WILDEARTH GUARDIANS
A FORCE FOR NATURE

June 15, 2015

BY ELECTRONIC MAIL

OSM/Colowyo Mine EA
c/o Nicole Caveny
Western Regional Office
Office of Surface Mine Reclamation and Enforcement
1999 Broadway, Suite 3320
Denver, CO 80202
OSM-Colowyo-Mine-EA@OSMRE.gov

Re: Colowyo Mine, South Taylor Permit Expansion Area Project Mining Plan EA Scoping Comments

Dear Ms. Caveny:

On behalf of its thousands of members and supporters, WildEarth Guardians ("Guardians") submits the following comments in response to the U.S. Office of Surface Mining Reclamation and Enforcement's ("OSMRE's") proposal to prepare an Environmental Assessment ("EA") for the Colowyo Mine's South Taylor Permit Expansion Area Project Mining Plan (hereafter "South Taylor Mining Plan"). The Colowyo coal mine is owned by the Colowyo Coal Company, an entity within Western Fuels that is a subsidiary of Tri-State Generation and Transmission. Coal from the Colowyo coal mine is burned in Tri-State's Craig Station in Craig, Colorado.

The South Taylor Mining Plan was originally approved in 2007 and authorized the mining of 43 million tons of publicly owned coal beneath 5,219 acres of lands in Moffat and Rio Blanco Counties, Colorado. Unfortunately, in approving the original mining plan, OSMRE did not provide any public notice of its proposed action or of the availability of any documents prepared pursuant to the National Environmental Policy Act ("NEPA"). What's more, in approving the original mining plan, OSMRE relied on dated NEPA analysis prepared by the U.S. Bureau of Land Management ("BLM") that did not adequately analyze or assess potentially significant impacts, in particular impacts related to coal combustion.

Fortunately, the public's right to be notified and involved in the mining plan decisionmaking process, and to be assured that environmental impacts will be fully analyzed in accordance with NEPA, was vindicated. In an order issued on May 8, 2015, the U.S. District Court for the District of Colorado held that OSMRE's original approval of the South Taylor Mining Plan violated NEPA and directed the agency to correct its mistakes. OSMRE is now moving forward to fix its missteps, proposing to prepare an EA and actively soliciting public

comment, a move that we heartily support and believe is fully warranted given the circumstances.

Although we appreciate the opportunity to finally comment on the South Taylor Mining Plan, however, we do have concerns that OSMRE may be shortchanging the process. In particular, we are concerned that OSMRE's assumption that the impacts of coal mining at the Colowyo coal mine would not be significant. The agency has never analyzed and assessed the full scope of environmental impacts associated with mining at Colowyo, in particular the reasonably foreseeable combustion impacts. According to data from the U.S. Energy Information Administration ("EIA"), virtually all coal mined at Colowyo is burned in the Craig Station.[1] In 2014, for example, 2,375,220 tons of coal were shipped to Craig while a little more than 58,000 tons were shipped to the Coronado power plant in Arizona.[2] *See* Exhibit 1, EIA Form 923 Fuel Receipt Data for Colowyo Mine, available online at http://www.eia.gov/electricity/data/eia923/xls/f923_2014.zip.

The impacts of the Craig Station have never been comprehensively analyzed and assessed, particularly with regards to carbon emissions from the facility. Although OSMRE has asserted that the plant is properly permitted, the facility's permits do not serve to indicate that the impacts of the coal-fired power plant are not significant or otherwise limited such that public health and environmental impacts are sufficiently mitigated.

Nevertheless, OSMRE is moving to conduct long overdue and necessary environmental analysis in order to determine whether to approve, disapprove, or approve with conditions the South Taylor Mining Plan. We appreciate this and offer the following comments to aid in the agency's analysis and assessment of impacts and determination of the correct course of action with regards to Colowyo.

1. An Environmental Impact Statement is Required

According to OSMRE's National Environmental Policy Act ("NEPA") guidance, found within the Interior Department Departmental Manual, 516 DM 13, approval of a mining plan requires an environmental impact statement ("EIS") where "[t]he environmental impacts of the proposed mining operations are not adequately analyzed in an earlier environmental document covering the specific leases or mining activity," "[t]he area to be mined is 1280 acres or more, or the annual full production level is 5 million tons or more," and "[m]ining and reclamation operations will occur for 15 years or more." 516 DM 13.4(A)(4). Upon review of available information, it appears that all three criteria are met with regards to the South Taylor Mining Plan.

Here, the proposed mining was anticipated to impact more than 1,280 acres. According to OSMRE's notice, 1,589 acres were intended to be disturbed as a result of the proposed mining

[1] Although small amounts of coal are at times shipped to other plants, virtually all coal is shipped to Craig to be burned.

[2] Incidentally, the Coronado power plant is owned by the Salt River Project, which is a 29% owner of units 1 and 2 at the three unit Craig Station. *See* http://www.srpnet.com/about/stations/craig.aspx.

plan. Furthermore, according to the State of Colorado, Colowyo is permitted to mine more than five million tons annually. Additionally, although OSMRE estimated that the life of the Colowyo mine under the South Taylor Mining Plan would extend until 2017, mining and reclamation activities at Colowyo are projected to occur for many years thereafter. As OSMRE has acknowledged in more recent mining plan proposals, mining is expected to continue at Colowyo for 20-40 years. *See* OSMRE, "Colowyo Outreach Letter" (Sept. 26, 2013), available at http://www.wrcc.osmre.gov/initiatives/colowyo/documents/Colowyo_OutreachLetter.pdf. Thus, two of the three criteria under the Departmental Manual indicate that an EIS is required.

With regards to the third criteria—whether the environmental impacts of the proposed mining have been adequately addressed in an earlier document—we are concerned that OSMRE's proposal also appears to trigger the need for an EIS. We are especially concerned that any earlier NEPA analysis relied upon by OSMRE, whether prepared by the BLM or by OSMRE, fails to adequately analyze and assess the impacts of the Craig Station, both a connected action and a reasonably foreseeable impact associated with approving mining at the Colowyo Mine. We are further concerned that earlier analyses fails to adequately analyze and assess air quality impacts, impacts to threatened and endangered species, water quality impacts, as well as the impacts of any and all noncompliance with the Surface Mine Reclamation and Control Act ("SMCRA"), the Clean Water Act, the Clean Air Act, and the Resource Conservation and Recovery Act. As OSMRE analyzes and assesses the impacts of the present proposal, we request OSMRE thoroughly and objectively assess whether an EIS is necessary on the basis of inadequate earlier NEPA analysis.

2. OSMRE Must Ensure that Colorado's SMCRA Permit is Adequate Under SMCRA

In analyzing and assess the impacts of the South Taylor Mining Plan, as well as the appropriateness of issuing the plan, OSMRE must analyze and assess whether Colorado's SMCRA permit is sufficient to meet the requirements of SMCRA. If the permit is not adequate, OSMRE must either craft its mining plan approval to address the inadequacies and/or disapprove of the proposed mining plan.

3. OSMRE Must Fully Analyze and Assess the Direct and Indirect Surface Impacts of Mining the Lease.

OSMRE must fully analyze and assess the surface impacts of mining the proposed lease. We impress upon OSMRE to fully analyze and assess the impacts of mining to the following:

a. Impacts to Rare Imperiled Fish, Wildlife, and Plants

OSMRE must analyze and assess impacts to rare imperiled fish, wildlife, and plants within and near the proposed lease area, including species listed under the Endangered Species Act as threatened, endangered, proposed, or candidate. We are particularly concerned over impacts to imperiled species in the Yampa River drainage, including the endangered razorback sucker and Colorado pikeminnow and their designated critical habitat. We are particularly

concerned over the impacts of mercury and selenium discharge from water outflows, as well as deposition of mercury and selenium from the combustion of coal at the Craig Station. Based on modeling prepared by WildEarth Guardians using the EPA's REMSAD model, mercury deposition from the Craig Station is most significant near the power plant and affects the Yampa River. *See* Exhibit 2, Map of Mercury Deposition Rates from Craig Station. Within the Yampa River drainage, the Craig Station contributes approximately 7.85% of all mercury deposition, with other coal-fired power plants in the region, as well as other sources, contributing as well. *See* Exhibit 3, Percent Contribution of Mercury Deposition from Coal-fired Power Plants and Other Sources in the Colorado Plateau Region.

As part of analyzing and assessing impacts to the sucker and pikeminnow, as well as their critical habitat, OSMRE must consult with the U.S. Fish and Wildlife Service in accordance with Section 7 of the Endangered Species Act.

b. Impacts to Surface Water Quality

With regards to water quality, OSMRE must fully analyze and assess water quality impacts to ensure compliance with state water quality standards. OSMRE must identify all existing water quality problems in the area that will be directly, indirectly, and cumulatively affected by the proposed action and disclose any contribution the proposed action will make to those water quality problems. We are especially concerned that the Yampa River is not supporting is designated beneficial uses due to excessive pollution. According to the State of Colorado, the Yampa River from the Elkhead River to the Green River is violating iron standards. OSMRE must address any contribution to this problem associated with the Colowyo mine, the Craig Station, and coal transport activities in between. OSMRE must ensure that its action ensures compliance with relevant water quality standards in accordance with the Clean Water Act.

c. Impacts to Air Quality

OSMRE must fully analyze and assess direct, indirect, and cumulative impacts to air quality, including impacts to air quality in the context of all national ambient air quality standards ("NAAQS"), prevention of significant deterioration ("PSD") increments for Class I and II areas, and visibility impacts to Class I areas. We are particularly concerned over the impacts of the mining to NAAQS for ozone, particulate matter, and nitrogen dioxide (which is produced during blasting). OSMRE must specifically address all emissions sources, particularly those that are not explicitly permitted by the State of Colorado (including blasting emissions). We request that OSMRE further address the impacts of fugitive emissions, including fugitive volatile organic compound and nitrogen dioxide emissions associated with blasting and stripping of overburden. OSMRE must quantify emissions from the mine to ensure an accurate and adequate analysis and assessment of air quality impacts. This is especially necessary given that earlier NEPA documents were prepared prior to the adoption of a number of recent NAAQS, including the 2006 24-hour $PM_{2.5}$ NAAQS (40 C.F.R. § 50.13(c)), the 2008 8-hour ozone NAAQS (40 C.F.R. § 50.15), the 2010 1-hour nitrogen dioxide NAAQS (40 C.F.R. § 50.11(b)), the 2010, the 2010 1-hour sulfur dioxide NAAQS (40 C.F.R. § 50.17), and the 2012 annual $PM_{2.5}$ NAAQS (78 Fed. Reg. 3086 (Jan. 15, 2013)).

In analyzing and assessing the potentially significant air quality impacts, we request OSMRE utilize the BLM's recently completed Colorado Air Resource Management Modeling Study. This study analyzed and assessed cumulative air quality impacts in northwest Colorado and beyond, providing OSMRE a valuable baseline from which to assess whether the impacts of the South Taylor Mining Plan are significant. *See* Exhibit 4, ENVIRON, "Colorado Air Resource Management Modeling Study (CARMMS) 2021 Modeling Results for the High, Low and Medium Oil and Gas Development Scenarios," Prepared for BLM Colorado State Office (January 2015), available online at http://www.blm.gov/style/medialib/blm/co/information/nepa/air_quality.Par.97516.File.dat/CARMMS_Final_Report_w-appendices_012015.pdf.

d. Climate Change Impacts

OSMRE must analyze and assess the climate change impacts of approving the proposed mining plan. To this end, we request OSMRE quantify the direct, indirect, and cumulative greenhouse gas emissions that would result from approving the proposed mining plan, including emissions of methane (including from mining activities), carbon dioxide, and other greenhouse gases that have been found to endanger public health and welfare. We also request that OSMRE analyze and assess the extent to which these emissions are likely to contribute to global climate change. This should be a simple exercise given that current levels of atmospheric carbon dioxide are fueling global climate change. In this case, it appears that any level of extended carbon dioxide emissions would pose significant impacts.

In order to adequately analyze and assess the climate impacts of more mining, OSMRE must, at a minimum, calculate the costs of projected carbon emissions that would result from the South Taylor Mining Plan. We urge OSMRE to analyze and assess costs using the social cost of carbon protocol, a valid, well-accepted, credible, and interagency endorsed method of calculating the costs of the environmental damages caused by greenhouse gas emissions and understanding the potential significance of such costs.

The social cost of carbon protocol for assessing climate impacts is a method for "estimat[ing] the economic damages associated with a small increase in carbon dioxide (CO2) emissions, conventionally one metric ton, in a given year [and] represents the value of damages avoided for a small emission reduction (i.e. the benefit of a CO2 reduction)." Exhibit 5, EPA, "Fact Sheet: Social Cost of Carbon" (Nov. 2013) at 1, available online at http://www.epa.gov/climatechange/Downloads/EPAactivities/scc-fact-sheet.pdf. The protocol was developed by a working group consisting of several federal agencies, including the U.S. Department of Agriculture, EPA, CEQ, and others, with the primary aim of implementing Executive Order 12866, which requires that the costs of proposed regulations be taken into account.

In 2009, an Interagency Working Group was formed to develop the protocol and issued final estimates of carbon costs in 2010. *See* Exhibit 6, Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866" (Feb. 2010), available online at

https://www.whitehouse.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf. These estimates were then revised in 2013 by the Interagency Working Group, which at the time consisted of 13 agencies, including the Department of Agriculture. *See* Exhibit 7, Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866" (May 2013), available online at https://www.whitehouse.gov/sites/default/files/omb/inforeg/social_cost_of_carbon_for_ria_2013_update.pdf.

Depending on the discount rate and the year during which the carbon emissions are produced, the Interagency Working Group estimates the cost of carbon emissions, and therefore the benefits of reducing carbon emissions, to range from $11 to $220 per metric ton of carbon dioxide. *See* Chart Below. In July 2014, the U.S. Government Accountability Office ("GAO") confirmed that the Interagency Working Group's estimates were based on sound procedures and methodology. *See* Exhibit 8, GAO, "Regulatory Impact Analysis, Development of Social Cost of Carbon Estimates," GAO-14-663 (July 2014), available online at http://www.gao.gov/assets/670/665016.pdf.

Revised Social Cost of CO_2, 2010 – 2050 (in 2007 dollars per metric ton of CO_2)

Discount Rate Year	5.0% Avg	3.0% Avg	2.5% Avg	3.0% 95th
2010	11	32	51	89
2015	11	37	57	109
2020	12	43	64	128
2025	14	47	69	143
2030	16	52	75	159
2035	19	56	80	175
2040	21	61	86	191
2045	24	66	92	206
2050	26	71	97	220

Most recent social cost of carbon estimates presented by Interagency Working Group on Social Cost of Carbon. The 95th percentile value is meant to represent "higher-than-expected" impacts from climate change. *See* Exhibit 7 at 3.

Although often utilized in the context of agency rulemakings, the protocol has been recommended for use and has been used in project-level decisions. For instance, the EPA recommended that an EIS prepared by the U.S. Department of State for the proposed Keystone XL oil pipeline include "an estimate of the 'social cost of carbon' associated with potential increases of GHG emissions." Exhibit 9, EPA, Comments on Supplemental Draft EIS for the Keystone XL Oil Pipeline (June 6, 2011).

Other agencies, including the BLM, have also utilized the social cost of carbon protocol in the context of authorizing fossil fuel extraction. In recent EAs for oil and gas leasing in Montana, the agency estimated "the annual SCC [social cost of carbon] associated with potential development on lease sale parcels." Exhibit 10, BLM, "Environmental Assessment for October 21, 2014 Oil and Gas lease Sale," DOI-BLM-MT-0010-2014-0011-EA (May 19, 2014) at 76, available online at

http://www.blm.gov/style/medialib/blm/mt/blm_programs/energy/oil_and_gas/leasing/lease_sales/2014/oct__21_2014/july23posting.Par.25990.File.dat/MCFO%20EA%20October%202014%20Sale_Post%20with%20Sale%20(1).pdf. In conducting its analysis, the BLM used a "3 percent average discount rate and year 2020 values," presuming social costs of carbon to be $46 per metric ton. *Id*. Based on its estimate of greenhouse gas emissions, the agency estimated total carbon costs to be "$38,499 (in 2011 dollars)." *Id*. In Idaho, the BLM also utilized the social cost of carbon protocol to analyze and assess the costs of oil and gas leasing. Using a 3% average discount rate and year 2020 values, the agency estimated the cost of carbon to be $51 per ton of annual CO_2e increase. *See* Exhibit 11, BLM, "Little Willow Creek Protective Oil and Gas Leasing," EA No. DOI-BLM-ID-B010-2014-0036-EA (February 10, 2015) at 81, available online at https://www.blm.gov/epl-front-office/projects/nepa/39064/55133/59825/DOI-BLM-ID-B010-2014-0036-EA_UPDATED_02272015.pdf. Based on this estimate, the agency estimated that the total carbon cost of developing 25 wells on five lease parcels to be $3,689,442 annually. *Id*. at 83.

To be certain, the social cost of carbon protocol presents a conservative estimate of economic damages associated with the environmental impacts climate change. As the EPA has noted, the protocol "does not currently include all important [climate change] damages." Exhibit 5. As explained:

> The models used to develop [social cost of carbon] estimates do not currently include all of the important physical, ecological, and economic impacts of climate change recognized in the climate change literature because of a lack of precise information on the nature of damages and because the science incorporated into these models naturally lags behind the most recent research.

Id. In fact, more recent studies have reported significantly higher carbon costs. For instance, a report published this month found that current estimates for the social cost of carbon should be increased six times for a mid-range value of $220 per ton. *See* Exhibit 12, Moore, C.F. and B.D. Delvane, "Temperature impacts on economic growth warrant stringent mitigation policy," *Nature Climate Change* (January 12, 2015) at 2. In spite of uncertainty and likely underestimation of carbon costs, nevertheless, "the SCC is a useful measure to assess the benefits of CO2 reductions," and thus a useful measure to assess the costs of CO2 increases. Exhibit 5.

That the economic impacts of climate change, as reflected by an assessment of social cost of carbon, should be a significant consideration in agency decisionmaking, is emphasized by a recent White House report, which warned that delaying carbon reductions would yield significant economic costs. *See* Exhibit 13, Executive Office of the President of the United States, "The Cost of Delaying Action to Stem Climate Change" (July 2014), available online at https://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_climate_change.pdf. As the report states:

> [D]elaying action to limit the effects of climate change is costly. Because CO_2 accumulates in the atmosphere, delaying action increases CO_2 concentrations. Thus, if a policy delay leads to higher ultimate CO_2 concentrations, that delay produces persistent economic damages that arise from higher temperatures and higher CO_2 concentrations.

> Alternatively, if a delayed policy still aims to hit a given climate target, such as limiting CO_2 concentration to given level, then that delay means that the policy, when implemented, must be more stringent and thus more costly in subsequent years. In either case, delay is costly.

Exhibit 13 at 1.

The requirement to analyze the social cost of carbon is supported by the general requirements of NEPA, specifically supported in federal case law, and by Executive Order 13,514. As explained, NEPA requires agencies to analyze the consequences of proposed agency actions and consider include direct, indirect, and cumulative consequences.

To this end, courts have ordered agencies to assess the social cost of carbon pollution, even before a federal protocol for such analysis was adopted. In 2008, the U.S. Court of Appeals for the Ninth Circuit ordered the National Highway Traffic Safety Administration to include a monetized benefit for carbon emissions reductions in an Environmental Assessment prepared under NEPA. *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 538 F.3d 1172, 1203 (9th Cir. 2008). The Highway Traffic Safety Administration had proposed a rule setting corporate average fuel economy standards for light trucks. A number of states and public interest groups challenged the rule for, among other things, failing to monetize the benefits that would accrue from a decision that led to lower carbon dioxide emissions. The Administration had monetized the employment and sales impacts of the proposed action. *Id*. at 1199. The agency argued, however, that valuing the costs of carbon emissions was too uncertain. *Id*. at 1200. The court found this argument to be arbitrary and capricious. *Id*. The court noted that while estimates of the value of carbon emissions reductions occupied a wide range of values, the correct value was certainly not zero. *Id.* It further noted that other benefits, while also uncertain, were monetized by the agency. *Id*. at 1202.

More recently, a federal court has done likewise for a federal coal decision. That court began its analysis by recognizing that a monetary cost-benefit analysis is not universally required by NEPA. *See* High *Country Conservation Advocates, et al. v. U.S. Forest Service, et al*., ---F. Supp.2d---, 2014 WL 2922751 (D. Colo. 2014), citing 40 C.F.R. § 1502.23. However, when an agency prepares a cost-benefit analysis, "it cannot be misleading." *Id*. at 3 (citations omitted). In that case, the NEPA analysis included a quantification of benefits of the project. However, the quantification of the social cost of carbon, although included in earlier analyses, was omitted in the final NEPA analysis. *Id*. at p. 19. The agencies then relied on the stated benefits of the project to justify project approval. This, the court explained, was arbitrary and capricious. *Id*. Such approval was based on a NEPA analysis with misleading economic assumptions, an approach long disallowed by courts throughout the country. *Id*. at pp. 19-20.

In addition to case law, Executive Order 13,514 makes the "reduction of greenhouse gas emissions a priority for federal agencies." Executive Order 13,514 at Preamble. The reduction of emissions includes emissions from both direct and indirect activities. *Id*. at Section 1. This Executive Order requires that, "[i]n order to create a clean energy economy that will increase our Nation's prosperity, promote energy security, protect the interests of taxpayers, and safeguard the health of our environment," it is the "policy of the United States" that agencies "shall

prioritize actions based on a full accounting of both economic and social benefits and costs." *Id*. When quantifying greenhouse gas emissions, the USFS is specifically instructed to "accurately and consistently quantify and account for greenhouse gas emissions" from sources controlled by the agency, including "emissions of greenhouse gases resulting from Federal land management practices." *Id*. at Section 9(a). The results of quantifying emissions from proposed federal land management actions, of fully accounting for all economic and social costs and benefits of those proposed actions, and the resulting prioritization of actions based on this quantification and accounting must be fully disclosed on publically available websites. *Id*. at Section 1.

4. <u>OSMRE Must Address Connected Actions and Impacts</u>

OSMRE must analyze and assess the direct, indirect, and cumulative impacts of all connected actions in the EIS. *See* 40 C.F.R. § 1508.25(a)(1). Connected actions include actions that automatically trigger other actions that may require an EA or EIS, actions that cannot or will not proceed unless other actions are taken previously, and actions that are interdependent parts of a larger action and depend upon the larger action for their justification. *Id*. at § 1508.25(a)(1)(i)-(iii).

Here, the OSMRE must clearly analyze the direct, indirect, and cumulative impacts of the operation of the Craig Station. The Colowyo mine, together with the nearby Trapper mine, fuels this power plant and OSMRE's action in approving the proposed mining plan will keep the Craig Station in operation. This extended operation is an action that is not only interdependent with the mining, but it would not occur but for OSMRE's approval of expanded mining at Colowyo. To this end, OSMRE must address the air quality impacts of the power plants (including greenhouse gas and climate change impacts), the water quality impacts, the impacts of coal combustion waste handling and disposal, and any other relevant environmental impacts associated with the power plants.

Other connected actions OSMRE must address include:

- The impacts of coal handling, hauling, and transport. The analysis must address the impacts of conveyor systems, trucking, and rail hauling.
- Infrastructure maintenance/improvements. The road and rail system facilitating the transport of coal must be maintained and/or improved. The impacts of these connected actions must be addressed by OSMRE.
- The impacts of water diversion and water transport to the mine and power plants.

To the extent that OSMRE believes that any of the aforementioned activities are not "connected actions," then at least the Agency is obligated under NEPA to fully analyze and assess the impacts of these actions as indirect impacts. Indirect impacts are impacts that are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. § 1508.8(b). In this case, the OSMRE must, at a minimum, analyze and assess the reasonably foreseeable indirect impacts associated with the continued operation of the Colowyo Mine, as well as the impacts of the operation of the Craig Station.

5. OSMRE Must Analyze and Assess Cumulative Impacts

OSMRE must analyze and assess the direct impacts of the proposed coal lease together with the impacts of all past, present, and reasonably foreseeable impacts, also known as cumulative impacts.

In this case, we have concerns over a number of other ongoing and potential activities within and near the Colowyo coal mine that cumulatively indicate that the proposed coal lease will significantly impact the environment. These activities may include but are not limited to:

- Oil and gas development, including the drilling and fracking of oil and gas wells, the refracking of wells, the development of gathering systems, the construction and operation of compressor stations and processing plants, truck traffic, and other related activities, poses significant cumulative air quality impacts, water quality impacts, fish and wildlife impacts, and impacts in terms of greenhouse gas emissions.
- Other coal-fired power plants in the region, including the nearby Bonanza power plant in Uintah County, Utah and Hayden power plant in neighboring Routt County, Colorado, which pose significant cumulative air quality impacts, water quality impacts, fish and wildlife impacts, and impacts in terms of greenhouse gas emissions.
- Other coal mines in the region, including the nearby Deserado coal mine, Sage Creek coal mine, Foidel Creek coal mine, and Trapper coal mine, which pose potentially significant cumulative air quality impacts, water quality impacts, fish and wildlife impacts, and impacts in terms of greenhouse gas emissions.
- Future expansions of the Colowyo coal mine. OSMRE is currently reviewing a proposed expansion of the Colowyo coal mine, which would open up the Collom Permit Expansion Area to strip mining. Any environmental analysis for the South Taylor Mining Plan must address the impacts of this expansion as they are a reasonably foreseeable impact related to the operation of the coal mine and approval of the Mining Plan.
- Off-road vehicle use, which poses significant cumulative impacts to air quality, wildlife and fish, soils, and other values.

6. OSMRE Must Rigorously Explore and Objectively Evaluate a Range of Reasonable Alternatives

OSMRE must analyze a range of reasonable alternatives. In addition to the No Action Alternative, we request that the OSMRE consider in detail all or portions of the following alternatives either as alternative mitigation measures or as alternatives to the proposed actions.

a. Alternative Mining Levels

We request the OSMRE consider in detail an alternative that limits the amount of coal

tonnage and/or acreage to be mined to lower levels than are currently proposed. Such an alternative will limit the extent to which the direct and indirect impacts of mining, hauling, and the Craig Station will occur, as well as incentivize power plant owners to develop alternative non-coal-fired electricity generation.

b. Underground Mining

We request that OSMRE consider in a detail an alternative that would require underground mining, rather than surface strip mining. This alternative would not only significantly limit the surface impacts of mining, but would also limit the reclamation burden on the Colowyo Mining Co.

c. Low or No Pollutant Emitting Equipment

We request that, in order to limit air quality impacts, that OSMRE consider in detail an alternative that requires the use of equipment that produce less or no emissions, such as natural gas-fired vehicles and machinery and electric machinery powered by solar panels or other renewable energy sources. We also request that OSMRE investigate whether it should require equipment maintenance standards to ensure that pollutant emitting machinery is maintained and operated such that air emissions are minimized to the maximum extent practicable.

d. Other Air Quality Mitigation Alternatives

We request that OSMRE consider in detail an alternative or alternative that mitigates the air quality impacts of the proposed mining. For instance, OSMRE should consider in detail an alternative that establishes stronger emission limits at the Craig Station for both criteria air pollutants and hazardous air pollutants, an alternative that requires more stringent mitigation to eliminate nitrogen dioxide emissions during blasting (including an alternative that prohibits cast blasting to prevent orange clouds from forming), and an alternative that requires a compensatory reduction in emissions for any and all emissions that would continued and/or increase as a result of the proposed coal lease. This last alternative could involve the OSMRE and/or Colowyo Mining securing commitments from oil and gas operators in the region to reduce their emissions.

e. An Alternative that Requires Colowyo Mining to Undertake Actions to Limit or Reduce Other Greenhouse Gas Emissions

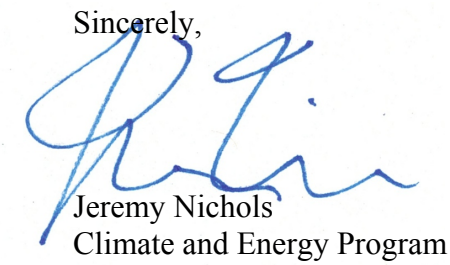
We request the OSMRE consider in detail an alternative or alternatives that mitigate greenhouse gas emissions associated with the proposed mining. The OSMRE should consider requiring that Colowyo Mining secure an increase in the efficiency of the Craig Station to reduce the total carbon dioxide emission rate (this could be accomplished through the establishment of a limit on carbon dioxide emissions at the plant, either through a total cap or lower emission rate), require the use of low carbon fuels for the operation of any heavy machinery, and/or require that Colowyo Mining use renewable energy to power the Colowyo mine.

e. An Alternative that Requires Offsite Mitigation or Compensation for the Impacts in Other Ways

Offsite mitigation, as well as mitigation that requires compensation, is explicitly authorized under NEPA. The definition of mitigation includes "[c]ompensating for the impact by replacing or providing substitute resources or environments." 40 C.F.R. § 1508.20(e). In this case, we request the OSMRE consider an alternative or alternatives that would require Colowyo Mining to offset its carbon dioxide emissions from the mine and the two power stations with offsite mitigation by developing a comparable amount of renewable energy. Such a mitigation measure would provide additional generation and also help to create cleaner energy sources that will eventually offset the greenhouse gas emissions produced by coal mining and burning. OSMRE could play a key role in spurring utilities to begin investing in and developing renewable energy as a means to limit fossil fuel consumption.

Thank you for the opportunity to comment. We look forward to OSMRE rigorously and objectively analyzing and assessing the potentially significant impacts of the South Taylor Mining Plan and issuing a well-informed and legally sufficient decision. Thank you.

Sincerely,



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