state legislators work to lower water quality standards that go against Federal guidances, allowing companies to discharge higher

levels of selenium and aluminum into streams.

Agencies like DEP seem to be working against the best interests of the people; because of this, citizens often turn to legal action to rein in the coal companies. We have even filed a 733 petition under SMCRA in West Virginia asking the Office of Surface Mining Reclamation and Enforcement to intervene in DEP's mining division for failing to do their job.

Due to state regulatory failure, a regional coalition known as the Alliance for Appalachia was created to circumvent the state authority and go straight to the Federal agencies such as OSMRE and EPA. We demand that they take action to rein in coal companies who blatantly break the laws where agencies like DEP allow it.

In 2009, the Alliance worked with the Council on Environmental Quality to establish a memorandum of understanding with the Federal regulatory agencies outlining steps we would like to see taken to lessen the impacts of mountaintop removal, including a strong stream protection rule. We will continue to go to the Federal agencies as long as the state agencies ignore us and our lives and homes are threatened by mountaintop removal.

In closing, how can state regulatory agencies honestly be expected to be part of a Federal rulemaking process when they have proven time and time again that they cannot perform their jobs to protect citizens from mining pollution? People living in mountain communities are experts in their own lives and know practices like

mountaintop removal are harmful and want action taken.

Water is one of the most important resources for life. We all live downstream and are all vulnerable to pollution. Stringent action to protect the waterways of these United States, no matter the size of the stream, should be taken by regulatory agencies and not obstructed. Access to clean, safe water is a human right. Thank you.

[The prepared statement of Mr. White follows:]

PREPARED STATEMENT OF DUSTIN C. WHITE, COMMUNITY ORGANIZER, OHIO VALLEY ENVIRONMENTAL COALITION, HUNTINGTON, WEST VIRGINIA

My name is Dustin White and I am a community organizer with the WV based Ohio Valley Environmental Coalition (OVEC) and spend the majority of my time working with people living with the day to day impacts of coal and mountaintop removal mining. OVEC is a local grassroots non-profit organization helping communities throughout the state fighting environmental injustice. For the record I am not a scientist or engineer, nor do I hold any type specialized degree. What I am, however, is an 11th generation West Virginian who grew up in Boone County, one of the state's top coal producing counties. It also happens to be one of the most ravaged by mountaintop removal. I have been around coal mining all my life and have family who've worked for the industry since its inception. I am here to speak on behalf of the hundreds of thousands of individuals throughout the Appalachian region who live in the wake of the coal extraction process. We often feel that we are ignored or overlooked in the decisionmaking process when it comes to coal.

one of the most abundant resources in the Appalachian region is in fact water, not just coal as many would like to believe. Not only is water one of the few basic fundamental elements needed for life, but it is also important to Appalachian culture because our streams and rivers are just as much part of our communities as the mountains that surround us. We don't just use them for recreational purposes like fishing and swimming but for many who do not have access to municipal water systems, it is the water they use for drinking, cooking, and bathing. Water from the Appalachian region was once considered some of the most pure on the planet. However, for the past several decades, our valuable water quality has been threatened and in many cases completely obliterated by pollution from mountaintop removal.

When mining companies dump the overburden from their operations into adjacent valleys they destroy ephemeral, intermittent, and perennial streams that act as

When mining companies dump the overburden from their operations into adjacent valleys they destroy ephemeral, intermittent, and perennial streams that act as headwaters for larger rivers and as natural channels for rain and snow runoff. This causes massive flooding. The mountains and forests of Appalachia are designed by nature to absorb and direct water, especially during periods of heavy rainfall. However, because these streams are destroyed, rain runs off the desert like landscape created by mountaintop removal into the communities directly below causing flash flooding. Now, almost yearly, people in areas with mining have to contend with flooding that is devastating to their communities. In the past, massive flooding was a rare occurrence but is now commonplace and I have seen the toll it has on already economically depressed communities.

One of the greatest threats from mountaintop removal comes in the form of the water contamination mining causes. The blasting of strata subsequently exposes naturally occurring elements locked in the ground, which once exposed to air, can become toxic. These now toxic elements along with other toxins, such as diesel fuel

from equipment and the chemicals used in explosives, leach into streams and groundwater supplies and eventually find their way into people's homes that depend on these sources for water. As a result people are becoming sick. Cancers, gastrointestinal issues, kidney damage, and gallbladder issues among others are commonplace throughout Appalachian communities with heavy mining. Not only have I witnessed these illnesses as a lifelong native of an area with heavy mining, but I often hear stories of commonality in each community impacted by mining I work in. People speak of their own wide range of illnesses or tell of family and neighbors who have similar health issues described or have even passed away from these illnesses; not only adults, but children as well. I myself at 31 years of age have outlived people I played with as a child.

It is well known there are dozens of peer-reviewed scientific studies published showing a correlation between mountaintop removal and health issues for people living near mining. One study shows a strong correlation between children being born with health defects and the proximity their mothers live during pregnancy to MTR sites. In medical pathology, correlation is the first key to determining if something has an impact on human health and is often the only way to determine a link when causation cannot be shown. In many medical study cases when it comes to determining something's impact to human health it is not causality that medical professional go by but the correlation data. I personally believe without a doubt that

most of these illnesses are caused by pollution from coal operations.

It is true that laws and regulations like SMCRA (Surface Mine Control and Reclamation Act) are in place to prevent or lessen environmental impacts of coal mining and mountaintop removal. However, in many cases it seems companies tend to ignore, for the most part, these regulations. Under SMCRA, some states are given primacy by the Federal Office of Surface Mining Reclamation and Enforcement (OSMRE) to have state regulatory agencies that can address issues related to mining. In WV this falls under the jurisdiction of the Division of Mining and Reclamation (DMR) inside the WV Department of Environmental Protection (DEP). These state agencies are supposed to be the citizens' first line of defense when coal mining companies break the law. However, after years of trying to work with these agencies on the state level we have found they do not work the way they were intended

Citizens often find that they are the ones who have to do the work in determining violations from mining companies. With little to no help from state regulatory agencies, citizens take it upon themselves to monitor water quality around areas with heavy mining. They are essentially doing the job the state regulatory agency is supposed to do. Independent labs and universities will often have to be consulted by community members for water testing because state agencies either dismiss claims from citizens or claim that they do not have the capacity to monitor the water source in question. In cases where state agencies find violations, fines set by the agency are often ineffective at deterring repeat offenders, and many state agencies allow habitual offenders of violations to continue operation with only temporary delays in production. This often prompts citizens to file lawsuits against the mining companies for things like excessive selenium discharges into streams and high conductivity, often an indicator of harmful heavy metals, in streams impacted by mining along with other Clean Water Act violations. Many of these lawsuits are more effective at reigning in coal companies over actions taken by state agencies.

Recently in West Virginia, due to the lack of enforcement by the state, citizens filed a 733 petition under SMCRA to have OSMRE investigate and possibly take over the DEP's mining division. The WVDEP has also worked with coal companies to weaken water quality standards inside the state that goes against Federal guidances in place. Due to the lack of enforcement in the states where MTR takes place and the refusal of agencies to work with impacted communities, people have been left with no other choice than going directly to Federal agencies such as the Environmental Protection Agency (EPA), OSMRE, the Council on Environmental Quality (CEQ), and the Army Corps of Engineers. Impacted citizens have asked these agencies, as public servants, to use their authority to provide some relief to communities where water quality is being destroyed by mining activity because they

are receiving little to no assistance from the state level.

It is true there is a cost to mining coal and we in Appalachia have been paying that cost for decades. Mountaintop removal is a continued threat to the safety and well-being of people living in the Appalachian region. Citizens not only face the current impacts to their health and environment, but will be left with the legacy pollution costs of mining. Due to their failure to adequately enforce regulations; state agencies have contributed to the impacts of mining on communities with little to no accountability and have shown that they cannot be a useful part of any nation-

wide rulemaking process. As a result, we will continue to seek rules from Federal agencies that will curtail the impacts of mining and threats to human health.

Mr. GOHMERT. Thank you very much, Mr. White.

I understand Congressman Mooney has been most unavoidably detained, and so it is my pleasure to introduce the Counsel for the Division of Mining and Reclamation within the West Virginia Department of Environmental Protection. So Mr. Russell Hunter, we are delighted to have you. You are recognized for 5 minutes.

STATEMENT OF RUSSELL M. HUNTER, COUNSEL, DIVISION OF MINING AND RECLAMATION, WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHARLESTON, WEST VIRGINIA

Mr. Hunter. Thank you for your kind introduction, Mr. Chairman. Good afternoon. I am appearing on behalf of——

Mr. GOHMERT. Is your microphone on? If it is, you might move it a little closer. OK. Yes. Then if you would just move it a little closer to your—

Mr. HUNTER. How about that? Good afternoon.

Mr. GOHMERT. It is still not picking up.

Mr. HUNTER. Good afternoon.

Mr. GOHMERT. I think that is good. Thank you.

Mr. HUNTER. Good afternoon again, three times. I am appearing on behalf of the West Virginia Department of Environmental Protection, and we appreciate the opportunity to present this testimony before the subcommittee regarding the state of West Virginia's perspective on the status of cooperating agencies for the Office of Surface Mining's Stream Protection Rule.

West Virginia is one of nine state agencies that signed Memoranda of Understanding with OSM to serve as cooperating agencies in development of the Stream Protection Rule's underlying environmental impact statement. Having the states participate as cooperating agencies in the NEPA process was envisioned by Congress, and particularly by the CEQ. Particularly, CEQ regulations mandate that the Federal agencies responsible for preparing NEPA analyses and documentation do so in cooperation with state and local governments with jurisdiction by law or special expertise.

It is important to note that the Department of the Interior and CEQ guidance documents make clear the role of cooperating agencies. It is not to be one of a nominal figurehead, but instead a role of active participation throughout the development of the EIS. That includes providing special expertise, practical knowledge, and primary regulatory experience to the process.

Since 1981, West Virginia has been a primacy state, with DEP implementing and administering SMCRA within our borders. Thus, West Virginia felt it could contribute to and learn from participation in the EIS process. It is with these expectations that DEP signed the MOU to cooperate in the preparation of the EIS.

As a means of initiating the cooperative process described in the MOUs, OSM released limited sections of their draft for review by the cooperating agencies. However, the time periods allowed for review and comment on these sections were impractical. At no point

during this EIS draft review process was there a face-to-face

meeting between cooperating agencies and OSM.

Despite the imposition of unreasonable time constraints and other logistical hurdles, DEP and the other cooperating agencies conformed to the OSM schedule and provided comments on those portions of the working draft that OSM had shared with them. It should be noted, however, that OSM did not provide the studies and research relied upon in the 2010 working draft.

In spite of the cooperating agencies' inquiries and offers to honor their MOU commitments, their communication from OSM was scant at best during the 4-year period that began in January 2011 and ended March 2015. From our perspective, OSM's treatment of DEP as a cooperating agency can best be described as limited, ab-

breviated, and contrary to the terms of the MOU.

The cooperating agencies, in correspondence dated February 23, 2015 to OSM, inquired about this EIS process. OSM, via communication on March 17, responded and requested that a meeting be held with the cooperating agencies regarding its draft EIS and pro-

posed rules.

Shortly before the OSM communication of March 17, some of the cooperating agencies had already withdrawn from the EIS process. Those agencies, as well as IMCC staff, were excluded from the subsequent OSM briefing of April 27. The briefing for the remaining cooperating agencies lasted approximately 3 hours and consisted solely of a PowerPoint presentation made by OSM, with brief questions and answers.

The briefing can be characterized as a unilateral presentation primarily related to methodology and OSM's predetermined views and conclusions rather than a solicitation of input from the remain-

ing cooperating agencies in attendance.

Upon inquiry as to OSM's next step in the EIS preparation process, the cooperating agencies were informed that the draft EIS and proposed rule were at the OMB, and it was indicated that if OSM needed information from the cooperators, OSM would contact them.

Based on these succinct statements, the only logical conclusion derived from the briefing was that OSM was going to unilaterally publish its draft without input from the cooperating agencies. This is unfortunate, given the regulatory history, experience and expertise of West Virginia. We signed the OSM MOU expecting DEP to meaningfully contribute to the EIS process, while gaining insight into new science, technology, or techniques.

Accordingly, DEP terminated its MOU with OSM, and will respond to the OSM rulemaking through appropriate regulatory procedures in efforts to provide transparent and responsible regulation designed to protect the environment and the state

West Virginia.

Thank you, and I will answer any questions. [The prepared statement of Mr. Hunter follows:]

PREPARED STATEMENT OF RUSSELL M. HUNTER, COUNSEL, DIVISION OF MINING AND RECLAMATION, WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Good afternoon. My name is Russell Hunter and I serve as Counsel with the Division of Mining and Reclamation of the West Virginia Department of Environmental Protection (WVDEP). I am appearing on behalf of the agency and we appreciate the opportunity to present this testimony before the subcommittee regarding

the state of West Virginia's perspective on the Status of Cooperating Agencies for the Office of Surface Mining's (OSM) Stream Protection Rule.

WVDEP is one of nine states that signed Memoranda of Understanding (MOUs) with OSM to prepare an Environmental Impact Statement (EIS) to accompany a rulemaking to address the stream buffer zone. The MOUs were developed by OSM pursuant to the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's (CEQ) implementing regulations at 40 CFR 1501.6 and 1501.8, and CEQ's January 30, 2002 Memorandum for Heads of Federal Agencies

relative to cooperating agencies.

The regulations of CEQ that implement NEPA, (40 CFR Parts 1500–1508), allow Federal agencies, as lead agencies, to invite state governments to serve as cooperating agencies (CAs) in the preparation of Environmental Impact Statements (EISs) and, if a CA is invited, as is the case for the Stream Protection Rule, the CEQ regulation of the CAS of the CEQ regulation of the CEQ regulati lations implementing NEPA govern the CA relationship for all Federal agencies preparing EISs, including OSM. More specifically, applicable CEQ regulations state:

40 CFR 1501.6 (CEQ) Roles of lead and cooperating agencies

- (a) The lead agency shall:
 - (1) Request the participation of each cooperating agency in the NEPA process at the earliest possible time.
 - Use the environmental analysis and proposals of cooperating agencies (2)with jurisdiction by law or special expertise, to the maximum extent possible consistent with its responsibility as lead agency.
 - Meet with a cooperating agency at the latter's request.
- (b) Each cooperating agency shall:
 - (1) Participate in the NEPA process at the earliest possible time.
 - (2) Participate in the scoping process . . .,
 - Assume on request of the lead agency responsibility for developing information and preparing environmental analyses including portions of the environmental impact statement concerning which the cooperating agency has special expertise . . .

It can be derived from the CEQ regulations (40 CFR 1501.6) and other Department of Interior (DOI) regulations (43 CFR 46.230), throughout the development of an EIS, the lead agency is required to collaborate, to the fullest extent possible, with all CAs concerning issues relating to their jurisdiction and special expertise. Also, CAs may, by agreement with the lead agency (in this case via signed MOUs), assist in doing the following: (i) Identifying issues to be addressed, (ii) Arranging for the collection and/or assembly of necessary resource, environmental action of the control and in the control of the collection of the collection and/or assembly of necessary resource, environmental action (iii) Application of the collection of the collection and/or assembly of necessary resource, environmental action (iii) Application of the collection and/or assembly of necessary resource, environmental action (iii) Application of the collection and or collection of the collection and or collection and collection of the collection of the collection of the collection of the collection and collection of the mental, social, economic, and institutional data, (iii) Analyzing data, (iv) Developing alternatives, (v) Evaluating alternatives and estimating the effects of implementing each alternative, and (vi) Carrying out any other tasks necessary for the development of the environmental analysis and documentation.

As described, the primary purpose of involving CAs is to bring into the process knowledge, expertise, and familiarity with matters being considered. It is with these expectations that WVDEP, on behalf of the state of West Virginia, signed the MOU to cooperate in the preparation of the EIS to support OSM's current rulemaking. West Virginia, since 1981, has been a primacy state, with WVDEP implementing and administering the Surface Mining Control and Reclamation Act (SMCRA) for West Virginia, under oversight from the OSM. West Virginia, dating back to 1933, had a set of laws addressing the aminomental activities of the second of th had a set of laws addressing the environmental ramifications of mining. In fact, SMCRA, passed by Congress in 1977 to provide a national framework for the regulation of mining, borrowed heavily from the preexisting state programs of lation of mining, borrowed heavily from the preexisting state programs of West Virginia and Pennsylvania. Given the regulatory history, experience and expertise of West Virginia, we felt WVDEP could meaningfully contribute to the EIS process while gaining insight into any new science, technology or techniques, and thus signed the MOU

WVDEP participated in the scoping process, and signed an MOU (prepared by OSM) to serve as a CA, regarding the proposed change to the existing 1983 regulations, which have been commonly referred to as the "stream buffer zone rule." OSM unilaterally developed the scope of the initial 2010 draft EIS and then circulated a draft EIS (the '2010 working draft EIS') and packaged it as "Stream Protection Measures." As a result, what had started out as a revision to the stream buffer zone rule, pertaining to discernable stream segments, had been expanded by OSM to include topics beyond the stream buffer zone. The expanded topics included, but were not limited to, the definition of material damage to the hydrologic balance, baseline data collection and analysis, monitoring requirements, the practices of mining through and under streams, corrective action thresholds, and fish and wildlife protection and enhancement. (A discussion on some aspects of the expansiveness of the OSM rulemaking and the appropriateness of it can be found in written comments filed with the Energy and Mineral Resources Subcommittee in conjunction with a hearing about H.R. 1644 on May 14, 2015). Essentially, from our perspective, OSM has turned its proposed stream buffer zone rulemaking into a rewrite of the permitting and performance standards established by Congress in SMCRA.

As a means of initiating the cooperative process described in the MOUs, OSM released sections of their draft rule for review by the CAs. However, in what appeared to be a mockery of the process, the time periods allowed for review and comment by the CAs were brief and impersonal in that (i) the comment deadlines were extremely short and impracticable, and (ii) were to be provided via a share-file on a Web site set up by OSM. Consequently, at no point in the draft review process was there a face-to-face meeting between cooperating agencies and OSM. Further, given OSM's time constraints, scheduling needed face-to-face meetings was impractical, although it is suggested that convening such a meeting could have been helpful, to address the CAs' comments and suggestions and to reconcile such comments and issues with the 2010 working draft EIS.

Despite the imposition of these logistical hurdles, WVDEP and the other cooperating agencies provided comments to the portions of the drafts which OSM had shared with the CAs. It is noted that OSM did not allow the CAs to comment on some portions of their draft 2010 working draft EIS, and OSM failed to provide the studies relied upon in the draft or a list of the research or studies it utilized.

A critical part of an EIS preparation stage is the identification and analysis of potential action alternatives and the selection of a preferred alternative. Selection of a preferred alternative which is overly restrictive such as categorically preventing disturbance of discernable stream segments could have profound effects on permitting decisions and performance standards and ultimately whether certain mining operations are authorized to proceed. In addition to limiting the CAs participation in the review process, OSM, by selecting a restrictive preferred alternative, would undermine the discretionary permitting decisions of approved state regulatory authorities. Also in preparing its version of the EIS, OSM apparently relied upon modeling performed by outside sources to select and analyze alternatives rather than seeking input from the CAs. These actions further belie the notion that OSM had made its decision as to the outcome of the EIS prior to the actual conclusion of the NEPA process. Such an approach to dictate future permitting decisions by state regulatory authorities, without input from primacy programs, is not only contrary to NEPA principles, but also contrary to the fundamental concept of state primacy under SMCRA.

Further, OSM's withholding of "new science" from review by the CAs deprived the states of information regarding the appropriate development of the EIS. This approach by OSM also served as a disservice to the primacy regulatory authorities charged with making current regulatory decisions as they implement SMCRA on a daily basis by keeping from them the latest available information.

Subsequent to this initial review phase (as described above), conducted in late 2010 and early 2011, there was no further dialog or input requested of the CAs by OSM. The CAs had discussions regarding this dilemma on more than one occasion and contacted OSM by letters, offering to honor their MOU commitments and to engage, or re-engage, in the preparation of the draft EIS. These offers were repeatedly refused by OSM. In spite of the CAs' inquiries and offers, the only communication from OSM, during this 4-year period from the end of the abbreviated comment period in January 2011 to March 2015, was a general statement that OSM was still working on a draft EIS and proposed regulation change. Further, OSM staff working on the draft EIS and proposed rule refrained from discussions with WVDEP personnel and declined to answer particular questions, if inquiries were made. From our perspective, OSM's treatment of the WVDEP, a cooperating agency in the OSM-led EIS, can best be described as limited, abbreviated, restricted, and contrary to the terms of the MOU.

From our discussions with other CAs, it is apparent they also felt disenfranchised by the OSM approach. In many cases, we were informed that letters of termination of their respective MOUs regarding the withdrawal of their participation in the EIS process had been sent to OSM. We understand the reasons for termination and withdrawal included very short review times, failure to provide reports and relevant data, substantial revision of the working draft without the input of the CAs, unwillingness to meaningfully engage the CAs, the overall quality of the work product,

missing reference material and the overall expansive nature of the rulemaking effort.

As what appeared to be yet another mockery of the CAs' role in the process and apparently as a result of Congressional inquiry into the Stream Protection Rule and EIS status, OSM, via a communication on March 17, 2015, requested that a meeting be set up with the CAs regarding the draft EIS and proposed rule. Although requests for the meeting were received individually by the CAs, the Interstate Mining Compact Commission (IMCC) was involved and handled the meeting arrangements on behalf of the cooperating agencies. The OSM "briefing" (the meeting) of the CAs was held on April 27, 2015 in Baltimore Maryland and attended by representatives from WV, WY, KY, VA, MT, OH, and IN. It is important to note that the CAs that had terminated their MOU and withdrawn from the EIS process (UT, NM, AL and TX), as well as an IMCC representative, were excluded by OSM from the meeting. The briefing for the remaining CAs lasted approximately 3 hours and consisted

The briefing for the remaining CAs lasted approximately 3 hours and consisted solely of a power point presentation, made by OSM, with brief questions and answers. It is important to note that neither copies of the presentation, nor any other materials, were furnished to the CAs, neither prior to or at the meeting. OSM's briefing began with a slide that identified the purpose of their proposed rule by using a bullet list of general concepts, with the first bullet in the list being, "Use Advancement in Science." In response to questions regarding such science advancements, it was indicated by OSM that the scientific advances will be seen throughout the OSM draft of the EIS, and reference was made to TDS (total dissolved solids), selenium, reforestation, and geomorphic reclamation (with no details provided or studies referenced as to such science advancements). Similar generalizations can be made as to the other general concepts identified in the bullet list presented during the briefing.

This briefing can be characterized, at best, as a unilateral presentation, primarily of methodology, of OSM's views and determinations, rather than a solicitation of input from the remaining CAs in attendance. The CAs were informed that, despite their doubts, their review comments from 2010/2011 were considered by OSM and that the current OSM draft of the EIS and proposed rule (neither of which as of today, May 20, 2015, have been seen by the remaining CAs) were revised, and that the revisions were peer reviewed by outside experts, based on said comments. Interestingly, despite the terms of the MOUs, neither the WVDEP nor the other CAs had been asked to review the revisions or studies relied upon by OSM to revise the limited portions of the 2010 working draft the CAs had previously seen. Upon inquiry regarding OSM's next step in the EIS preparation process, the CAs were informed that the draft EIS and proposed rule were at the Office of Management and Budget (OMB), specifically Office of Information and Regulatory Affairs (OIRA), and were being circulated among other Federal agencies (and not the CAs). The CAs were further informed that, following the Federal agencies' review, a draft EIS and proposed rule would be published and available to the CAs and the public for comment. However, it was indicated that if OSM needed information from the CAs, during or after the comment period, then OSM would contact them. Based on this succinct statement, the only logical conclusion derived from the briefing was that OSM was going to unilaterally publish its draft without input from the CAs, despite the terms of the MOUs.

The fundamental stages in developing an EIS are scoping, preparing and publishing a draft, receiving comments, responding to comments, and publishing a final document. At what stage in the process an action agency (generally the lead agency) proceeds with an action (e.g. proposed rule) is determined by that agency. From our perspective, OSM perverted the NEPA process because, among other things, the CAs' comments on the initial working draft were being treated as a part of the scoping stage, rather than as part of the preparation stage of the EIS process and OSM had already determined the preferred alternative (e.g. the proposed rule language) it would include in the final document.

The fact that the 2010/2011 cooperating agency comments on the OSM initial working draft is the only involvement of cooperating agencies is disappointing to put it mildly. OSM actions during preparation of this EIS denied WVDEP the opportunity to interact with the lead agency, excluded WVDEP from timely receiving information OSM relied on and in effect forestalled WVDEP from performing in the process as contemplated in the MOU and NEPA cooperating agency guidance. The dismissive approach of OSM necessitates that WVDEP position itself to provide transparent and responsible regulatory revisions and decisions to be considered and addressed consistent with the appropriate regulatory processes.

We appreciate the opportunity to provide these comments to the subcommittee. We urge the subcommittee to continue its investigation and oversight of the process

with the goal of motivating OSM to reconsider the need for and breadth as well as consequences of its rulemaking.

Thank you for the opportunity to testify today. I would be happy to answer

questions.

Mr. GOHMERT. Thank you very much.

At this time we will move into a question-and-answer session. Normally the Chair recognizes him- or herself first, but I am going to wait to ask questions and would recognize my friend Mr. Labrador for 5 minutes.

Mr. LABRADOR. Thank you, Mr. Chairman. Thank you all for

being here today.

Mr. Johnson, you write in your written statement that you anticipated a robust opportunity to work with OSMRE, but the cooperating states have essentially been shut out of the process and relegated to the sidelines as OSMRE moved forward with the EIS. Can you elaborate a little bit on this statement, specifically regarding the commenting process?

Dr. JOHNSON. Congressman, the first chapter that we were given was provided to us in September, which was actually Chapter 2 of the EIS. The subsequent two chapters were Chapters 3 and 4. We

were given approximately 8 to 10 days to look at these chapters.

We had no prior input in the development of those chapters or in providing data or information regarding the substance of the proposed EIS. So, what we were relegated to essentially was the role of the proofreader. That is the way we feel.

Mr. Labrador. All right. Was the Agency cooperative with you

at all when you requested documents?

Dr. Johnson. We never received any of the documents that we asked for, to my knowledge. Other states may have, but I do not recall ever seeing any.

Mr. LABRADOR. How many times did you request documents?

Dr. JOHNSON. I think there were at least—individual states, I know, requested information from the Director. We requested information in our November 10 letter to the Director, and then expressed concerns about not having received those in our subsequent letter in July of 2013.

Mr. LABRADOR. All right. According to your testimony, when draft EIS chapters were shared with the states, you were only given a short time to comment. What was the reason given to you for the lack of time to comment?

Dr. JOHNSON. We were told that the schedule had been established on what the review process was going to be, and they would

not deviate from those schedules.

Mr. Labrador. Established by whom?

Dr. JOHNSON. The Director. They actually gave us a timetable on the development of the EIS, and proposed to have it out, I believe, by the end of February of 2011, the entire DEIS.

Mr. Labrador. How long has it been since the last comment period closed?

Dr. JOHNSON. The last time we had any opportunity was in January, I believe, of 2011.

Mr. LABRADOR. Have you requested an opportunity to give any additional comments?

Dr. JOHNSON. Yes, we have. We did on July 3, 2013.

Mr. LABRADOR. Thank you.

Mr. Hunter, in your written testimony you state that it can be derived from the CEQ regulations and other Department of the Interior regulations throughout the development of an EIS, that the lead agency is required to collaborate to the fullest extent possible with all cooperating agencies concerning issues relating to jurisdiction and special expertise. Has the Agency collaborated with you in such a manner?

Mr. HUNTER. OSM has not cooperated with us in that manner,

Congressman.

Mr. LABRADOR. Have you made your concerns regarding the lack of collaboration known to the Agency?

Mr. Hunter. That is correct.

Mr. LABRADOR. And what has the Agency done to address your

complaints?

Mr. HUNTER. The briefing was the most recent thing they have done, and that was the only thing other than routine updates or

general updates for a 4-year time period.

Mr. Labrador. Now, as we saw, Secretary Jewell testified that the states can comment on the proposed rule once it is released. This question is for Mr. Johnson, Mr. Hunter, and Mr. Baker. Is that statement consistent with how the regulations require the Federal agency to collaborate with a cooperating agency?

Dr. Johnson. Sir, according to my understanding of what the NEPA process for involvement of the states is, that is not consistent with it. I believe the process envisions dealing with the states all the way up through the development of the entire DEIS, or draft EIS, and that has not been done.

Mr. LABRADOR. Thank you. Mr. Baker?

Mr. Baker. The same. We do not agree that we have been involved in the process like it was set out to be for our involvement.

Mr. LABRADOR. All right. Mr. Hunter?

Mr. Hunter. Well, in a previous EIS on the mountaintop mining issue, West Virginia was in a co-lead position. In the co-lead position, which is distinguished from a cooperating agency position, there was more than collaboration; there was actually working together to put a product out. I mean, we labored over each word and line. So there was great sharing of information at that time.

It is my understanding, talking to other states that have Federal lands and do EISs more frequently than we have to in West Virginia, that as a cooperating agency, they receive almost everything that is put out by the lead agency. So I would have to

say that that was contrary to our experience here.

Mr. LABRADOR. Thank you very much. Thank you for your time.

Mr. GOHMERT. I thank the gentleman from Idaho.

At this time I will recognize the Ranking Member, Mrs. Dingell.

Mrs. DINGELL. Thank you, Mr. Chairman.

I just want to follow up on this line of questioning for 1 second before I go to the others. This is for all the witnesses that represent a state regulatory agency. I want to better understand the level of participation in the development of the environmental impact statement for the 2008 Stream Buffer Protection Rule under the Bush administration.

By show of hands, which of your agencies was a cooperating agency at the time of the EIS attached to the rule?

[Show of hands.]

Mrs. DINGELL. So you did not do it back then, either. Did you complain at the time that you were not being included when the Bush administration issued the rule?

Mr. HUNTER. Not that I can recall.

Mrs. DINGELL. So it is my understanding there was very little input from the states during the 2008 EIS process, either, and that this Administration has actually had a more open process for state participation than the earlier one. So I just wanted to get that point on record.

Mr. White, now I would like to ask you some questions. You mention in your testimony that a 733 petition was filed because there was concern in your community that the West Virginia Department of Environmental Protection was not adequately regulating the coal mines. Can you talk about some of the things you have seen that have prompted you and other organizations to file the petition?

Mr. WHITE. Absolutely. They range from a wide variety of issues. The main issues that OSMRE decided to take a look at from our 733 petition were the fact that the DEP fails to address potential flooding impacts, and they fail to issue SMCRA violations when

NPDS system violations exist.

The DEP also fails to regulate selenium pollution. This is one key that I can specifically talk about because my organization has actually entered into several lawsuits against mining companies because of high levels of selenium output into streams. We have been very successful in those lawsuits. They also fail to properly define impacted areas and cumulative hydrological impact analysis results and harm to watershed, and fail to require properly protected soil removal and reclamation measures for MTR mining sites.

With reclamation, the Appalachian forest is one of the most biodiverse forests, second only to the Amazon itself. It is essentially a rain forest, with all these different species of plants and animals. When they destroy the mountain, they are essentially turning it into either a desert landscape or a prairie landscape, and so little of the native vegetation is put back on these sites.

They destroy the topsoil, which is the nutrient-rich soil that provides the life; and plant non-native species of grasses like lespedeza, shrubs, and very few native species. In turn, this also causes runoff from water because there is nothing there to catch the rain-

water any more.

Mrs. DINGELL. So I want to talk about health effects, too. We heard last week from Dr—our time is short, which is why I am cutting you off there a little—we heard last week from Dr. Michael Hendryx in a different hearing on the same subject. As an accomplished epidemiologist, he told us about the health effects we see in mountaintop mining and coal mining communities. He was very concerned about them.

Can you talk a little more about some of the health problems you have seen in your community firsthand, and whether that is impacting the economics of your region?

Mr. White. Absolutely. In the communities I work with, I have witnessed a lot of folks with cancers. Some even have multiple types of cancers. I know of one young lady whose gallbladder completely calcified. Many residents in the region have actually had their gallbladders removed. Crohn's disease is a large problem in a lot of these areas, and I encounter them. My own grandmother died of kidney failure, and that was something that was very difficult for me to go through because she was the only one in her community that was still on well water and was not on a public water system.

It is very hurtful when you see people in your community suffer from health effects, and when you know that things are going on around them in their environment that are causing their health effects.

Mrs. DINGELL. Thank you. We are sorry you are seeing that.

Mr. Chair, I only have 1 second, so I will yield it back.

Mr. Gohmert. All right. At this time the Chair recognizes Mr. Lamborn from Colorado for 5 minutes.

Mr. LAMBORN. Thank you, Mr. Chairman. I want to commend you for having this hearing. In fact, as the chairman of another subcommittee who has had some of the previous hearings on this important issue, I commend the fact that when you were named as Chairman of the new O&I Subcommittee, you immediately saw the need to delve into this issue. So I commend you for that.

For Mr. Johnson, Mr. Baker, and Mr. Hunter, are any of you familiar with the Yale medical study that found that in coal mining country, the problems that are identified have to do not with coal mining but with poverty? Mr. Johnson? Dr. Johnson. I for one am, sir.

Mr. Lamborn. So you are familiar with that study? OK, that is good.

Let me get into the role of the states. I am concerned OSM has been ignoring the states and just putting on a show-just putting on the appearance of consulting, trying to meet the regulatory requirements, the statutory requirements, under NEPA. But I am afraid that they have been insincere and it will not stand up to legal challenge in the future.

Do any of you, Mr. Johnson, Mr. Baker, or Mr. Hunter, think that the OSM has complied with the spirit and letter of the law; or are they just going through the motions and not really listening

to you at all?

Dr. JOHNSON. Sir, my experience in dealing with this type of operation is that I had never done it before. So this was a first for me. Even though I had been there 34 years, I had not been a co-

operating agency on an environmental impact statement.

But, having said that, I think I went into it expecting one thing and came out of it seeing that I did not accomplish that. I was expecting to be involved in the process of developing this EIS from the very beginning and having some input on what data was looked at and what factors might be considered in developing a new rule; even though I understood from the very beginning that I was not participating in developing the rule itself, only the EIS.

In the end, as I said before, I think all I got from this was the

fact that I was a glorified proofreader.

Mr. LAMBORN. Thank you. Mr. Baker, I will be a little more specific with you in the state of Virginia. Was Virginia able to provide substantive comments to OSM? And was the amount of time given

you to review what they provided reasonable?

Mr. Baker. In Virginia we also, as with other states who were cooperating agencies, had very short turnaround times on being able to provide any information in this process. A lot of the information, as we said, some of the things have changed and needed to be updated as far as Virginia production and different issues like that that we have not been able to provide because we have not been a part of the process.

Mr. LAMBORN. Mr. Hunter?

Mr. HUNTER. West Virginia did provide comments to the three chapters that were shared via a share file. The abbreviated comment period made some of them substantive, not as substantive as we would have liked to have had some of the comments, and some of them were procedural.

I am thinking back in time a little bit. I have not studied those comments. But there was an expectation that there would be some dialog about the comments and the range of alternatives and the possible alternatives, which never followed the initial comment period on those three chapters.

Mr. LAMBORN. Thank you.

Now, changing gears just a little bit, those of us who have been watching this with a lot of concern remember when the contractor who was hired to do economic analysis came out with a finding that tens of thousands of jobs—I think 17,000, something like that—would be lost; it would be devastating on the communities in Appalachia—however you say that properly—and that that would have a harmful economic impact.

Then that contractor was fired and later became a whistleblower, and it was almost like OSM was shooting the messenger because they did not like the message they were hearing. Then they looked for someone else to give a different message, more in keeping with

what their predetermined outcome wanted to be.

Are you all familiar with that? Well, I guess I am running out of time. But maybe we will get a chance to talk more about that next round. Thank you. I yield back.

Mr. GOHMERT. Thank you.

At this time I would recognize the gentleman from Arkansas, Mr. Westerman, for 5 minutes.

Mr. Westerman. Thank you, Mr. Chairman.

Dr. Johnson, I would like to ask about the rationale for cooperating agencies. The NEPA regulations talk about including states that have special expertise or jurisdiction by law. What kind of spe-

cial expertise do states have in this area?

Dr. Johnson. Well, our states, as a group and individually, have been in the business of regulating the coal industry for the last 35 years, or more in some cases. We were granted primacy by the Office of Surface Mining to do that, and they have watched over our shoulder diligently for the last 35 years to ensure that we are enforcing the law and the regulations.

I do not believe you can get much better expertise in these different fields, particularly dealing with the water quality issues and the excess spoil disposal issues that are involved, anywhere else but the states that actually regulate.

Mr. WESTERMAN. So how would the knowledge and experience of

states benefit in the environmental review process?

Dr. JOHNSON. It would be beneficial in trying to identify exactly what factors are going to come into play on these different alternatives that they are proposing, whether or not they are going to be feasible to implement, and whether or not they are going to result in any on-the-ground improvements.

Mr. Westerman. So would you say that states have a better understanding of mining operations in their own states than OSM

has in Washington, DC?

Dr. JOHNSON. I would definitely think that. That is my opinion. Mr. WESTERMAN. So what about jurisdiction by law? Do states have the level authority to regulate coal mining?

Dr. JOHNSON. I am not sure of the question, sir?

Mr. WESTERMAN. Do states have the legal authority to regulate coal mining? I believe in Alabama——

Dr. Johnson. Yes, sir.

Mr. Westerman [continuing]. You all have that there.

Dr. Johnson. Yes, sir. We do.

Mr. Westerman. All right. So in Alabama, coal mining is primarily regulated by the state?

Dr. Johnson. Yes, it is.

Mr. Westerman. All right. Do you think OSM has taken the states' input seriously and made an effort to use their expertise to inform the environmental review?

Dr. JOHNSON. I think they missed a good opportunity on this. To the extent that they have included or taken our comments to heart, reviewed them and given credence to them, we do not know yet because we have not seen a final draft EIS.

Mr. Westerman. Do you think it makes sense for OSM to ignore the special expertise that the states have?

Dr. JOHNSON. No, sir. I do not.

Mr. Westerman. So the states have the expertise, and they have jurisdiction to regulate mining in their states; yet OSM is trying to make a rule without taking that into account. Is that a fair assessment, Dr. Johnson?

Dr. Johnson. That would be my opinion. Yes, sir.

Mr. WESTERMAN. Mr. Hunter, do you agree with that?

Mr. HUNTER. In general, yes, Congressman.

Mr. WESTERMAN. All right. Mr. Chairman, I yield back.

Mr. GOHMERT. Thank you. I appreciate the gentleman from Arkansas.

At this time I recognize the gentlelady from American Samoa, Mrs. Radewagen, for 5 minutes.

Mrs. RADEWAGEN. Thank you, Mr. Chairman. I want to thank the panel for being here today.

Let me start with Dr. Johnson. When did Alabama first become involved in the environmental review for the Stream Protection Rule?

Dr. JOHNSON. We signed an MOU with OSM; I believe the date of that MOU was August 26 or 28, 2010.

Mrs. RADEWAGEN. And then Alabama became a cooperating agency. Right?

Dr. Johnson. That is correct.

Mrs. RADEWAGEN. How did that happen? Did Alabama approach OSM or did OSM approach you?

Dr. Johnson. No. OSM sent me a letter, as Director of the agen-

cy, and invited me to participate as a cooperating agency.

Mrs. RADEWAGEN. Did OSM explain why they were asking the

states to be cooperating agencies?

Dr. JOHNSON. The letter was fairly explicit on why they were asking, yes. It detailed what they were trying to accomplish, and the fact that the National Environmental Policy Act also mandated that they give the states an opportunity to become cooperating agencies.

Mrs. Radewagen. I see. So looking back, were your expectations

met? Do you think OSM held up their side of the agreement?

Dr. JOHNSON. I do not believe that we went into this expecting to be brought in so late in the game on developing the EIS. By the time we were given any draft materials to look at, the process had been drafted out in pretty much a very finished format.

We really did not get a chance to look at any of the data or studies that were referred to in the EIS. We were never really given a complete copy of it to see how it all meshed together. So in the end, it was my opinion that it was a waste of my time.

Mrs. Radewagen. Thank you, Dr. Johnson.

Mr. Baker, do you have a similar understanding of what it means to be a cooperating agency?

Mr. Baker. Yes, ma'am. I do.

Mrs. RADEWAGEN. Do you think the drafts OSM provided to the states years ago fully satisfy the NEPA regulations and the MOU, or does Virginia expect to be able to participate more substantively?

Mr. Baker. Virginia would like to participate more substantively. What was submitted to us early on was lacking a lot of technical information. There were things referenced that we never received a copy of, to be able to actually look at the rule as needed.

Mrs. Radewagen. Do you agree, Mr. Hunter?

Mr. Hunter. Yes, Congresswoman. Mrs. Radewagen. Thank you, Mr. Chairman. I yield back.

Mr. GOHMERT. I thank the gentlelady and appreciate her as one of the most faithful members of the overall Natural Resources Committee. I appreciate all those who have been here for this.

As the last one who has not asked questions, I want to go back to Mr. Hunter. When you were finishing your statement, I want to make sure I was clear on what you were saying. Is West Virginia withdrawing from the memorandum of understanding with OSM?

Mr. HUNTER. Yes, Mr. Chairman.

Mr. GOHMERT. And when was that decision made?

Mr. Hunter. That decision was communicated by letter to the Director of OSM yesterday, and a copy was sent to him electronically this morning.

Mr. GOHMERT. I see. Is your microphone on?

Mr. Hunter. I believe it is.

Mr. Gohmert. Now I hear you, yes, as you lean forward.

I know you gave your written statement, but since that has just occurred yesterday and today, would you summarize in a nutshell exactly why that decision was made in the last day or two?

Mr. HUNTER. The thinking that went into that decision is basically what has been the substance of the testimony today.

Mr. GOHMERT. All right. So did the last meeting you had with

OSM play a part in the decision of West Virginia?

Mr. HUNTER. That is correct. When it became clear that the rules were going to be published without being circulated back with the cooperating agencies for input and collaboration, it is felt that we could provide better comments in the public participation process; which according to NEPA, they are required to respond to in writing. We felt that we could have a more effective input by assuming another role in the process.

Mr. GOHMERT. I appreciate that. Sorry for the lack of input the states have had. I hope all of you appreciate—everybody on this committee, on both sides of the aisle, wants a clean environment.

We want citizens protected.

I love climbing up mountains. I am not in as good a shape as I once was; 16,000 feet is the highest I have ever been. But I love mountaintops. I love the outdoors. And I think we all want to see our environment preserved and have areas where we can enjoy the beauty that God has provided.

At the same time, Mr. Lamborn brought up the point that when people are in poverty—the study indicated people in poverty have a lot more problems with health than most other people. That is the issue. As I have seen in east Texas, we do not have mountaintop mining; but I have seen people lose their jobs in the energy area, and they live day to day. They cannot plan on going to the doctor, whether it is because of a deductible or one thing or another.

Anyway, we want to see the economy do well. And it sure appears clear, from everything I have seen in my 10 years on this committee and from what you can read and find out, the only place that there is really any good done in preserving the environment is where the economy is doing well. So there is obviously a trade-off here.

Mr. White, I know you had mentioned that you were concerned about having a state agency testify, that you did not believe were properly concerned for the citizens' well-being, basically in effect. From where I sit, having been a judge and a chief justice, I mean, this has been my life—you follow the law, and when the law says cooperating agencies are supposed to have input, you let them have input.

Then if they have not been a good agency, then that ends up coming in as evidence to show that their opinion should not be worth what somebody else's is. But you do not just fail to follow the law when the law says you are going to get input from the cooperating agencies, including the state cooperating agencies,

throughout the process.

The process is failing. It is violating the law unless that is followed. We do hope to get responses from OSM on this matter. We hope to get the rest of the documents that we have requested. My

time is expired, but I really appreciate all of you being here today, and I do mean all four of you.

Would you like to have an additional round or questions? Oh, I am sorry. I did not look up and see Mr. Mooney has not asked questions yet. Mr. Mooney, I had explained earlier that you were most unavoidably detained, or otherwise you were going to be here to introduce Mr. Hunter. Since you are now here, you are recognized for 5 minutes.

Mr. MOONEY. Thank you, Mr. Chairman. I just came from the Floor. I gave a little talk on the research and development tax credit. I actually believe I have two of my constituents here, so welcome, and thanks for coming.

I actually do want to address my first question to Mr. White. I read your testimony last night, and I know you have been very involved in the community and activities. Of course, the concerns from the folks that I represent, and that you live and work with, and know in the coal industry, is the jobs.

I have a bill that I think will help save those jobs. I am certain it will. I am seeing you are not supportive of it. So what about the jobs? Is that a concern to you for your friends and neighbors?

Mr. White. My primary concern is the health impacts that come from this technique of mining, which have been proven through multiple studies to have impacts to human health.

Mr. MOONEY. Not having a job is not good for your health, either.

Would you agree with that?

Mr. WHITE. You cannot legislate or deregulate a market value for coal. As we know, the market value right now is what is actually impeding the coal industry from making a profit. It has nothing to do with regulations.

Mr. MOONEY. I think there are a lot of factors, but appreciate

you coming and testifying.

Mr. Hunter, another constituent of mine, has West Virginia participated in an environmental review process like this before?

Mr. Hunter. Yes.

Mr. MOONEY. Can you tell me more about what the process was like compared to how the Office of Surface Mining has handled this environmental review for the Stream Protection Rule?

Mr. HUNTER. As I explained earlier to the committee while you were on the Floor, the agency, West Virginia DEP, participated as a co-lead agency with the mountaintop mining EIS that was concluded in basically 2005.

We did that as a co-lead, and we sat in the room and wrote with them. Then, with the EISs concerning public land, we receive information back and forth throughout the process until the draft is published, and then after the draft we help them in the final.

It was my understanding in talking to other people with more familiarity that cooperating agencies generally receive a great amount of information from the lead agency, contrary to what happened here. And with regard to the 2008 rulemaking by the Office of Surface Mining, it was tiered off, if you will, the 2005 EIS. It is my recollection we were not sent a letter requesting to be cooperating agencies in that particular venture. So that is my experience with EISs.

Mr. MOONEY. Do you think it would be a fair characterization, would you say, that the Office of Surface Mining's current treatment of the states is unprecedented?

Mr. Hunter. I missed the last part of that question.

Mr. MOONEY. Unprecedented? Mr. Hunter. That is correct. Mr. MOONEY. Without precedent. Mr. Hunter. That is correct.

Mr. Mooney. Now, Dr. Johnson, a couple of questions for you. What in particular do you think OSM should be doing to better en-

gage with the states?

Dr. JOHNSON. I believe that, prior to having developed a draft EIS, they should have involved the states as cooperating agencies in the process of actually putting together the data that was necessary to evaluate the issues that they wanted to evaluate, in terms of putting out a new proposed rule—not bring the states in in the middle of the process when all of that had already been done.

Keep in mind that we are not necessarily attacking any proposed rule, because there has not been one yet. We have not seen that rule. All we are attacking is the process by which they went forward with putting together the EIS. We feel like we were told and promised that we would get a full copy of the proposed draft EIS before it was published and would have a chance to review it, and it was not given to us.

Mr. MOONEY. All right. Just to follow up, generally speaking, is OSM's current treatment of the states in line with your previous experiences with OSM, or would you say this is a particularly troublesome period for OSM's relationship with states like the one you

Dr. JOHNSON. You are talking about outside of the EIS process? You are talking about in general?

Mr. MOONEY. In general.

Dr. JOHNSON. In general, I would say that our experience with OSM over the last 6 or 7 years has not been a very rewarding one.

Mr. MOONEY. OK, thank you. Mr. Chairman, I will yield back.

Mr. GOHMERT. I thank the gentleman.

At this time we will start a second round. Since we have had numerous Republicans ask questions, at this time I would like to recognize the gentlelady, Mrs. Dingell, for 5 minutes.

Mrs. DINGELL. Thank you, Mr. Chairman. I will be brief.

Mr. Mooney, you missed earlier. I did ask them on record before the rule was issued in 2008 if the Bush administration had solicited any of them, and they had not. So actually some have said that this Administration has been more inclusive than that, and I just wanted that on the record. I am not saying it is right or wrong for either administration, but I wanted that documented.

I would also like, Mr. Chairman, to put in the record with reference to a Yale health study, which is actually not a Yale health study. It was done by a professor, Dr. Jonathan Borak, who teaches in the Public Health Department there; but it was paid for by the National Mining Association. When asked if it was a Yale study, he said no, because he would have had to have undergone a very complicated application process.

So I do want to, if that is all right with you—Mr. GOHMERT. Without objection.

Mrs. DINGELL [continuing]. Put that into the record so we have

exactly that.

Then, Mr. Hunter, I would just like to ask you a couple questions. There is a concern in some mountaintop communities that the state regulators have been, in essence, captured by the industries they regulate. One of the ways this happens is when mining companies see violations imposed by the agency as a cost of doing business rather than an incentive to avoid collecting notices of

Do you think the West Virginia DEP has sufficient incentives in place to defer repeat offenders?

Mr. HUNTER. I believe the West Virginia DEP has in place an

effective regulatory program, yes.

Mrs. DINGELL. So let me ask you, how long has Keystone Development No. 2 been in operation?

Mr. HUNTER. The most recent Keystone permit, I think, has only

been in operation less than a year.

Mrs. DINGELL. May 2014 is what I saw. But in that time, do you know how many violations have been accumulated?

Mr. Hunter. No, Congresswoman.

Mrs. DINGELL. I am going to put them in the record—over 20 violations and 3 cessation of work orders. Would it seem to you like maybe the coal business sort of regards these violations as the cost of doing business?

Mr. HUNTER. I do not have an opinion on that, really.

Mrs. Dingell. So may I put that in the record, Mr. Chair? Mr. Gohmert. Without objection.

Mrs. DINGELL. I have 2 minutes. Mr. White, let me ask you a question. What do you see in your community, and communities like yours, when mountaintop removal companies take an abandoned mine but reclaim it? What does the re-reclamation look like? Has the mountaintop been restored? What about the vegetation? Talk about what really happens.

Mr. White. Well, to be honest, Congresswoman, you cannot put something back that God created the way he created it. It is essentially a lifeless landscape now, not up to Appalachian forest standards, I should add. It may be considered full of life for a Midwest

prairie, but not for an Appalachian forest.

There are basically just open expanses of nothingness. Often a rebuttal from the mining industry is that they will use this land for economic diversification or economic processes that are not existing. When you have MTR sites like the Hobet 21 mine site, that is large enough to fit 75 percent of the city of Manhattan in, and it is just sitting there vacant, they obviously have no use any more—not naturally, not for economic development.

Mrs. DINGELL. Thank you, Mr. White. I will yield back the

Mr. GOHMERT. All right. Thank you. I have a few questions.

For one thing, it is my understanding that the report that was allegedly leaked regarding an analysis of the effects of the Stream Protection Rule indicates or predicted there would be perhaps 7,000 jobs lost as a result of this rule.

Mr. White, I wanted to make sure I understood you accurately on one of the things you said. Did you say you cannot regulate the value of coal? Is that what you were saying?

Mr. WHITE. Yes. We have known for a very long time that the coal industry has been in a downturn. There was even a USGS

study published.

Mr. GOHMERT. But I am just particularly curious about your feeling you cannot regulate the value of coal.

Mr. WHITE. Currently, with the market and demand for natural

gas----

Mr. GOHMERT. But you think that the government cannot regulate the value of coal? That government does not have any effect on the value of coal? Is that what you believe?

Mr. White. The stock market is based on supply and demand. Mr. Gohmert. I am asking you, Mr. White, what you believe. Do you believe the government cannot have an effect on the value of coal?

Mr. White. I believe that I have answered the question on how I believe.

Mr. GOHMERT. All right, then let me tell you what our President said. The President of the United States, while he was a candidate, said that if he were President, basically, he would make the value or the price of energy produced with coal skyrocket.

So our President believes he can make the price of coal-powered energy skyrocket. That means if he can make the price of energy skyrocket, then it will drive down the value of coal and make it almost worthless because nobody is going to use it to power energy.

And it means people like the 80-plus-year-old lady in my district that said, "I was raised in a home that only had one source of energy—a wood-burning stove. Because of what is now happening to the price of energy, I am afraid that is the way I am going to die. I am going to die in a home with a wood-burning stove and nothing else because I cannot afford it."

So I would encourage you to do a little more research into just how profound the effect on the price of energy by over-regulation can be. It really does make a difference.

And I do want to ask Mr. Hunter—I don't know if you know or not, but are you aware of what happened to the poverty level in West Virginia since President Obama took office?

Mr. HUNTER. Mr. Chairman, I am unfamiliar with those numbers.

Mr. Gohmert. Well, I am curious. I want to look into it because I know that the voters, certainly, in West Virginia felt very strongly about what was happening to their way of life and their standard of living, so much so that they changed people that were representing them because of how strongly they felt about what was happening to their standard of living.

So in any event, those are matters that I have observed. I do not think there should be any question that, by regulation, the government are applied to the state of the size of the size

ment can completely put one industry out of business.

I can also tell you that there have been indications if this Administration persists with the war on coal that it has basically had—and I have to give it to President Obama, that is one campaign promise he is keeping; been a lot of them that he has not,

that is one he is keeping—but if the EPA does what they are talking about doing, then this Administration could very well force potential brownouts in Texas, where we have more energy than we know what to do with it just because of over-regulation.

Our skies are getting cleaner every year. Our water is getting cleaner. The state agencies are doing a good job. But the Federal Government can make life absolutely miserable for people in their

80s that cannot afford energy any more.

Let's see. Was there anybody else that had not asked questions twice? Did you have another question, Mrs. Radewagen? Yes. Then the chair recognizes Mrs. Radewagen for 5 minutes.

Mrs. RADEWAGEN. Thank you, Mr. Chairman.

A question for Mr. Hunter. Mr. Hunter, are you concerned about West Virginia being associated with this rule and the EIS draft?

Mr. HUNTER. That is a difficult question to answer. We are concerned more with the effect of what comes out in the rule and how it may or may not affect the ability to regulate mining operations, which would be permit or not permit them.

As far as lending credibility to a process where the agency did not contribute to what the preferred alternative was, there is some concern about the impression it would give the public; but we are more concerned about getting it right.

Mrs. Radewagen. Thank you. I wanted to ask Dr. Johnson the

same question.

Dr. Johnson. I originally drafted a letter to Director Pizarchik in early 2011, shortly after we had received the last chapter of the EIS. It was my intention to withdraw at that time as a cooperating agency. I did not do it after talking with some of the other cooperating states, because we felt like that it was possible that we would be re-engaged in this process some time before publication of the final rule and the draft EIS.

That has not happened, and my sole purpose for withdrawing from this was to make it known that the state of Alabama did not believe that its participation in this process should be used to vali-

date the draft EIS.

Mrs. RADEWAGEN. So you had intended to withdraw but did not withdraw, or did you withdraw from—

Dr. JOHNSON. I did not until February of this year.

Mrs. Radewagen. Because you were concerned about whether the document actually reflected Alabama's input?

Dr. JOHNSON. That is correct.

Mrs. RADEWAGEN. What about the other states that have withdrawn? Did they withdraw for similar reasons?

Dr. Johnson. I cannot speak for the other states. Now, Mr. Hunter is here, and I think he has already articulated that. I believe I mentioned in my opening statement that there were four states that had withdrawn; at the time that I prepared my written statement, there were four. But there are now six, counting the state of West Virginia. Everything that I have seen in all my dis-

cussions with these other states, the reasons are similar.

Mrs. RADEWAGEN. So are you saying that some states are choosing not to withdraw, or to withdraw from their MOUs?

Dr. JOHNSON. I believe there are two that have chosen not to, out of the original nine.

Mrs. RADEWAGEN. I see. Is it true—and this is my last question—is it true that the states that remain as cooperating agencies retain their right to sue?

Dr. JOHNSON. Is that question directed to me?

Mrs. Radewagen. Yes, sir.

Dr. Johnson. And you asked, is it true that if the states remain, they retain the—

Mrs. RADEWAGEN. If they remain as cooperating agencies, do they retain their right to sue?

Dr. JOHNSON. I do not know the answer to that question.

Mrs. Radewagen. Mr. Hunter?

Mr. HUNTER. That is kind of a legal opinion. I will give you my assessment of it; I do not want to be rendering legal advice on the matter. But I understand, from the way that it is all structured, that when you look at the guidance and the case law, that yes, they would retain the right to exercise their right to bring litigation.

Mrs. RADEWAGEN. What do you say, Mr. Baker?

Mr. BAKER. Virginia has not made any determinations as far as that matter is concerned.

Mrs. RADEWAGEN. Thank you, gentlemen.

Mr. Chairman, I yield back.

Mr. GOHMERT. I thank the gentlelady.

Mr. Mooney, you are recognized for 5 minutes.

Mr. MOONEY. Thank you, Mr. Chairman.

When the environmental impact study is published, the seals of the states who acted as cooperating agencies will be on the cover tacitly endorsing the document. So Mr. Baker, in your testimony, you mention that Virginia has asked to include a statement with the draft environmental impact study explaining and clarifying the role that the states played in the review process.

Do you have any concerns about staying in and having Virginia associated with this rule and the National Environmental Policy Act review?

Mr. Baker. Well, our concern is mainly that we have not been involved in the process as we feel like the process should go forward. We want to remain in the process, but we would like for the process to continue as it is set out to be, with the cooperating agencies being able to participate in this process fully and to have our input recognized as we move through this particular process.

Mr. MOONEY. So what would you like the public to know about Virginia's participation in the environmental impact statement drafting process, specifically for the Stream Protection Rule?

Mr. BAKER. Exactly what our involvement was, not necessarily that our seal is on there, but that we had no participation in the process.

Mr. MOONEY. Dr. Johnson, this next one is for you. When was the draft environmental impact statement originally supposed to be finalized?

Dr. Johnson. I believe the finalization date was February of 2011. I cannot swear to that, but I believe that is what they had on their original schedule. They subsequently pushed that into early or late spring, but I do not know the exact date that they put on it at that time.

Mr. MOONEY. So 2011; OSM has delayed this publication for years, but could not give the states more time to provide thorough comments on the environmental review documents?

Dr. JOHNSON. That is correct.

Mr. MOONEY. OK, well that is it for me, Mr. Chairman. Thank you very much. I yield back my time.

Mr. GOHMERT. I thank the gentleman.

At this time I would like to ask unanimous consent to enter these peer-reviewed papers, one on mortality disparities in Appalachia, which found that mortality rates in coal mining counties were independently related to poverty, level of education, lifestyle choices, and other factors not related to mining. Do we know who that was by so we can—

Mrs. DINGELL. I was just going to ask that question. And who

paid for it?

Mr. GOHMERT. Is that the one that she is talking about?

Mrs. Dingell. So can we just document who has paid for it and

all that? Thank you, Mr. Chair.

Mr. GOHMERT. Yes. We will make sure that we get that in the record, who exactly did the study and where it came from, because you had pointed out it was not an official Yale study, if that is the same one. And also another paper, "The influence of misclassification bias on the reported rates of congenital anomalies on the birth certificates for West Virginia—A consequence of an open-ended query."

Do we know who did that? It is underneath? Oh, I see. Yes, here it is. All right. So that is by Ji Li, Shayhan Robbins and Steven Lamm. And then another—oh, that is the same people, actually, plus Elizabeth Dissen, Rusan Chen, and Manning Feinleib. And

that is the one—OK.

Mrs. DINGELL. Yes. That is the one that was paid for by the

Mining——
Mr. COHME

Mr. GOHMERT. Yes, that you were talking about. It was not an official Yale study, but done by Jonathan Borak, M.D. So without objection. And with those clarifications, those will be made part of the record.

Anyway, thank you to each of our four witnesses for being here today, for providing the information you have that will allow us to look more deeply into the issue and make sure the law is properly being followed.

The members of the committee may have some additional questions for the witnesses, and if so, they would ask you to respond in writing. Under Committee Rule 4(h), the hearing record will be held open for 10 business days for such responses.

If there is no further business at this time, without objection, the subcommittee is adjourned.

[Whereupon, at 3:39 p.m., the subcommittee was adjourned.]

[ADDITIONAL MATERIALS SUBMITTED FOR THE RECORD]

Article Relating to Impacts of Mountaintop Mining

ORIGINAL ARTICLE

Mortality Disparities in Appalachia Reassessment of Major Risk Factors

Jonathan Borak, MD, Catherine Salipante-Zaidel, MEM, Martin D. Slade, MPH, and Cheryl A. Fields, MPH

Objective: To determine the predictive value of coal mining and other risk Objective: To determine the predictive value of coal mining and other risk factors for explaining dispropritionately high mortality rates across Appalachia. Method: Murtality and covariate data were obtained from publicly avuilable databases for 2000 to 2004, Analysis employed ordinary least square multiple linear regression with age-adjusted mortality as the dependent variable. Results: Age-adjusted all-cause mortality was independently related to Poverty Rate, Median Household Income, Percent High School Graduates, Rural-Urban Location, Obesity, Sex, and Race/Ethnicity, but not Unemployment Rate, Percent Uninsured, Percent College Graduates, Physi-cian Supply, Smoking, Diabetes, or Coal Mining. Conclusions: Coal mining is not per se an independent risk factor for increased mortality in Appslachia. Nevertheless, our results underscore the substantial economic and cultural disadvantages that adversely impact health in Appslachia, especially in the coal-mining areas of Central Appalachia.

The Appalachian region, as currently defined by the Appalachian Regional Commission (ARC), is comprised of 420 contiguous counties in 13 states stretching from New York to Mississippi. The numbers of ARC counties has increased from an initial 360 as a result of periodic acts of Congress. There were 399 counties in 1991, 406 counties in 1998, 410 counties in 2002, and 420 counties since 2008. Encompassing an area of 205,000 square miles, the region processors and extends become the less exercise democrated extends. coverlaps and extends beyond the less sharply demarcated cultural region known as Appalachia. It is home to about 25 million people. For research and other purposes, the region is often divided into five geographic subregions of relatively homogeneous characteristics (eg. topography; demographics) as shown in Fig. 1. Appalachian Regional Commission, a regional economic development agency, was created in 1965 by Congress in recognition that Appalachia

suffered disproportionately poor socioeconomic conditions.

It is also well recognized that Appalachians suffer disproportionately poor bealth and increased risks of adverse health outcomes compared with the rest of the nation.

A for example, the comes compared with the rest of the nation." For example, the Appalachian region suffers higher rates of total and premature mortality (mortality in persons aged 35 to 64 years). ** heart disease and cardiac mortality, ** caneer incidence* and cancer mortality, ** caneer incidence* and cancer mortality, ** chronic pulmonary disease, ** obesity, ** and disbetes, **District in the view of many epidemiologists and public health researchers, Appalachia is characterized by "increased chronic disease burden, limited access to health care, and elevated rates of behavioral risks. ***!*

Significant licalth disparities have also been documented within the region, with deficits most consistently found in central and southern Appalachia. Figures 2 to 5 show the regional distributions of county-level premature mortality due to all causes, caneer, heart disease, and stroke. High rates of all-cause mortality are concentrated in eastern Kentucky, southern Ohio, western Virginia, southern West Virginia, northern Alabama, and Mississippi. *Cardiac-related death rates are generally higher in rural areas,* with highest rates of premature mortality in central and southern Appalachia, particularly eastern Kentucky.* Premature cancer mortality is dominated. ularly easiern Kentucky. Premature cancer moranity is communed by high rates in the Appalachian countries of Kentucky, Ohio, and West Virginia. In eastern Kentucky, mortality rates for total cancer, lung cancer, and certvical cancer are up to 36% greater than overall Appalachian rates and up to 50% greater than corresponding US rates. 10

Appalachia and their health care and social service systems. As dis-

Such dispartites impose enormous burdens on the people of Appalachia and their health care and social service systems. As discussed later, a variety of risk factors (eg. age, sex, race, income, and education) have been associated with specific outcomes, but those factors do not fully explain the disparties. It has been proposed that health dispartites in Appalachia are due to "highly localized" factors are unique to each local area. "If the public health policy implications of such localized factors are potentially much different from those that apply to more systematic barriers to health.

A recent series of ecological studies by researchers at West Virginia University (WVU) has suggested that; age-adjusted Appalachian county mortality rates are independently related to the presence of coal mining, but the nature of that relationship was uncertain. In-18 increased mortality rates were apparently not due to occupational exposures and observed mortality patterna differed between Appalachian coal-mining counties and coal-mining counties outside Appalachian coal-mining counties and coal-mining area. If The WVU authors proposed that observed health disparities in residents of Appalachian mining area might be a tributed to a "coal mining-dependent economy." For to "pollution" and the "environmental impacts of Appalachian mining, "1-18" or to "additional behavioral or demographic characteristics not captured through other covariates."

To better understand these possibilities, particularly the role of coal mining as an independent risk factor for disparate mortality rates, we undertook a reanalysis of those rubblesde studies. Our testes were apparently the role of coal mining as an independent risk factor for disparate mortality rates, we undertook a reanalysis of those rubblesde studies. Our defendence and the proposed studies of the proposed studies

10 octier uniong as an independent risk factor for disparate mortality rates, we undertook a reanalysis of those published studies. Our objective was to determine the predictive value of coal mining and other potentially relevant risk factors for explaining differences in mortality rates across the Appalachian region

From the Department of Epidemiology and Poblic Health (Dr. Borak and Ma Fields). Vale University Department of Medicine (Dr. Borak and Mr. Slade). Vale University and Senathan Borak & Company (Or. Borak, Mr. Saliponto-Vale University and Senation (Dr. Borak, Mr. Saliponto-Vale Marchael (Dr. Borak). We saliponto-Vale the Medical Senation (Dr. Borak, Mr. Saliponto-Vale the Medical Senation (Dr. Borak). The result present the the Medical Senation of the data of the manuscript. The study sporsor had no role in the study design, analysis or interpretation of the data, or in the writing, preparation, or anderioson of the manuscript, which was not provided to the optioner prior to its submission for publication. Address correspondence for Jonathan Borak (M), 234 Church Storet (#1100), New Haven, CT (96310 (jonathan borak@yale.edu).

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BACKGROUND

A variety of economic measures illustrate how badly the Appalachian region lagged behind other parts of the US in 1965, the year that ARC was founded, and how that status has improved. At that time, 1 in 3 Appalachians lived in poverty, 295 of 360 counties were categorized as "ligh poverty" (poverty rate > 1.5 times US average), and 223 of 360 counties were classified as "economically



FIGURE 1. Geographic subregions in Appalachia. Appalachian counties divided into five geographic subregions of relatively homogeneous characteristics (eg. topography, demographics, economics), Reproduced, with permission, from the Appalachian Regional Commission, November 2009.

distressed."^{1,a} By 2008, the poverty rate had declined to 18%, the number of "high poverty" counties had fallen to 116 of 410 counties, and 78 of 410 counties were classified as "distressed." Despite such improvement, however, Appalachian per capita personal income remains about 20% lower than the US average and the region has "fared far worse than the nation" during the recent recession.¹⁹

Significant economic disparities occur within the region. For example, incomes are relatively high in northern and southern Appalachia, but relatively low in central Appalachia. In 2008, per capita market income for the region overall was 75% of the US average, but only 51% in central Appalachia. Likewise, 57 of the 82 Appalachian counties classified as economically distressed in 2011 were located in the contiguous areas of three central Appalachian states: eastern Kentucky, northern Tennessee; and southern West Virginia. "A summarized by ARC, "the central Appalachian region in particular still battles economic distress, with concentrated areas of high poverty, unemployment, poor health, and severe educational disparities." Such economic disparities seem to parallel the characteristic Appalachian landscape: "counties classified by ARC as "distressed" tend to be the mountainous and isolated counties that most people consider to be Appalachia." As expected, poorer health status in Appalachia is associated with lower economic status. High rates of premature all-cause mortality, cardiac mortality, and cancer mortality have each been associated with low income, high poverty, high unemployment, and a

As expected, poorer health status in Appalachia is associated with lower economic status. High rates of premature all-cause mortality, acrdiac mortality, and cancer mortality have each been associated with low income, high poverty, high unemployment, and a high percentage of people without health insurance. Similar associations are found when counties are classified by economic status. As a group, economically distressed Appalachian counties had the highest mortality rates from heart disease and stroke. I Likewise, prevalence of diabetes increases as economic status declines. In 2007, the prevalence of diabetes was 13% in "economically distressed" Appalachian

counties, more than twice the 6% rate in Appalachian "economic attainment" counties; the corresponding national and regional rates were 8% and 10%, respectively.¹⁴

were 8% and 10%, respectively."

Education is also strongly linked with health status; limited education is regarded as a "precursor to poor health." 3-30.1 The region has long been characterized by "severe educational disparities," which persist in some areas. "In 2000, the proportion of adults without high school diplomas or equivalents exceeded the US average in 11 of the 13 Appalachian states, and the proportion of those with a college degree was substantially lower. While 24.4% of US adults had college degrees, only 17.7% of Appalachian adults and only 10.2% of those residing in economically distressed Appalachian counties were college graduates. 32-34 Only 18 of 410 Appalachian counties were college graduates of college graduates than the national average; most were the homes of large universities. In general, the counties with lowest educational attainment were "concentrated in central Appalachia, especially in the mining regions," where health status is seenerally worst. 3

were conege graunates. Only 18 of 410 Appatentan countes had a higher percentage of college graduates than the national average; most were the homes of large universities. In general, the counties with lowest educational attainment were "concentrated in central Appalachia, especially in the mining regions," where health status is generally worst. ²³
In addition, unhealthy behaviors are more common in the region than in the rest of the nation. ^{15,25,26} For example, Appalachian have a higher prevalence of lobacco use than does the US population. ²⁵ Five Appalachian states rank among the cight highest for smoking prevalence, ^{27,26} and smoking rates are higher in the Appalachian counties and Labor Market Areas of those five states. ^{4,35} High rates of smoking loster in central Appalachia, notably in eastern Kentucky and West Virginia where smoking rates are the nation's highest. ^{4,5,51} in those areas, high smoking rates coincide with the nation's highest lung cancer rates, with similar patterns seen for other tobacco-related cancers. ^{5,18,31}
Lack of physical exercise and poor eating habits are two other behaviors that adversely impact regional health. Compared with the 115 a-apparent of the property of the 15 a-apparent of the 15 a-apparent

Lack of physical exercise and poor eating habits are two other behaviors that adversely impact regional health. Compared with the US population, residents of southern and central Appalachia are less likely to engage in recommended levels of physical activity and more likely to have no physical activity during leisure time. 25.32 Residents of rural Appalachia are also more likely to consume less nutritious, more energy-dense diets, 16.32 Because inactivity and poor diet are risk factors for obesity, and because inactivity, poor diet, and obesity are all risk factors for diabetes, it is not surprising that obesity are diet, and diabetes are more prevalent in Appalachia. Likewise, physical inactivity, poor diet, and obesity are risk factors likely to contribute to the increased incidence of cancer in rural Appalachia. 36.313

Appaintens.

In 1997, the prevalence of obesity (body mass index >30kg/m²) in Appalachian counties ranged from 10.2% to 27.6% among men and 7.8% to 25.3% among momen. High rates of obesity clustered in eastern Kentucky, southern West Virginia, north-central Pennsylvania, and southeast Oftio. 34 In 2007, the highest prevalence rates of obesity and diabetes in the United States were mainly found in the Appalachian counties of West Virginia, eastern Kentucky, and northern Tennessee. 12

northern Tennessee. ¹²
Nevertheless, such risk factors, at least as measured by traditional epidemiologic variables, seem insufficient to fully explain the region's health disparities. For example, after accounting for a variety of covariates (eg., age, sex, race, education, income, smoking, obesity, and physical activity), residents of economically distressed counties in Appalachian had a statistically significant 33% greater risk of having diabetes than did residents of non-Appalachian counties; by contrast, risks did not differ between non-Appalachian counties and the Appalachian counties not classified as distressed. ¹⁴

[&]quot;According to ARC, a county is "economically distressed" if it ranks in the worst 10% of US counties for three-year average unemployment rate, per capita market income, and poverty rate. By contrast, a county has achieved "economic attainment" if it ranks in the best 10% of US counties. ⁷¹

^{*}The US Department of Labor defines Lahor Market Area (LMA) as "an economically integrated geographic area within which individuals can reside and find employment within a reasonable distance or can resultly change employment without changing their place of residence." In Appalachia, non-metropolitan LMAs size generally identical to ensulties."

Some of the health disparities not accounted for by the traditional risk factors may be attributed to the geographic isola-tion that characterizes rural Appalachia. Such isolation adversely impacts regional health status by creating logistical barriers to health care access and by limiting employment opportunities, thus contributing to poverty and lack of health insurance. For such reasons, residents of rural Appalachia generally utilize fewer preventive health services such as routine cancer screening. 26:35-36 Geventive health services such as routine cancer screening. 20,35-20 Go-graphic isolation, which leads to fewer local medical and other sup-port resources, is also a likely explanation for the increased unortality rates from coronary heart disease in rural versus metropolitan Ap-palachian communities. Other data suggest that rural Appalachians with cancer have less access to comprehensive diagnostic and treat-ment services. And by limiting access to health care services and producing physician shortages, the rural geography has seemingly caused an adverse impact on Appalachia's "diabetes problem." Of Cultural and social factors associated with residence in dis-tressed areas are also likely to adversely impact health. Factors sug-gested as relevant include "Appalachian cultural beliefs such as fa-talism," which reinforces poor health behaviors and discourages seeking of early health intervention and medicial advice. In addition, high rates of smoking lead to increased exposure to second-land

high rates of smoking lead to increased exposure to second-hand smoke. 14.18 Local social conditions also influence dietary habits, and thereby health. Rural Appalachin is distinguished by a relative lack of full-service grocery stores and fruit-and-vegetable markets; residents of such "food deserts" tend to shop in stores with fewer mutrifional choices and have less nutritious diets. 14,94,41,43

METHODS

Design

Design

This study retrospectively investigated all-cause mortality rates for residents of Appalachia during the years 2000 to 2004. Mortality and covariate data were obtained from publicly available databases. The time period considered and the data utilized were selected to allow for analyses that closely resembled those described in the WVU studies, M-18 Data were collected to represent the same time period (2000 to 2004) as much as possible given data availability, but the actual time periods corresponding to specific variables were not identical. Because the WVU analyses differed from study to study, we choose to incorporate the least complex of those afternative approaches for our basic model. The following discussions of Data and Analysis explain that process in detail.

Mortality

Mortality data were obtained from the Centers for Disease Control and Prevention. A Reported data described county-level mor-tality rates age adjusted to the 2000 US standard gopulation. We utilized all-cause mortality for all age groups.

Demographic Data

We obtained county-level demographic data from the 2005
Area Resource File. **The percent men population was calculated as
the arithmetic mean for the years 2000 to 2003. The percentages of
the population who were white, African American, Native American, non-white Hispanic, and Asian American were determined for the

Four measures of economic status have been associated with mortality rates in Appalachia: median household income; poverty rate; unemployment rate; and rate of health insurance. Each was considered in at least 1 of the 3 WVU analyses. We obtained countylevel economic data from the Area Resource File. 61 Median House-hold Income and Poverty Rate were determined as the arithmetic

means for the years 2000 to 2002. Unemployment Rate (persons aged >16 years) and Percent Uninsured were obtained for the year 2006.

County-level rates of bigh school graduates and college grad-uates were calculated using ARC data for the year 2000.⁵⁵ The number of persons with a high school diploma or higher (Percent High School Graduates), and the number of persons with a college diploma or higher (Percent College Graduates) were each divided by the number of persons aged 25 years or older.

Location

The location type of each county was characterized using the The location type of each country was characterized using the US Department of Agriculture (USDA) nine-point train-urbins classification scheme, which codes metropolitan and nonmetropolitan countries by degree of urbanization, adjacency to metro areas, and population size of urban areas. "(For example, "Code 1" = "counties in metro areas of 1 militon population or more", "Code 5" = counties with "urban population of 20,000 or more, not adjacent to a metro area", and "code 9" = counties that are "completely the rural or <2500 urban population, not adjacent to a metro area.")
We obtained county-specific rural-urban continuum codes from the
Area Resource File. 4 We divided the USDA rural-urban continuum codes into three categories: Metropolitan (codes 1 to 3), Micropolitan (codes 4 to 7), and Rural (codes 8 to 9).

Access to Health Care

Access to Health Care.

County-specific physician supply was used as a measure of access to health care. Data for the number of active medical doctors (MDs) and osteopathic doctors (DOs) per 1000 population were obtained from the Area Resource File. **I woo of the WVI studies used "number of active MDs and DOs per 1000 population," **I** whereas the third included "physician supply" not otherwise defined. **In our analyses, Physician Supply indicates the number of active MDs and DOs per 1000 population.

Rates of current smokers were obtained from the Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System (BRFSS)³⁶ supplemented with smoking rates available from state public health department Web sites. County-level data were available for 54 Appalachian counties, of which 9 were reported at the level of metropolitan statistical areas, For the other 366 counties, smoking rates were available as the means for each of 84 subgroups smoking rates were available as the means for each of as suggroups of contiguous counties. When available, we used rates averaged, for the years 2002 to 2004; otherwise, we used data for the year(s) closest to that time period. (Smoking data were available for the following years for each state: Alabama: 2009–10; Georgia: 2000–03; Kentucky: 2002–04; Maryland: 2000–02; Mississajpi; 2004; New York: 2003; North Carolina: 2002–04; Office: 2002; Pennsylvania: 2002–04; Swift Carolina: 2003–04; Al-Santagera 2005; Visinia: 2007. 04; South Carolina: 2002-04; Tennessee: 2005; Virginia: 2007; West Virginia: 2001-05.)

Obesity and Diabetes

We obtained county-level data for obesity and diabetes from the National Diabetes Surveillance System for the year 2004. A Obesity Rate indicates the proportion of adults aged 20 years or older with body mass index 30 kg/m² or more, Diabetes Rate indicates the proportion of adults aged 20 years or older with diagnosed

County-specific coal production data were obtained from the Energy Information Administration.** In our analyses, we divided

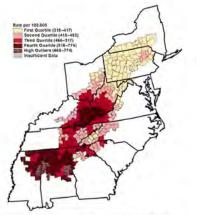


Figure 2. All-cause premature mortality (1995–2001).

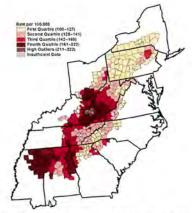


FIGURE 4. Heart disease premature mortality (1995–2001).

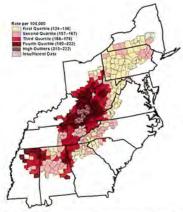


FIGURE 3. All-site cancer premature mortality (1995–2001).

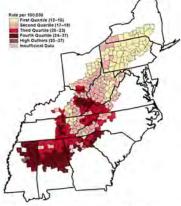


FIGURE 5. Stroke premature mortality (1995–2001).

FIGURES 2–5. Premature mortality in Appalachia (1995–2001). These four maps show the distribution of county-level premature mortality rates for 1995–2001, standardized to 2000 census. "High Outlier" identifies counties with death rates greater than the 75th percentile plus 1.5 times the interquartile range. Adapted from Halverson and Bischak³; reproduced, with permission, from the Appalachian Regional Commission.

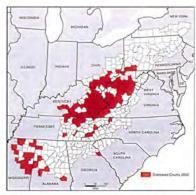


FIGURE 6. Appalachian Regional Commission—designated distressed counties (2002). A county is designated as "economically distressed" if it ranks in the worst 10% of US counties for 3-year average unemployment rate, per capita market income, and poverty rate. Reproduced, with permission, from the Appalachian Regional Commission, June 2002. Data sources: US Bureau of Labor Statistics, LAUS, 1997–1999; US Bureau of Economic Analysis, REIS, 1998; and US Census Bureau, STF3A, 1990.



FIGURE 8. High school completion rates in Appalachia (2000). County-level percentages of adults, 25 years and older, completing 12 years or more of school. Reproduced, with permission, from the Appalachian Regional Commission, October 2008. Data source: US Census Bureau, 2000 Census, SF3. Data classification scheme: Natural Breaks.



FIGURE 7. Poverty rates in Appalachia (2000). County-level ratios of the persons below poverty level to the total number of persons for whom poverty status has been determined. Reproduced, with permission, from the Appalachian Regional Commission, October 2008. Data source: US Census Bureau, 2000 Census, SF3. Data classification scheme: Natural Breaks.



FIGURE 9. Appalachian Regional Commission—designated distressed counties (2002) and coal-producing counties (2000–2004). Counties were designated as "coal producing" if any amount of coal was mined during 2000–2004. Reproduced, with permission, from the Appalachian Regional Commission, September 2011. Data sources: US Department of Energy, EIA, 2011; US Bureau of Labor Statistics, LAUS, 1997–1999; US Bureau of Economic Analysis, REIS, 1998; and US Census Bureau, STF3A, 1990.

Appalachian counties into two groups based on whether they produced coal during 2000 to 2004 and we also grouped coal-producing counties into those above (High) and below (Low) the median coal production level for Appalachian counties during that time

Analysis

Analysis

The data were analyzed using SAS 9.2 (SAS Institute, Cary, NC), 40 We conducted ordinary least square multiple linear regression with age-adjusted mortality as the dependent variable. Our basic regression model ("Basic Model") paralleled the WYU analyses, but we considered only the 420 Appalachian counties, and we did not include coal mining-related variables or the "dichotomous Southern variable", .. created to capture regional effects that partially overlap with Appalachia. "18 The model included the following independent variables: variables:

- Percent Men
 Race/Ethnicity Rates
- Poverty Rate
 Percent High School Graduates
 Percent College Graduates
 Rural-Urban Category

- Physician Supply
 Smoking Rate

Next, we added additional independent variables into the basic model and evaluated their explanatory power by means of partial F tests. Partial F tests are used to determine whether the addition of one or more variables to an already specified model significantly decreases the unexplained variance of the model. When that occurs, addition of the variable is said to have significantly improved the model's fit to the observed data. The partial F test is also known

and the state of the conserved mater in partial r lest is also known as Type 3 test for fixed effects when the addition of only one more variable is contemplated.

Additional variables were added one at a time to the Bosic Model, regression analyses were performed, and the results compared with the regression results for the Basic Model without that additional variable. If partial F tests indicated that inclusion of the sariable had to simplificantly improved model fit the variable. adoutonal variable led to significantly improved model fit, the variable was retained in an "Expanded Model." Alternatively, if including a variable did not significantly improve the model, it was excluded. This process was repeated using Expanded Models in place of the Basic Model, until all variables had been evaluated. The following is a list of the additional independent variables that were tested in this way, listed in the order in which they were added:

- · Median Household Income
- Unemployment Rate
 Percent Uninsured
- · Obesity Rate
- Dinbetes Rate
 Coal Mining (Yes/No)
- Coal Mining (High/Low/Nonn)

RESULTS

The results of ordinary least squares multiple linear regression analysis of the Basic Model are presented in Table 1. These findings indicate that higher age-adjusted all-cause mortality rate was independently related to Poverty Rate, Percent High School Gradiants, Rural-Urban Location, and Demographic variables including Sex and Race/Ethmicily rates. Mortality Rate was not significantly related to Percent College Graduates, Physician Supply, or Smoking

We then evaluated whether inclusion of additional variables would significantly reduce the unexplained variance of the Basic Model, thus improving its fit to the age-adjusted mortality data. Table 2 presents the results of this sequential testing, indicating F score, P value, and conclusions for each of the seven variables. Incluscore, P value, and conclusions for each of the seven variables. Inclusion of Median Household Income significantly improved the Basic Model (P < 0.0001) and it was returned in an "Expanded Model." Likewise. Obeavity Rate significantly improved the Expanded Model (P = 0.0022), and it was retained in a "Further Expanded Model" By contrast, no improvements resulted from the addition of Unemployment Rate (P = 0.8052), Percent Uninsured (P = 0.3036), Diabetes Rate (P = 0.3704). Coal Mining: Yes/No (P = 0.6003), or Coal Mining: High/Low/None (P = 0.1047), and they were excluded.

Table 3 presents the results of ordinary least squares multiple linear regression analysis of ordinary least squares multiple linear regression analysis of the Further Expanded Model. The variable Coal Mining: Yes/No has been included to demonstrate its lack of statistical significance when added to the model. These findings indicate that higher age-adjusted all-cause mortality rate was independently related to Powerfy Rate, Median Household Income, Percent High School Graduates, Rural-Urban Location, Obesity Rate, and Demographic variables including Sex and Race/Ethnicity rates. The relationship between Mortality Bate and Power College Ged. and Demographic variances including sex and Racez familiary rates. The relationship between Mortality Rate and Percent College Graduates was nearly significant (P = 0.0814), but Mortality Rate was not significantly related to Physician Supply, Smoking Rate, or Coal Mining: Yes/No.

We also performed regression analyses of the Further Es-panded Model after adding each of the excluded variables (Un-employment Rate, Percent Uninsured, Diabetes Rate, Coal Mining: Vis/No. and Coal Mining: High/Low/None). First, we added a variable and ran the model, and then we removed that variable and added the next variable and repeated the process so that all variables were individually tested. Then we included all variables in the model at one time (but only one of the Coal Mining variables was included at any time). Adding each or all of those excluded variables did not significantly change the model's parameter estimates or their P values (data not shown); hence, all inferences remained the same.

DISCUSSION

Appalachiant suffer disproportionately poorer health and sig-nificantly higher mortality rates than the rest of the nation.³⁻³ In general, the Appalachian counties with poorers health are also the most economically distressed, the least educated, and those with the most limited access to social and medical services. In ad-dition, residents of those counties demonstrate generally higher rates of risky behaviors, for example, higher amoking rates, more prevalent obesity, less physical activity, less nutritious diets, and less use of preventive health services. Notably, these often rural, isolated counties include many of the most productive cost-mining areas in Appalachia. Appalachia.

Earlier efforts to understand and address the sources of such health disparities have identified a number of independent risk fac-tors associated with specific health outcomes, but have not fully explained the disparities. Some have proposed that health disparities in Appalachia are due in part to factors "unique to each local area." A recent series of ecological studies has suggested that the presence of coal mining is such a "local" factor, which is independently related to age-adjusted mortality rates, although the nature of that

relationship is uncertain.

To better understand that relationship, we studied all-cause mortality rates for Appalachian residents during 2000 to 2004. Mortality and covariate data were selected to create a Basic Model that closely resembled the models employed in the UWV ecological stud-ies, but did not include coal mining. As seen in Table 1, the regression analysis of that Basic Model indicated that increased mortality rate was significantly associated with greater poverty, lesser educati

TABLE 1. Basic Model: Ordinary Least Squares Multiple Linear Regression Model; Age-Adjusted All-Causes Mortality Rate

Data Category	Basic Model						
	Variable	Coefficient	SE	P			
	Intercept	5179.71	1101:18	< 0.0001			
Economic status	Poverty Rates	7,99	1.28	< 0.0001			
Education	Percent High School	-497.87	87.92	< 0.000.			
	Percent Collège	-174.43	117.46	0.1383			
Location	Rural-Urban Category	- 30,54	5,97	< 0.000.			
Access to health care	MDs and DOs per 1000	2.56	2.61	0,3285			
Smoking	Smoking Rate	90.51	100,38	0,3688			
Demographics	Percent Men	- 805.75	320,29	0,012			
	Percent White	-35.49	11,00	0.001			
	Percent Black	- 35.67	10.98	0.001			
	Percent Asian	-41.35	14.71	0.005			
	Percent Native American	- 33.70	11.94	0.005			
	Percent Latin	-20.48	6.72	0.002			

Bold and Italicized (indicates statistically significant variables, DO, osteopathic doctor; MD, medical doctor.

TABLE 2. Explanatory Power of Additional Independent Variables, With Sequential Addition of Significant Variables to the Basic Model, as Evaluated Using Partial F Test

Comparisons	Numerator df	Denominator df	P Seure	P	Conclusion	
(1), Basic Model						
(1) ys (2) [Basic Model + Income]	- 1	406	15,220.	0.0001	Retain income in model	
(2) vs (3) [Basic Model + Income + Unemployment Rate)	SA.	405	0.165	0,6852	Unemployment Rate does not improve model Exclude	
(2) vs (4) [Basic + Income + Percent Uninsured]	Y	405	1.965	0.3036	Percent Uninsured does not improve model: Exclude	
(2) vs (5) [Basic + Income + Obesity]		405	9.483	0.0022	Retain Obesity in model	
(5) vs (6) [Busic + Income + Obesity + Diabetes]		404	0.804	0.3704	Diabetes Rate does not improve model; Exclusion	
(5) vs (7) [Basic + Incume + Obesity + Mining (Yes/No)]	Ж.	404	0.275	0.6003	Mining (Yes/No) does not improve model; Exclude	
(5) vs (8) [Basic + Income + Obesity + Mining (High/Low/None)]	2.	403	2,269	0.1047	Mining (High/Low/None) does not improve model; Exclude	

attainment, rural location, and demographic factors including sex and ruce. No significant associations were seen for smoking or physician

supply.

We then expanded that Basic Model, First, we considered the We then expanded that Basic Model, First, we considered the inclusion of three additional economic measures (Median Household Income, Percent Uneraployed, and Percent Uninsured) as independent variables. Those three measures, along with Poverty Rate, are generally correlated, but they are nonidentical and reflect different aspects of socioeconomic status and economic distress. 5:35:33. All four have been independently associated with Appalachian mortality rates. 5:17 WVU model did not include Median Household Income, Percent Unemployed, or Percent Uninsured. Uninsured.
The inclusion of Median Household Income significantly im-

proved the model's fit to the observed data and it was included in an Expanded Model. By contrast, neither of the two other economic variables significantly reduced the unexplained variance of the Ex-

panded Model (ie, Basic Model plus Median Household Income); hence, neither was retained in the model.

We next considered whether adding Obesity Rate and Dusbetes Rate would improve the Expanded Model's explanatory power. Both are important risk factors for mortality. The World Health Organization has determined that "overweight and obesity" is the fifth leading risk factor for deaths worldwide. ** and Centers for Disease Control and Prevention recognizes diabetes as the seventh leading cause of death in the United States. ** Obesity is also seen as a more important risk factor for chronic disease than either smoking or poverty. **5.7* Neither Obesity Rate nor Diabetes Rate was included in the WVU analytical models.

In our analyses, aidition of Obesity Rate significantly improved the Expanded Model and it was retained in a Further Expanded Model (ie, Basic Model plus Median Household Income plus Obesity Rate). By contrast, adding Diabetes Rate to that model yielded no significant improvement and it was excluded.

TABLE 3. Further Expanded Model: Ordinary Least Squares Multiple Linear Regression Model; Age-Adjusted All-Causes Mortality Rate. Coal Mining (Yes/NO) Has Been Included for Demonstration Purposes, but Is Not a Component of the Model

Data Category	Varjuble	Coefficient	SE.	P
	Intercept	4977.06	1076.63	< 0.0001
Economic status	Paverty Rates	10.96	1.90	<0.0001
	Median Household Income (per 51000)	4.86	1.27	0.0001
Education.	Percent High School	- 510.44	90.52	< 0.0001
	Percent College	- 222,60	127.42	0.0814
Location	Rural-Urban Category	-20.55	6.17	0.0010
Access to health care	MDs and DOs per 1000	2.98	2.59	0.2500
Smoking	Smoking Rate	52.67	98.61	0,5935
Obesity and diabetes	Obesity Rate	5.96	1.97	0.0027
Demographics	Percent Men	- 931.40	316.61	0.0035
	Percent White	-36.39	10.74	0.0008
	Percent Black	- 37.23	10.71	0.0006
	Percent Asian	- 41.38	14,38	0.0042
	Percent Native American	-35.06	11.65	0.0028
	Percent Lutin	-21.96	6.56	0.0009
Coal mining	Coal Mining (Yes/No)	4.68	8.92	0.6003

Bold and italicated indicates statistically agnificant variables.

Finally, we considered the effects of including either of the two measures of cont mining in the Further Expanded Model. Neither Coal Mining: Yes/No nor Coal Mining: High/Low/None significantly improved the explanatory power of the model. The findings of this analytical model argue that coal mining is not per se an independent risk factor for increased mortality in Appalachia. By contrast, we found that increased mortality was significantly associated with greater powerly, lower median household income, fewer high school graduates, rural location, obesity rate, and demographic factors including sex and race. Lower college graduate rate was nearly significant. Moreover, we found no significant associations for smoking, physician supply, and diabetes.

It seems surprising that smoking rate was not significantly associated with mortality, given that smoking causes about 20% of US deaths, 85 but similar results were reported in WVU studies, 16-3. This is likely due to limitations of the available data. BRFSS determines current smoking status, not quantity or duration (The relevant BRFSS questions are "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke digarettes every day, some days, or not at alt?. "58, thus BRFSS data do not capture the substantial dose-response gradient linking smoking and mortality." Also, smoking data were available for only 54 of 420 individual Appalachian counties; for the other 366 counties, the available smoking rate were mean values calculated for each of 84 subgroups of configuous counties. Thus, Smoking Rate is almost certainly biased by non-differential misclassification, a particular concern in light of evidence that smoking rates are increased in coal-mining areas. 57-18-37. To the extent that such misclassification "biases toward the nuil", the link between smoking and mortality would be differentially reduced in high-smoking counties. The available data are not adequate to evaluate whether smoking might act synergistically with other environmental nollutants.

to evaluate whether smoking might act synergistically with other environmental pollutants. Likewise, we were surprised that Diabetes Rate failed to improve the model, but this is likely explained by two factors. First, obesity is a critical risk factor for diabetes and the two are well correlated. Risk of diabetes, for example, was increased up to 11fold in Medicare recipients with a history of midlife obesity. In Thus Diabetes Rate may add little explanatory value not associated with Obesity Rate. Second, BRFSS self-reported diabetes status is likely to misclassify a substantial proportion of the population because more than 27% of adults with diabetes in the United States have "undiagnosed diabetes." Such misclassification would likely have greatest impact in the economically distressed Appalachion counties where reported diabetes rates are generally higher and utilization of preventive services generally lower than in other counties. Thus, in those counties apparent associations between diabetes and mortality are probably understated.

Lack of a significant association between Physician Supply

Lack of a significant association between Physician Supply and mortality rate is also notable. One explanation is that the number of physicians is "just one factor within complex environments," which include other health care workers and a variety of health care delivery systems: "Higher physician supply per se does not amount to better access, quality, or outcomes." Some studies report that an increased supply of primary care physicians, but not specialists is associated with reduced mortality. Reanalysis of their data, however, suggested that benefits were region-clustered and less likely to occur in rural populations. Set Finally, there is no standard approach to quantifying the supply of primary care providers using secondary data sate; it is fikely that some specialists will be misclassifted, while nurse practitioners and physician assistants are

ignored. We doubt that the differences between our findings and those of the WVU studies are due to the ways in which covariates were selected and defined. We chose time periods, variables, and data to closely resemble those studies. In three cases, the WVU studies are mompletely or inconsistently defined their covariates. In those cases, we chose the least complex alternative for our model; thus, we used covariates that were similar, but not necessarily identical. For example, the WVU studies defined Physician Supply as the number of active MDs and DOs per 1000 population. Some results were also reported for "primary care physicians," a category not specifically contained in the 2005 Area Resource File and

no explanation was given as to how "primary care physicians" was defined. We defined Physician Supply as the number of active MDs and DOs per 1000 population; we did not differentiate "primary care

physicians."

A second case involves the rural-urban continuum. Two WVU studies included the nine-point USDA continuum scale, ^{16,17} while the third study, cling concerns for nonlinearity, recoded the scale into three categories ("metropolitan," "and "rural"). Nevertheless, that study did not actually define the categories, To understand how these categories were structured, we reviewed other studies by those researchers who included the USDA scale, but found the scale used in still other ways. One study defined only two categories, "metropolitam" (codes 1 to 3) and "nonmetropolitan" (codes 1 to 3) and "nonmetropolitan" as causivalent terms: "The terms sural and nonmetropolitan" as causivalent terms: "The terms sural and nonmetropolitan" tan' (codes 4 to 9), our men treatee rural and nonmetropout-tan' as equivalent terms: "The terms rural and nonmetropolitan will be used interchangeably in this study." A second study coded "metropolitan" stutus as a "five-level variable," but no further details were provided. A third. included "rural-urban setting" as a cowere provided." A find "included "rural-urran setting" as a co-variate that was not defined. Our analyses included three explicitly defined categories that seem consistent with the USDA scheme and the least complex of the WVU approaches. ¹⁸ The third case involves coal mining. The WVU studies each defined different coal-mining categories. One defined coal-mining areas as "counties with any amount of coal mining" during 1994 to

2005; some analyses also grouped coal-mining counties into those above and below the median production level. A second study defined three groups of counties based on total 2000 to 2004 coal production: more than 3 million tons; less than 3 million tons; and no production. ¹⁶ For some analyses, counties with more that 3 million tons of production were compared with all other counties combined and "per capita coal production" (calculated relative to the 2000 per capina coan production. (calculated relative to the 2000 census) was also included in those analysis. The third study also defined three groups of counties on the basis of total 2000 to 2004 coal production, but groups were defined differently: more than 4 million tons; less than 4 million tons; and no production. Tour approach was similar to the first of those WVU studies, but we approach was similar to the first of those WVU studies, but we considered the time span considered in the latter two studies. Our analysis divided counties into two groups based on whether any amount of coal was mined during 2000 to 2004, and coal-producing counties were further grouped into those above and below the median production level for Appalachian counties during that time period.

Our Expanded Model indicates that coal mining is not per se

the cause of increased mortality in rural Appalachia. On the contrary, our results underscore the substantial economic and cultural disadvantages that adversely impact the health of many area residents. Particularly in the cost-mining areas of central Appalachia, there is a potent combination of greater economic distress, lesser educational attainment, decreased access to health care, limited availability of nutritious foods, higher rates of behavior-related risks such as obesity and smoking, and decreased use of preventive health services. The conjunction of such factors and their adverse effects can be seen by comparing Figs. 2 to 5, which show the geographical distributions of various county-level mortality rates, and Figs. 6 to 9, which show the

various county-level mortality rates, and rigs, 6 to 9, which show the distributions of county-level poverty rate, economic distress, percent high school gruduates, and coal mining.

Such overlapping risk factors and mortality rates illustrate how difficult it can be to disentangle the effects of the cultural environment from those of the physical environment, a difficulty made greater because the two interact. For example, the physical relation of the resourcement and treating that the experience. cal isolation of the mountainous counties that characterize rural cal isolation of the monthalmost confines that characterize trial Appalachia poses barriers to industrial diversification and broaden-ing of employment options, and also contributes to lower incomes, reduced access to health care services, reduced availability of nutri-tious foods, and so forth. 14.25 The interplay of geographical isola-tion, kinship, and health-related behaviors further complicates mat-ters. Rural Appalachia is distinguished by tight-kait social networks,

"cohesive, extended, and geographically connected" kinships, which often extend beyond biological families. 15.69 Such networks can exert significant influence on the behaviors and health of their individual members, as recently documented in the Framingham Study. In that members, as recently documented in the Framingham Study, in that well-studied New England community, risks of becoming obese (ie, the "induction and person-to-person spread of obesity") were pre-dicted by the closeness of social relationships, not by "common ex-posure to the local environment." Thus, the physical environment (og. geographical isolation) can foster cultural practices (eg. fight-knit kinships) that promote adverse health outcomes (eg. obesity).

Accordingly, coal mining in Appalachia, an industrial activity associated with rural, mountainous areas, is likely to be geographically associated with a variety of economic and cultural health risk factors. And, for similar reasons, mining is also likely to be geo-graphically associated with a variety of adverse health outcomes. Although our results indicate that mining is not the direct cause of those outcomes, they do not rule out the possibility that mining contributes to the development of the social environments and cultural practices that adversely impact health. This possibility seems most likely in those specific areas where mining is the principal industry. Likewise, our analyses do not rule out the possibility that some spe-cific mining methods may have greater adverse effects than others on the physical environment. Ultimately, the issue of greatest concern is that Appalachians

suffer disproportionately poor health and increased risks of adverse health outcomes compared with the rest of the nation.³ During the past 50 years, ARC and others have overseen substantial improvements in the well-being of regional residents. Nevertheless, signif-icant shortfalls persist. To eliminate health-related disparities, sub-stantial efforts must be directed at the region's underlying economic and social disparities. To the extent that coal mining is a factor in defining the cultural fabric and socioeconomic environment of Appalachian communities, the coal-mining industry must play a role in efforts to increase economic diversity, develop job-creation programs, ensure access to appropriate heath care services, improve educational opportunities, and facilitate access to nutritious foods

REFERENCES

- www.are.gov/inpolachian_region/TheAppalichianRegion.asp. Accessed August 2011.

 Appalachian Regional Commission. ARC History. Washington, DC: Appalachian Regional Commission. ARC History. Washington, DC: Appalachian Regional Commission. ARC History. Washington, DC: Appalachian Regional Commission. Hope of the history of the history of the history. Access to Health Care in the Appalachian Region. Washington, DC: Appalachian Regional Commission; 2004. Available at: http://www.arc.gov/researchia. Regional Commission; 2004. Available at: http://www.arc.gov/researchia. Regional Commission; 2008. Available at: http://www.arc.gov/researchia. History of the history

- norm, 2011;47:1002-1015.
 Barnett E, Halverson JA, Elmes GA, Braham VE. Metropolitian and non-metropolitian trends in coronary heart disease mortality within Appalachia, 1980–1997. Ann Epidemial, 2000;10:370–379.
- Wingo PA, Tucker TC, Jamison PM, et al. Cancer in Appalachia, 2001–2003. Concer. 2008;112:181–192.
- Huang B, Wyatt SW, Tucker TC, Botteroff D, Lengerich E, Hall MI. Canzer death rates—Appstachia, 1994–1998, MMPR, 2002;51:527–539.

- Mulverson JA, Barnett E, Carper M. Geographic disparities in heart disease and stroke mortality among black and white populations in the Appalachian region. Ethnicity Dis. 2002;12;83–82–91.
- Gregg EW, Kirtland KA, Cadwell BL, et al. Estimated county-level prevalence of diabetee and obesity—United States, 2007. Morbid Mortal Week Rep. 2009;38:1259–1265.
- Barker LE, Kirtland KA, Gregg EW, Geiss LS, Thampsim TJ. Geographic distribution of diagnosed diabetes in the US. A diabetes belt. Atm. J Proc Med. 2011:40:434-439.
- Barker L, Crespo R, Gerzoff RB, Denham S, Shrewsberry M, Cornelius-Averhart D. Residence in a distressed county in Appalachia as a risk factor for diabetes, Behavioral Risk Factor Surveillance System, 2006–2007. Prev Chronic Da. 2010;7:A104.
- Lengerich EJ, Bohland JK, Brown PK, et al. Images of Appalachia. Free Chronic Dis. 2006;3:A112.
- Hendryx M, Ahern MM. Mortality in Appalachian coal mining regions: the value of statistical life loat. Pub Health Rep. 2009;124:541

 –550.
- Hendryx M, Mortality from heart, respiratory, and kidney disease in coal-mining areas of Appalachia. Int Arch Occup Environ Health. 2009;82:243—
- Hendrya M, O'Donnell K, Born K. Lung cancer mortality is elevated in conl-mining areas of Appalachia. Lung Cancer. 2008;62:1–7.
 Appalachian Regional Countisision. Economic Overview of Appalachia—2010. 2011. Available at: http://www.nar.goy/minage/appregion/faiallit/Economic/Overview-1–28-11.pdf. Accessed August 2011.
 Wakelby MA, Jatulis DE, Frank E, Fortmann SP. Socioeconomic antus and health: how education, income, and occupation contribute to risk factors for cardiovascular disease. Am J Pub Health. 1992;82:816–820.
- Feinstein L, Sabates R, Anderson TM, Sorbaindo A, Hammond C, What are the Effects of Education on Health' Measuring the Effects of Education on Health and Civic Engagement. Proceedings of the Copenhage Symposium. Paris, France: Organisation for Economic Co-operation and Development: 2006;173-206. Health and Civ Paris, France 2006:171-354.
- U.S. Census Bureau. Statistical Abstract of the United States: 2011. Washington, DC: U.S. Department of Commerce; 2011.
- Haaga J. Demographic and Socioeconomic Change in Appalachia. Washington, DC: Population Reference Bureau; 2004.
- U.S. Census Bureno. Educational Attainment in the United States: 2003. Washington, DC: U.S. Department of Commerce; 2004.
- Washington, M.C. U.S. Department of Commencer, 2004.
 Wewers ME, Katz M, Fickle D, Paskett BD, Risky behaviors among Ohio Appalachian adulta. Prev Chronic Dis. 2006;3:1–8.
 26. Appalachian Community Cancer Network: The Cancer Burden in Appalachia, 2009. Lexington, KY: Appalachian Community Cancer Network, 2009. Available at: http://www.accenveb.com/docs/2009/CancerBurden/Appalachia
 2009.pdf. Accessed August 2011.
- Dube SR, McClave A, James C, et al. Vital signs: current cigarette smoking among adults aged = or = 18 years—United States, 2009. MAWR. Mach Mortal Why. Rep. 2010;59:1135–1140.
- Centers for Disease Control and Prevention. Behavioral Risk Factor Survey lance System Survey Data. Atlants, GA: U.S. Department of Health and Hi man Services; 2011. Available at: http://apps.neod.ede.gov/brfss/. Accesse August 17.
- Danaei G, Friedman AB, Ozz S, Murray CJ, Ezzati M. Diubetes prevalence and diagnosis in US states: analysis of bealth surveys. Popul Health Metr. and diagnosis in US sta 2009,7:16.
- Hampton JW, Friedell GH, Cancer surveillance. A problem for Native American and Appalachian populations. Cameer. 2001;91:242–246.
 Hopenbayn C, King JB, Christian A, Huang B, Christian WJ. Variability of cervical cancer rates across 3 Appalachimi states, 1998–2003. Concer. 2008;113(espee) 107;2974–2980.
- Centers, for Disease Control and Preventium, Physical Activity Statistics, Alliants, GA: U.S. Department of Health and Human Services, 2011. Available at: http://www.cdc.gov/ncciphip/dnpa/physical/stats/index.htm. Accessed Autoust 2011. gust 2011
- Renchan AG, Tyson M, Egger M, Heller RF, Zwahlen M. Body-mass and incidence of capeer: a systematic review and meta-analysis of prospe observational studies. *Lancet*. 2008;371:569–578.
- Halversen JA, Harner J, Hanham R, Ma L, Braham V. Obesity in Appalochia. An Allas of Geographic Disparities. West Virginia, WV: West Virginia University, 2004.
- Vanderpool RC, Huang B. Cancer risk perceptions, beliefs, and physician avoidance in Appalachus results from the 2008 HINTS Survey. J. Health Commun. 2010;15(suppl.3):78-91.

- Lyttle NK, Shalelman K. Assessing awareness and knowledge of beast and cervical cancer among Appalachian warmen. Proc Chronic Dis. 2006;3:A125.
 Available at: http://www.otic.gov/pcd/issoes/2006/. Accessed August 2011.
- Hall HI, Uhler RJ, Coughlin SS, Miller DS. Breast and cervical cances screening among Appelachum worsen. Cancer Epidemiol Biomarkers Press screening among / 2002;11:137-142.
- Relier PL. Appellachtan Self-Identity, Cervical Cancer Screening, and Rubes Sexual Behavior Annual Biomen in Ohio Appalachia, Columbus, OH: Ohio State University; 2008. Available at: http://etchiolink.edu/ vieweg/face_numvous12/1095858; Accessed August 2011.
- Lengerich EJ, Tucker TC, Powell RK, et al. Canter incidence in Kentucky Pennsylvania, and West Virginia: disparities in Appalachia. J Rural Health. 2005;21:39-47.
- Pollard C, Bailey KA, Petitte T, Baus A, Swim M, Hendryx M. Electronic patient registries improve diabetes care and clinical outcomes in rinal com-munity health centers. J Rural Health. 2009;25:77–84.
- Ecanomic Research Service, Report to Congress: Acoust to Affordable and Municious Food. Washington, Dc. US Department of Agriculture, 2009.
 Williams KJ, Taylor CA, Wolf KN, Lawson RF, Crespo R. Collunal perceptions of healthy weight in rural Appalachear youth, Mund Remote Health, 2008;8:1–17.
- Centers for Disease Control and Prevention. Compressed Martality. 1999–2007. Atlanta, GA: U.S. Department of Health and Human Services: 2010. Available at: http://wonder.cci.ego//emf-icdf U.html. Accessed August 2011.
 Health Resources and Services Administration. 2005 Aver Resource Fife. Back-ville, MD: U.S. Department of Health and Human Services; 2006.
 Association Pages of Control Development.
- Appalachian Regional Commission. Data Reports. Washington, DC: Appalachian Regional Commission; 2011. Available at: http://www.arc.gov/data. Accessed August 2011.
- Economic Research Service, Measuring Rurality, Rural-Urban Continuum Coles, Washington, DC: U.S. Department of Agriculture, 2004. Available at: http://www.ers.usda.gov/briefing/rurality/irmalurbcon/. Accessed August 2011.
- Centers for Disease Control and Prevention, Dtuberer Data & Trends, Atlanta, GA: U.S. Department of Health and Human Services; 2011, Available at http://apps.newl.ede.gov/DDTSTRS/default.aspx. Accessed August 2011.
- Energy Information Administration. Annual Coal Reports. Washington, DC: U.S. Department of Energy; 2011. Available at: http://www.eia.gov/eneal/ coal/page/ar/backsisses.html. Accessed August 2011.
 SAS Institute; 2010.
- Chow GC. Tests of equality between sets of coefficients in two linear regres-sions. Econometrica. 1960;28:591–605.
- Thompson EC, Berger MC, Allen SN, Roenket JM. A Study on the Current Economic Impacts of the Appalaction Coal Industry and its Future on the Re-gion. Lexington, KY: Center for Business and Economic Research. University of Kettucky; 2001.
- Adler NE, Ostrove JM. Socioeconomic status and health: what we know and what we don't. Ann NY Acad Sci. 1999;896:3-15.
- DeNavas-Wall C, Proctor BD, Smilis JC, Income. Proverse and Health In-amuree Coverage in the United States: 2009 [U.S. Comous Burean, Current Population Reports, P601–238]. Washington, DC. U.S. Government Printing Diffice. 2010. Population R Office, 2010.
- World Health Organization. Obusity and Overseight. 2011. Available at: http://www.wio.int/mediacentre/factsheets/fa311/en. Accessed August 2011.
- Xu I, Knchanek KD, Murphy SL, Tejada-Vera B. Deaths: Finel Data for 2007. National Vital Statistics Reports (vol. 58, no. 19). Hyattaville, MD: National Ceoter for Health Statistics, 2010.

- Cevier for Health Stanstice, 2010.

 56. Sturm R, Wells KR. Does obesity contribute as much in murbidity as poverty or anoking. Public Health, 2001;115:229–235.

 57. Schulte PA, Wagner GR, Ostry A, et al. Work, obesity, and occupational safety and health. and Publi Health, 2001;715:229–346.

 58. U.S. Oepartiment of Health and Haman Services. How Tolucco Smoke Content Disease: The Billingia and Behavioral Blantife Smaking-Institute Disease: A Report of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention, 2010.

 59. Hendryx M. Poverty and nortality dispatities in Central Appalachia: mountaintenmining and environmental justice. J Health Disp Res Proct. 2011;4:144–53.
- 33.;
 60. Thun MJ, Myers DG, Day-Lally C, et al. Age and the Exposure-Response Relationships Between Cigarene Smoking and Prymanure Death in Con-cer Prevention Study II. Changes in Cigarent-Helsted Disease Risks and Their Implications for Prevention and Control: Smoking and Tobacco.

- Control Monograph No. 8. (kHH Pub. No. 97-4213). Bethesda, MD: National Cancer Institute, 1997-285-413.

 Yun LL, Daviglus ML, Liu K, et al. Midlife body mass index and hospitalization and normality in older age. Jul Midd Jasov. 2006;295;190-198.

 Centers for Disease Control and Prevention. National Disabsters Fast Bisect. 2011. Atlanta (A. U.S. Department of Health and Human Services, 2011.

 Available at: http://www.cod.gov/diabsterlpubs/factabeer11.htm. Accessed August 2011.

 Coodman DC, Grumbach K. Does having more physicians lead to better health system performance. J alm Med Assov. 2009;29-335-337.

 Stasfield B, Sbi L, Grover A, Macinko J. The effects of specialist supply no population health: assessing the evidence. Health Myl Millimord. 2005;5uppl Web (Jas-Itan):Ws-97-Ws-107.

 Coodman DC, Grumbach K. Does having more physicians supply does region hold the key to the paradacy Physician Stephyl of Section 10. Configured Assertion of the Stephyl Med Jasov. 2007;42:2333-2251.

 Configured Tables of Section 11. Configured Assertion Physician Stephyl of Section 11. Configured Assertion Physician Stephyl of Section 11. Configured Assertion Physician Stephyl on population health: assessing the evidence. Health Myl Millimord. 2005;5uppl Web (Jas-Itan):Ws-97-Ws-107.

 Configured Tables of Section 11. Configured Assertion Physician Stephyl on population health: assessing the evidence. Health Aging Configured Assertion Physician Stephyl on population health: assessing the evidence of the Section Physician Stephyl on population health: assessing the evidence of the Section Physician Stephyl on population health: assessing the evidence of the Section Physician Stephyl on population health: assessing the evidence of the Section Physician Stephyl on population health: assessing the evidence of the Section Physician Stephyl on population health: assessing the evidence of the Section Physician Stephyl on Physician Physician Stephyl on Physician Stephyl on Physician Physician Stephyl on Physician Stephyl (Section Physician St monal cancer Institute, 1997/353–413.
 61. Yan L.D, Daviglian ML, Link, et al. Middlife body mass index and bospitalization and mortality in older age, J-hn Med Assoc, 2006/285:190–198.
 62. Centers for Disease Control and Prevention. National Diabetes Fact Sweet. 2011. Alatina, GA: U.S. Depiationer of Health and Human Services, 2011. Available at: http://www.cdc.gov/diabetes/pubs/factiheet11.htm. Accessed August 2011. 2011. Allana, GA. U.S. Deplartment of Health and Human Services. 2011. Available at http://www.cdc.gov/diableterplu/pdf-fetablert1.htm. Accessed August 2011.
 3. Goodman DC, Grumhach K. Does having niwe physicians lend to better health system performance. J Am Med Assur. 2008;299:335-337.
 4. Starfield B, Shi L, Grover A, Macinku J. The effects of specialist assurely on populations' health: assessing the evidence. Health Aff (Millivous). 2005;50(p) Web (Jan-Juni-WS)-7W-S-107.
 5. Ricketts TC, Holmes GM, Murtality and physician supply: does region hold the key to the pundant? Health Serv Res. 2007;42:2233–2251.
 6.6 Mendrys M, Fedorko E, Halstenson J, Folliston sources and mortality vitea across rural-urban areas in the United States. J Roual Health. 2019;26:383–391.

- Bireau of Labor Statusurs. Lobor Market Areas, 3011. Washington, DC. U.S. Department of Labor, 2011. Available at: http://www.bls.gov/lau/imadic.pdf Accessed August 2011.

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LIST OF DOCUMENTS SUBMITTED FOR THE RECORD RETAINED IN THE COMMITTEE'S OFFICIAL FILES

List of Permit Violations from the West Virginia Department of Environmental Protection Web site specifically for Keystone Industries

Memorandum of Understanding between the Office of Surface Mining Reclamation and Enforcement and State of Alabama Surface Mining Commission for EIS activities under NEPA for Stream Protection rulemaking—August 25, 2010

Letters to Director Joseph Pizarchik from states terminating the MOU with participation as a "cooperating agency"

- —Alabama—February 10, 2015 (See page 17 for a copy of this letter, submitted as part of Mr. Johnson's testimony)
- —Indiana—July 7, 2015
- Kentucky—May 13, 2015
- -Montana-July 9, 2015
- New Mexico—February 20, 2015
- —Texas—March 12, 2015
- —Utah—February 23, 2015
- —West Virginia—May 19, 2015
- Wyoming—May 22, 2015

Other Articles Relating to Impacts of Mountaintop Mining

The Influence of Misclassification Bias on the Reported Rates of Congenital Anomalies on the Birth Certificates for West Virginia—A Consequence of an Open-ended Query. Ji Li, Shayhan Robbins, and Steven H. Lamm. Birth Defects Research (Part A): Clinical and Molecular Teratology 97:140–151 (2013).

- —Are Residents of Mountain-Top Mining Counties More Likely to Have Infants with Birth Defects? The West Virginia Experience. Steven H. Lamm, Ji Li, Shayhan A. Robbins, Elisabeth Dissen, Rusan Chen, and Manning Feinleib. Wiley Periodicals, Inc. (November 12, 2014).
- —Study finds toxins from mountaintop coal mining sites. Alice Su. *The Center for Public Integrity* (July 20, 2012).
- —The association between mountaintop mining and birth defects among live births in central Appalachia, 1996–2003. Melissa M. Ahern, Michael Hendryx, Jamison Conley, Evan Fedorko, Alan Ducatman, and Keith J. Zullig. *Environmental Research* (May 19, 2011).