Clean Coal Technologies Work

Sources: USDA 2011, EIA 2012, NETL 2011
Cost Per kWh & Percent of Coal Power Sector Generation

¢ = average retail price per kilowatt hour, 2013
%
= percent of total generation from coal, 2013
U.S. Average – 10.08¢/kWh, 40% of power sector generation, 2013

The U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) have released a proposed rule to revise the definition of “waters of the United States” (WOTUS) for all Clean Water Act (CWA) programs. **H.R. 594, “Waters of the United States Regulatory Overreach Protection Act of 2015”** addresses concerns and uncertainties caused by the proposed rule (“Definition of Waters of the United States’ Under the Clean Water Act” (79 Fed. Reg. 22188, April 21, 2014)

**Proposed WOTUS Rule Is Substantially Flawed**
Despite agencies’ assertions, the proposed rule contains many of the same flaws as the leaked, draft proposed rule that so concerned stakeholders and the public.

**Broader in Scope:** But the proposed rule provides essentially no limit to CWA federal jurisdiction. It establishes broader definitions of existing regulatory categories, such as tributaries, and regulates new areas that are not jurisdictional under current regulations, such as adjacent non-wetlands, riparian areas, and floodplains.

**Inconsistent With Supreme Court Precedent:** The Supreme Court has made clear that there is a limit to federal jurisdiction under the CWA, specifically rejecting the notion than any hydrological connection is a sufficient basis to trump state jurisdiction. The proposed rule will extend coverage to many features that are remote and/or carry only minor volumes, and its provisions provide no meaningful limit to federal jurisdiction.

**Adversely Affects Jobs and Economic Growth:** The proposed rule will subject more activities to CWA permitting requirements, NEPA analyses, mitigation requirements, and citizen suits challenging the applications of new terms and provisions. Many sectors of the economy will be adversely effected, and have been largely dismissed by the agencies and EPA’s highly flawed economic analysis. The agencies also do not adequately address the effect on state and federal resources for permitting, oversight, and enforcement.

**Fails to Provide Reasonable Clarity:** The proposed rule leaves many key concepts unclear, undefined, or subject to agency discretion. The proposed rule leaves to the agencies’ “best professional judgment”, which results in vague definitions and concepts that do not provide the intended regulatory certainty and will likely result in litigation over perceived definitions.

Concerns with the Interpretative Rule: Critical problems and questions with the EPA’s approach include: (1) activities are only exempt from permitting when conducted consistent with NRCS guidelines; (2) who will inspect and enforce compliance with NRCS guidelines; (3) will third parties have the ability to challenge exempt status; (4) concern with EPA involvement in NRCS programs through development of the Memorandum of Agreement that has yet to be developed; (5) is this an interpretative or a legislative rule under the Administrative Procedure Act.

**Congressional Action**
WMC urges support of H.R. 594, by Representative Gosar et al. It is anticipated there will be similar legislation proposed in the Senate.

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Greater Sage-Grouse Conservation Measures

The Bureau of Land Management (BLM) and the U.S. Forest Service (USFS) draft Land Use Plan Amendments (LUPA)/draft Environmental Impact Statements (EIS) Preferred Alternatives in Nevada, Idaho, Utah, Montana and Wyoming endorse land use restrictions and prohibitions that will severely impede and even prohibit a wide range of responsible uses of nearly 60 million acres of public lands with sage-grouse habitat in 11 western states. The preferred alternatives are not based on the best available science and commercial data. BLM continues to rely on *A Report on National Greater Sage-Grouse Conservation Measures* released on December 21, 2011 from the Sage-Grouse National Technical Team (NTT Report) despite at least two independent studies that demonstrate it is based on flawed science, methodological bias and a lack of reproducibility; mischaracterizes previous research; contains substantial errors and omissions; lacks independent authorship and peer review; includes invalid assumptions and analysis, and inadequate data.

The recent release of the Western Governors’ 2014 Sage Grouse Inventory shows the voluntary measures being taken by states, industry and NGOs has been very successful in protecting, conserving and re-establishing sage-grouse and its habitat. And we need to be focusing on two primary threats: wildfire and invasive species.

**Sage-Grouse Protection and Conservation Act**

Senator Gardner, anticipated by mid-April 2015

- Allows states to implement state-specific plans to protect and restore greater sage-grouse populations and their habitat – states may choose to defer to federal agencies plans
- Requires collection of data tracking population trends to be submitted to the secretary of the interior
- Requires secretary of the interior to share scientific data, assist states in crafting and implementing states’ plans for a minimum of 6 years
- Prohibits large scale mineral withdrawals for the protection of greater sage-grouse
- Requires the implementation of Secretarial Order 3336 to prevent rangelend fire and to restore sage brush landscapes on federal land

This proposed legislation provides sufficient time to complete and implement state conservation and management plans for the recovery of greater sage grouse; to demonstrate effectiveness of those plans; and importantly, to develop the track record necessary to support a not warranted listing under the Endangered Species Act (ESA).

**Women’s Mining Coalition urges Congress to support Senator Gardner’s Sage-Grouse Protection and Conservation Act**

To cosponsor or for additional information, please contact:

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Tim Robison (tim.robison@mail.house.gov) in Utah Congressman Chris Stewart’s office

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Sage-Grouse Protection and Conservation Act Senator Gardner

PURPOSE:
The Sage-Grouse Protection and Conservation Act is designed to allow states to implement state-created conservation and management plans for the recovery of greater sage-grouse in order to prevent a listing under the Endangered Species Act (ESA).

WHAT THE BILL DOES:
• Allows a state to create and implement a state-specific conservation and management plan that will successfully protect and restore greater sage-grouse populations and their habitats, in lieu of federal management through land use plan amendments and the ESA.
  o Not a mandate - a state may choose to defer to federal agencies for greater sagegrouse protection.
• Requires states, opting to implement their own plan, to collect monitoring data and population trends of greater sage-grouse and report this information to the Secretary of Interior.
• Requires the Secretary of Interior to share scientific data with states, assist states in crafting and the implementation of the state’s plan, and recognize these state plans for a minimum of 6 years.
• Prohibits the Secretary of Interior from conducting large scale mineral withdrawals for the protection of greater sage-grouse.
• Requires the Secretary of Interior to implement Secretarial Order 3336 to effectively prevent rangeland fire and restore sage brush landscapes on federal lands.

BACKGROUND:
In response to Secretary Salazar’s 2011 invitation to prepare the conservation plans, western states, where greater sage-grouse live, are preparing or have prepared statewide conservation and management plans.

The states’ conservation and management plans will address the threats to greater sagegrouse, as well as preserve and mitigate greater sage-grouse habitat within that state in order to keep the species off the endangered species list.

The Sage-Grouse Protection and Conservation Act will keep pressure on states, federal agencies, and stakeholders to continue implementation of conservation and management plans, continue investments to conserve, protect, and enhance greater sage-grouse populations, and protect and restore greater sage-grouse habitat in order to prevent a September 2015 listing decision.

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WMC SUPPORTS LEGISLATION ADDRESSING PERMITTING DELAYS

- Reduce permitting delays by setting binding time lines of 2 to 3 years on the permitting process
  - Canada, Australia and Chile permit mines within 3 years to the same environmental standards as the U.S.
  - Provide efficient, timely, coordinated and thorough permit review
- Require project appellants and litigants to post bonds to pay the cost of delays if they lose on appeal and in court
- Return Federal Register Notice authority to the State BLM offices
- Address Federal agencies’ aging workforce issues, by replacing and training new professionals
- Incorporate best practices for coordination among state and federal agencies
- Clarify responsibilities and avoid/eliminate duplication

Permitting delays unnecessarily inhibit job creation and increase our dangerous dependence on foreign sources of critical and strategic minerals. If the United States is going to compete in a global mineral environment fueled by resource nationalism, it must adopt policies that guarantee access to lands with mineral deposits, provide a competitive tax regime, and reduce permitting delays.

In a 2014 Behre Dolbear report ranking the 25 leading mining countries, the United States is tied for last with Papua New Guinea in permitting delays due to bureaucratic, litigation, and other delays, with an average 7-to 10-year period required before mine development can begin. Consequently, the U.S. lags in attracting job-creating exploration dollars. The Metals Economics Group reports that the U.S., despite having significant mineral resources, attracts only 8% of total worldwide exploration dollars.

Given these facts, and the significant economic contribution of mineral production on our National Forest and public lands, we urge Congress to enact policies and incentives that will reduce permitting delays and encourage investment and production of America's vast mineral resources to supply the strategic and critical metals and minerals necessary to create and sustain U.S. manufacturing jobs, a robust economy, and our standard of living.

Solutions
Reform of the permitting system in the U.S. must carefully and credibly address the pitfalls of our existing outdated and underperforming system.

Over the last several Congresses, there have been several bi-partisan legislative attempts to address the need for strong mineral development policies, including those addressing Critical Minerals as well as permitting reform. These past legislative proposals would allow the nation’s mining sector to support the nation’s expanding manufacturers’ needs.

WMC asks for your support on Senator Murkowski’s bill that has been introduced, “American Minerals Security Act of 2015”, covering permitting delays in the context of Critical Minerals. As well, Representative Amodei is preparing a companion bill in the House of Representatives to address similar issues. This is expected in mid-April 2015.

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The global production of nearly every mineral resource reached all-time highs in 2014, according to data from the U.S. Geological Survey’s *Mineral Commodity Summaries 2015*. Global demand has risen in recent years largely because of rising population and increasing standards of living in many parts of the world, particularly China and India. Essentially every naturally occurring element on the periodic table, with the exception of a couple with short half-lives, has multiple applications in modern society, as illustrated in the table below.

<table>
<thead>
<tr>
<th>Energy</th>
<th>Health</th>
<th>Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>Information</td>
<td>Money</td>
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Periodic table of the naturally occurring elements, illustrating major uses. Energy includes the production, transmission, and storage of energy, as well as lighting. Health includes elements necessary for life (food & pharmaceuticals) and for the growing of crops (fertilizers and pesticides). Buildings include materials needed for structures and their general contents and the tools needed to construct them. Transportation includes vehicles and infrastructure, including moving water and wastewater. Information includes communication systems, electronics, and optics. Money includes items that are held as a backing of currencies or to substitute for money, plus jewelry and the arts.

New technologies create opportunities for increasing demand for some mineral resources. For example, wind turbines generate electricity best with magnets made of Fe₁ₓNd₂B, one of the drivers for concerns about the availability of rare earth elements. Another example is a concern about the availability of materials for thin-film photovoltaics in solar cells, including CdTe and CIGS [Cd₃₋ₓGaₓSe₂]. Most of the trace elements of concern are byproducts of other, more abundant elements. Cadmium, which geochemically is similar to zinc, is a common byproduct of smelting sphalerite. Indium is a byproduct of both zinc and copper production, and gallium, which geochemically follows aluminum, is chiefly a byproduct of aluminum reduction from bauxite.
Permitting delays exacerbate our Nation’s reliance on foreign sources of minerals. In 2014, the U.S. had become greater than 50% import reliant on 43 minerals, and 100% reliant on 19 minerals.
New EPA Regulations Will Inflict Enormous Costs, Fail to Achieve Benefits, and Threaten Energy Reliability

The Environmental Protection Agency (EPA) continues to propose regulations that will threaten millions of American jobs, impede economic growth, and cause higher electricity bills. These rules impair the global competitiveness of American businesses and impose regressive energy taxes on America’s working families and those on fixed incomes. Experts warn these regulations will jeopardize our nation’s reliable electricity supply.

Greenhouse Gas (GHG)/Carbon Regulations for Existing Power Plants – Clean Air Act §111(d)

EPA’s proposed its “Clean Power Plan” (CPP) in June, 2014 to regulate GHG including carbon emissions from existing power plants, with plans to finalize this rule in the summer of 2015. In this complex, ambiguous, and overreaching regulation, EPA is choosing winners and losers in the energy economy of the future. The rule will force large decreases in coal generation and dramatic increases in natural gas generation, and threaten electric grid reliability. Its consequences will include diminished energy market competition, higher and more volatile electricity prices, and reduced energy security for America. The rule would also undermine $125 billion in investments made through 2014 to upgrade plants to meet other EPA regulations for conventional emissions. Many of these investments could be strangled by EPA’s carbon rule. Furthermore, the rule will have virtually no benefits, as it will not meaningfully reduce either U.S. or global carbon emissions. U.S. coal demand was only about 12% of global coal demand in 2013, and the U.S. coal generation fleet accounts for only about 4% of global GHG emissions. Asia’s annual coal consumption is more than 6 times that of the U.S., and accounts for 70% of global consumption. Coal is expected to continue to be the leading feedstock for electric generation globally for at least the next three decades. Its affordability, abundance, and accessibility will help developing nations provide access to electricity and raise their standards of living.

GHG/Carbon Regulations for New Power Plants – Clean Air Act §111(b)

EPA proposed regulation of GHG including carbon emission from new power plants in January, 2014 and also plans to finalize this rule in the summer of 2015. EPA admits it would result in “negligible CO₂ emissions changes”. The rule will effectively halt coal technology advances and ban the construction of state-of-the-art, advanced coal power plants important to maintaining fuel diversity and sustaining coal as an essential component of a reliable electric system. America will forfeit new higher-efficiency lower-emission coal, and the U.S. will cede its position as a world leader in coal technology development. Even EPA admits that the rule will impose a standard (for Carbon Capture and Storage) that is beyond the reach of any commercially available technology. The U.S. government’s lack of support of clean coal technologies is further evidenced by the withdrawal of funding for FutureGen—a keystone project essential to establishing the commercial viability of these technologies. Balanced energy and environmental policies must require EPA to set reasonable standards that can be achieved by currently commercially available technology. This approach would allow Americans to reap the benefits of an energy resource more abundant in the U.S. than in any other country in the world—coal—with 30-40% lower emissions than older power plants.

Ozone

In late 2014, EPA proposed regulation to lower the National Ambient Air Quality Standards for ozone from 75 parts per billion (ppb) to between 65 and 70 ppb. This would have additional, severe impacts on American businesses and consumers. NERA Economic Consulting analyzed a 65 ppb standard for the National Association of Manufacturers, finding annual impacts of $140 billion in lost GDP, job losses of 1.4 million, and an $830 decrease in average household consumption. A lower standard would necessitate additional NOx controls on coal power plants, risking shutdowns of even more coal capacity. The level proposed by EPA is also at or near the level of naturally occurring
ozone in some areas, particularly in the western U.S. EPA deemed the current standard protective of human health in 2008, and it should not be changed.

Costs and Consequences of EPA’s Regulations

EPA’s rules fail to account for economy-wide repercussions, or the cumulative costs and impacts of multiple rules. A study by Energy Ventures Analysis prior to EPA’s proposed new ozone rule incorporates the cumulative costs of EPA regulations including MATS, regional haze, and the Clean Power Plan. It projects commercial, residential and industrial customers will pay over $284 billion more in 2020 for electricity and natural gas than in 2012, a staggering 60 percent increase. Average household bills will increase by $680 over the period. EVA found the industrial sector would be hardest hit on a percentage basis, with costs 92 percent higher in 2020 than 2012. Before EPA released the Clean Power Plan, 70 GW of coal generating capacity had been identified for closure due primarily to prior EPA rules including MATS. (1 GW powers 750,000 homes.) The Clean Power Plan could add another 45 to 169 GW in premature retirements. In total, this means shutdowns of one third to three-fourths of the existing U.S coal fleet. According to EIA, from 2000-2014, natural gas demand for the power sector rose by 57%.

Electricity Affordability & Reliability Jeopardized, and Future Environmental Progress Impeded

EPA’s recent regulations for power plants have already raised future electricity costs. More than half of American households spend greater than 20% of their family budget for energy— more than double ten years ago. Higher energy costs impose a regressive tax on lower income families and those on fixed incomes. Virtually all of the increase in residential electricity prices over the past two decades has occurred since 2000—a period that coincides with EPA’s massive new regulations for power plants.

Electric utilities have expressed concern about future electric grid reliability with additional coal plant shutdowns, and they have emphasized the importance of fuel diversity and choice. American Electric Power’s CEO testified at the Senate Energy and Natural Resources Committee’s hearing on grid reliability and security last year that the harsh winter of 2014 provided an early warning of serious issues with electric supply and reliability. Southern Company reported 2014 savings of $125 million for its customers due to the ability to switch from natural gas to coal, particularly in the winter when gas prices spiked severely. Fuel diversity and retaining coal capacity is the policy choice to protect American consumers from energy price shocks and to provide reliable electricity.

Through investments to advance technology, coal use can continue to provide cleaner power for America. Over the past 43 years, coal based electricity has increased by 125% while emissions have decreased by over 90%. With balanced policies, new high efficiency supercritical coal plants can further reduce emissions by more than 30% compared to older plants they would replace.

Coal Creates Permanent Jobs

Coal power plants create more jobs than any other source of electricity generation. U.S. Department of Energy data and models show that coal based electricity creates nine times more construction and permanent jobs on a “dollar invested” basis than a wind facility. In short, policies that displace coal-fueled electricity result in a net job loss.

EPA’s proposed carbon and ozone rules will leave the nation’s electricity supply less diverse, less reliable and more expensive. They will also cause more volatile energy costs for business and households.

WMC requests support for legislation to halt EPA’s headlong rush to regulate without performing sufficient analysis of effects on costs, jobs, business competitiveness, and energy needs.

WMC supports a truly “All of the Above” energy policy using coal and coal technology to meet U.S. and global economic and environmental objectives.

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Stop Duplicative, Costly, and Unnecessary
EPA CERCLA §108(b) Financial Assurance Rulemaking

The Western Governors’ Association unanimously adopted Policy Resolution 2014-7 opposing EPA’s attempt to create a CERCLA 108(b) financial assurance program as duplicative and unnecessary. An EPA CERCLA §108(b) rule is pre-emptive to existing states’ programs, and jeopardizing to the global competitiveness of U.S. industries which are: 1) powering the U.S. economy, 2) delivering affordable energy, 3) manufacturing critical products, and 4) providing high-paying jobs. Already in place are existing, coordinated state and federal financial responsibility programs which are have a track record of working well.

Importantly, EPA does not have a mandatory statutory duty to pursue these requirements. Yet, if the agency moves forward with these burdensome and pre-emptive (states’ rights) financial assurance requirements, EPA is jeopardizing the global competitiveness of the US hardrock mining industry and other industries (manufacturing, included) that power the US economy.

The vast majority of the industries, including the hardrock mining sector, targeted by EPA and this rulemaking are already subject to financial assurance requirements, under both federal and state laws. These industries operate within a comprehensive framework of environmental laws and regulations coordinated between federal and state agencies, preventing or controlling releases at levels that are protective of the environment and human health. If there are "gaps" in the existing state and federal processes, then modifications should be made to the financial assurance programs developed by the federal land management agencies and the states over the past 30 years, who have the experience, expertise and resources to implement financial assurance requirements, including for hardrock mining operations.

Nonetheless, the US Environmental Protection Agency (EPA) is currently working on rulemakings that would impose new unwarranted duplicative financial assurance requirements on multiple industries, including mining, under Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Timeline:
EPA is expected to convene a SBREFA panel sometime in the future and plans to release a proposed rule in Spring 2016.

Potential Action Items:
1) Use the Appropriations process to de-fund the CERCLA §108(b) rulemaking process. This is a high priority for WMC and its members.

2) Insist that EPA provide the financial assurance industry capacity study required by the Consolidated Appropriations Act of 2014.


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Administration Overreach

Administration overreach is not limited to actions by the U.S. Environmental Protection Agency. When our nation needs more regulatory certainty to foster investment and job creation, the Administration instead continues to pursue regulations and policies that exceed the authorities provided by Congress. These policies will detrimentally impact our nation’s economic and energy security.

Office of Surface Mining Stream Buffer Zone Rule

The Department of the Interior’s Office of Surface Mining, Reclamation and Enforcement (OSM) is planning significant and sweeping changes to the existing stream buffer zone (SBZ) rule that will substantially impair the domestic coal mining’s ability to meet our nation’s energy needs. The agency has provided no justification for a new rule. In 2012 ENVIRON International Corporation completed an analysis on behalf of the National Mining Association on the anticipated economic impacts associated with the proposed rewrite of the stream buffer zone rule. Their analysis found that total number of jobs at risk of loss, including mining and linked sector employment is between 133,441 and 273,227 and the overall decrease in recovery of demonstrated coal reserves is between 30.4% and 41.5%.

Two of OSM’s original subcontractors that worked on the draft environmental impact statement provided shocking testimony before the House Natural Resources Subcommittee on Energy and Mineral Resources reporting that OSM “suggested” the contractors change the assumptions used to develop the economic analysis for the purpose of lowering the lost jobs impacts. The subcontractors also testified that they refused to use a “fabricated” baseline scenario to soften the coal production loss numbers and were terminated by OSM shortly thereafter.

In addition, OSM’s activities have been universally criticized by stakeholders throughout the United States. Serious objections to this rulemaking effort have been raised by three State governors, eight State cooperating agencies, the Interstate Mining Compact Commission (representing state coal mining regulators), and the Western Governors’ Association.

Despite all of the controversy and predictions of tens of thousands of potential job losses, instead of withdrawing this proposal, OSM is trying to rewrite its environmental impact statement to support the rule. A proposed rule is scheduled for April 2015. When our nation needs more regulatory certainty to foster investment and job creation, OSM’s unprecedented regulatory package will increase unemployment, lower personal income, devastate coal production, raise electricity rates and cost states vital revenues needed to close their budget deficits. WMC urges Congress to prevent this rulemaking from moving forward.
Office of Natural Resources Revenue Proposal on Coal Valuation

The Department of the Interior’s Office of Natural Resources Revenue (ONRR) is proposing changes to the way it calculates royalties on federally-owned coal. The proposal is not justified as recent reviews and audits have found that wholesale changes to the regulations are unnecessary and that the current system provides stable and very significant tax and royalty revenue ($4.8 BILLION OVER THREE YEARS) to both state and federal governments. Any problems are dealt with through regular and robust audits by ONRR, which have not indicated any major underpayments by coal lessees.

ONRR’s proposed default provision, allowing DOI nearly complete discretion to establish value of production is particularly concerning and of dubious legality. The provision permits DOI to “exercise considerable discretion to establish the reasonable value of production using a variety of discretionary factors and any other information the Secretary believes is appropriate.”

The result of the propose rule will be to increase taxes and royalties, which will reduce investment, lower government (federal and state) royalties and decrease jobs and access to affordable energy. WMC urges Congress to prevent this rulemaking from moving forward.

Council on Environmental Quality’s Greenhouse Guidance

The Council on Environmental Quality (CEQ) has drafted guidance for Federal agencies to assess and mitigate greenhouse gas emissions generated outside the US under the National Environmental Policy Act (NEPA). As such CEQ directs agencies to consider impacts beyond their statutory authority to address, and conveys the false impression that reliable analyses can be done on many aspects of climate change.

The guidance would drastically alter the required NEPA analyses, adding further inefficiencies and significant costs, creating other avenues for parties to challenge projects and ultimately, delaying projects. Consequently, the draft guidance could disrupt development of the nation’s minerals and coal, which are vital to our economy, and national and energy security. Furthermore, the guidance provides no discernable benefit for the environmental considerations the guidance purports to advance.

Enactment of this policy will have detrimental impacts on increased trade across virtually all exports, including the export of automobiles, airplanes, heavy equipment and natural resources, such as coal, and would do nothing more than cede U.S. job and economic growth to other nations.

Rather than advancing this fundamentally flawed approach, CEQ should advise agencies not to undertake analyses or employ metrics that are scientifically unreliable or undeveloped, or would impermissibly bias the resulting document. WMC urges Congress to act to prevent finalization and implementation of the CEQ guidance.

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