

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO**

Civil Action No. 1:12-cv-1275-JLK

DINÉ CITIZENS AGAINST RUINING OUR ENVIRONMENT;
SAN JUAN CITIZENS ALLIANCE;
SIERRA CLUB;
CENTER FOR BIOLOGICAL DIVERSITY; and
AMIGOS BRAVOS,

Plaintiffs,

vs.

UNITED STATES OFFICE OF SURFACE MINING RECLAMATION AND
ENFORCEMENT, an agency within the U.S. Department of the Interior;
SALLY JEWELL, in her official capacity as Secretary of the Interior;
AL KLEIN, in his official capacity as Regional Director of U.S. Office of Surface
Mining Reclamation and Enforcement, Western Region;
BOB POSTLE, in his official capacity as Manager of the Program Support Division for
the Western Region of the Office of Surface Mining Reclamation and Enforcement;
RICK WILLIAMSON, in his official capacity as Manager of the Indian Programs Branch
of the Western Region of the Office of Surface Mining Reclamation and Enforcement

Defendants, and

BHP NAVAJO COAL COMPANY,

Intervenor-Defendant, and

NAVAJO NATION,

Intervenor-Defendant.

PLAINTIFF'S OPENING MERITS BRIEF

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ABBREVIATIONS

APA	Administrative Procedure Act
APS	Arizona Public Service
BHP	BHP Navajo Coal Company
BIA	U.S. Bureau of Indian Affairs
BiOp	Biological opinion
CCW	Coal combustion waste
CEQ	Council on Environmental Quality
CHIA	Cumulative hydrologic impact assessment
CLRD	Chronic lower respiratory disease
Diné CARE	Diné Citizens Against Ruining Our Environment
EIS	Environmental impact statement
EPA	U.S. Environmental Protection Agency
FCPP	Four Corners Power Plant
FONSI	Finding of No Significant Impact
GHG	Greenhouse gas
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NNEPA	Navajo Nation Environmental Protection Agency
NO _x	Nitrogen oxides
OSM	U.S. Office of Surface Mining Enforcement and Reclamation

PM Particulate matter

SJGS San Juan Generating Station

I. INTRODUCTION

Excepting the Great Wall of China, the smoke plume of the Four Corners plant near Farmington . . . was the only man-made phenomenon observed by the astronauts in 1966. It has been called the greatest single source of pollution in the country, greater than the entire city of Los Angeles, and its awesome shroud has been darkened in recent years by the fallout from one of its sibling plants, only ten miles away.

Peter Matthiessen, *Indian Country* 295 (Viking Press 1984) (1979).

The heart of this case is the Navajo Mine and Four Corners Power Plant (“FCPP”) complex, a massive, intertwined mine-mouth coal operation in the San Juan Basin, near Fruitland, New Mexico. Federal Defendants (collectively, “Office of Surface Mining” or “OSM”) have failed to fully analyze the mine and power plant as inextricably connected actions under the National Environmental Policy Act (“NEPA”). Continuing a thirty-year practice,¹ OSM has instead limited its analysis to a narrow segment of the strip mine in Area IV North, which alone has no independent utility. Consequently, OSM’s truncated and unlawful analysis ignores the inexorable, albeit indirect, effect of mine expansion: the release of a tremendous amount of contamination from combustion of Navajo Mine coal at FCPP and disposal of the resultant coal combustion waste (“CCW”). This contamination—the legacy of half a century of operations at the mine-power-plant complex—has caused and is continuing to cause significant harm to neighboring

¹ OSM has only existed since 1977, when Congress created the agency by enacting the Surface Mining Control and Reclamation Act of 1977 (“SMCRA”). 30 U.S.C. § 1211 (creating OSM).

communities, which are among the most vulnerable in the country, and the surrounding environment.

Plaintiffs Diné Citizens Against Ruining our Environment (“Diné CARE”), San Juan Citizens Alliance, the Center for Biological Diversity, the Sierra Club, and Amigos Bravos (collectively, “Citizens”) respectfully request that this Court declare OSM’s NEPA analysis of the Area IV North Permit Revision Application arbitrary and capricious, set aside its approval of the Area IV North Permit Revision Application, and remand the matter to OSM with instructions to prepare an environmental impact statement (“EIS”).

II. JURISDICTION AND VENUE

This Court has jurisdiction to review this matter pursuant to 28 U.S.C. § 1331 (federal question jurisdiction). This action arises under NEPA, 42 U.S.C. § 4332, and is subject to judicial review pursuant to the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 702, 704. Venue is proper pursuant to 28 U.S.C. § 1391(b)(2), because a substantial part of the actions and omissions giving rise to this case occurred at OSM’s western regional office located in Denver, Colorado.

Citizens have standing to challenge this action. Standing requires a showing of injury, traceability, and redressability. *Comm. to Save Rio Hondo v. Lucero*, 102 F.3d 445, 448 (10th Cir. 1996). In a NEPA case, as here, a plaintiff satisfies the injury requirement by showing (1) that the alleged NEPA violation creates an increased risk of environmental harm and (2) that the plaintiff has a geographical nexus to or actual use of the area of the agency action. *Id.* at 449. To establish traceability, the plaintiff “need

only show its increased risk is fairly traceable to the agency's failure to comply with [NEPA],” i.e., “the agency's uninformed decisionmaking.” *Id.* at 451-52. Redressability is satisfied by showing that the plaintiff's “injury would be redressed by a favorable decision requiring the [agency] to comply with [NEPA's] procedures.” *Id.* at 452.

Here, Citizens meet this standard. Citizens' members are directly harmed by operations of the Navajo Mine and FCPP, failure of OSM to conduct a lawful NEPA analysis created an increased risk of environmental harm through uninformed decision-making, and this harm would be redressed by a decision requiring OSM to conduct a adequate NEPA analysis. Eisenfeld Dec. ¶¶ 4-11; Willie Dec. ¶¶ 2-9; Long Dec. ¶¶ 3-4, 9-15; *Diné Citizens Against Ruining Our Environment v. Kline (Diné CARE)*, 747 F. Supp. 2d 1234, 1243-45 (D. Colo. 2010) (holding that these declarants have standing to bring NEPA challenge against mine expansion).² Further, Citizens have organizational standing because their members have standing (as noted), the claims are germane to their organizational purposes,³ and in this NEPA challenge to OSM's actions, no participation by individual members is required. *Comm. to Save Rio Hondo*, 102 F.3d at 447 n.3.

III. BACKGROUND

The southeastern corner of the Colorado Plateau meets the South Rocky Mountains in the historical homeland of the Navajo Nation. AR:8-1-1-32, 171 to -173, -223. In this high desert ecosystem, water is the lifeblood of civilization and has determined settlement patterns for centuries. 8-1-1-182, -284. In the San Juan Basin, the

² See also ; White Dec. ¶¶ 1, 5; McKinnon Dec. ¶¶ 10-18; McNall Dec. ¶¶ 5-12.

³ Eisenfeld Dec. ¶¶ 1, 3-4, 11; Long Dec. ¶¶ 1-3; White Dec. ¶¶ 3-4; McKinnon Dec. ¶¶ 2-3; McNall Dec. ¶¶ 2-3.

San Juan and Animas Rivers, which gather their waters in the peaks of the Southern Rockies, are the only permanent watercourses. AR:2-1-1-1738. A testament to the region's stark beauty and wealth of archeological and paleontological sites, some fifteen national parks, monuments, and wilderness areas—referred to as the Golden Circle of National Parks—surround the San Juan Basin. AR:1-2-14-1094.

Since 1963, the region has also been home to the Navajo Mine and FCPP. This Pantagruelian strip mine and power plant were referred to in a 1976 EIS as “one of the largest coal mines in the western hemisphere” and the “largest generating facility west of the Mississippi River.” AR:8-1-1-252. Residents of the Burnham area of the Navajo Nation where the mine-power-plant complex is located have long tried to maintain a traditional Navajo way of life, with livestock raising as the principle occupation. AR:8-1-1-242, -305. They have also long resisted the advances of the Navajo Mine. *See* AR:8-1-1-306 (1976 EIS noting longstanding opposition to mine and proposed gasification plant); AR:1-3-7-1 to -32 (uniform public opposition in Burnham to Area IV North in 2011). Among Navajo, there has been “uniform sympathy” for those dislocated by expansion of the Navajo Mine. *See* AR:8-1-1-306; *cf.* Willie Dec. ¶ 4.

Today, the Navajo Mine, owned and operated by Intervenor BHP Navajo Coal Company (“BHP”), a wholly owned subsidiary of BHP Billiton Limited, a multinational Australian corporation, sprawls across approximately 13,000 acres of the Navajo Nation. AR:1-1-1-167; AR:1-2-11-20. BHP's coal lease for the mine covers 33,000 acres. AR:1-2-11-19. From its conception, the mine has been inextricably linked to FCPP.

A. Mine-power-plant complex: One vision and one reality

BHP's predecessor in interest (Utah International Inc.) obtained a coal lease from the Navajo Nation in 1957. AR:1-2-11-19. The lease specifically envisioned construction of a mine-mouth power plant: "The Navajo Tribe and Lessee herein recognize the desirability of utilizing the coal produced under this lease in generating electrical power . . . and agree to cooperate with each other to the fullest extent for the purpose of erecting a power plant on or adjacent to said Reservation" AR:7-4-1-10. Shortly thereafter, the company made a proposal to Arizona Public Service ("APS"): if it would construct a power plant next to the coal lease, Utah International Inc. would develop a coal strip mine to supply coal to the plant. AR:8-1-1-1309. APS accepted the proposal, obtained a lease from the Navajo Nation, and built the first three units of FCPP, which began operating in 1963, burning coal from the Navajo Mine. AR:8-1-1-1309, -1310; AR:8-1-1-2265. In 1964, a consortium of utilities chose to add two more, much larger units to FCPP; these units came online in 1969 and 1970, respectively. AR:8-1-1-1310 to -1311.

All units at FCPP were constructed specifically to burn coal from the Navajo Mine. AR:1-2-11-20. Since the construction of FCPP and the inception of mining at Navajo Mine, the mine has produced coal "solely for use at the Four Corners powerplant," AR:8-1-1-2264; Doc. 1, ¶ 74; Doc. 13, ¶ 74. It is not feasible for FCPP to obtain coal from any source other than the Navajo Mine. AR:1-2-11-294 to -295. If the mine does not expand, annual coal production at the mine will decline. AR:1-2-11-29, -

189 to -190. Thus, if Area IV North is not strip mined, FCPP will not have an alternative source of fuel, and combustion and emissions will accordingly decline.

Both OSM and power plant owners have acknowledged that FCPP could not operate without the coal supply from the Navajo Mine. OSM has stated that cessation of mining at the Navajo Mine “would probably result in the shutdown of the Four Corners Powerplant unless coal could be obtained from another source.” AR:8-1-1-2293; *cf.* AR:1-2-11-294 to -295 (not feasible to obtain coal from any other source). The Salt River Project, a partial owner of FCPP, recently acknowledged as much in comments on the challenged mine expansion: “[BHP] will be able to provide the supply of coal needed to operate the plant through the remaining term of the existing lease from the Navajo Nation *only* through the issuance of permits and approvals addressed in the EA. Without a coal supply, *Four Corners will not be able to operate . . .*” AR:1-2-14-193 to -194 (emphasis added). These statements underscore OSM’s acknowledgement that the mine and power plant are one “entire project of which the coal mine [is] a small part.” AR:8-1-1-2276.

The historically intertwined operations of the mine and power plant further reveal their functional interdependency. BHP’s water permit is used to supply water to both the mine and the power plant. AR:5-1-1-26. Additionally, from 1971 to 2008 all coal combustion waste (“CCW”) from the power plants’ two largest units was delivered to the coal mine for disposal in unlined, mined-out pits.⁴ AR:8-1-1-1325; AR:1-2-11-19, -223.

⁴ CCW from the other three units was disposed of in unlined ash ponds and used for “fill and diking support” at the ash ponds. AR:8-1-1-1322 to -1325; AR:5-2-1-42 (attachment

The electric railway that transports coal from the mine connects to only one destination—FCPP. AR:1-2-11-40. FCPP is, in turn, connected to the mine by a network of power-lines through which it provides electricity to the mine and its draglines. AR:1-2-11-40; *id.* AR:1-2-11-278 (draglines are electric).

B. Sickened communities, degraded environment

Together the Navajo Mine and FCPP—operating in tandem like the gas tank and engine of a car—constitute one of the largest energy projects in the United States and in the western hemisphere. AR:8-1-1-252. The total generating capacity of FCPP is 2,060 megawatts (“MW”). AR:1-2-11-214. Given the plants’ annual coal consumption rate of 8.5 million tons, AR:1-2-11-20, over 300 million tons of coal have been strip mined and burned since 1970. The combustion of vast amounts of Navajo Mine coal at the FCPP has resulted in significant pollution that has and is continuing to harm the communities and environment on the Navajo Nation and in the broader San Juan Basin. FCPP is, according to the U.S. Environmental Protection Agency (“EPA”) the largest source of Nitrogen Oxide (“NO_x”) emissions in the United States, emitting over 42,000 tons annually. AR:1-2-14-1094. Nitrogen oxides, upon interaction with sunlight, form ground-level ozone. AR:1-2-14-547, -626.

It has been firmly established that breathing ozone results in short-term decreases in lung function and damages the cells lining the lungs. It also increases the incidence of asthma-related hospital visits and premature deaths. Vulnerability to ozone effects is greater for those who spend time outdoors, especially with physical exertion, because this results in a higher

2 (“Ross Report”) at 5. EPA has found that the ash ponds have a significant hazard potential. AR:2-1-1-6958.

cumulative dose to the lungs. As a result, children, outdoor workers, and athletes are at higher risk for these ailments.

AR:1-2-14-624; AR:1-2-14-786. Increased temperatures due to climate change “have been found to increase ozone more in areas with already elevated concentrations, meaning that global warming tends to exacerbate ozone pollution most in already polluted areas.” AR:1-2-14-626. Recent warming in the Southwest “is among the most rapid in the Nation.” AR:1-2-14-661. “Projections suggest continued strong warming, with much larger increases under higher emissions scenarios compared to lower emissions scenarios.” AR:1-2-14-661.

FCPP is also “among the largest sources of mercury emissions in the western U.S.,” emitting over 1,000 lbs. annually, approximately 1% of total mercury emissions from coal-combustion in the entire United States. AR:1-2-14-1946; AR:1-2-14-1000 (annual mercury emissions from all coal combustion in U.S. is 48 tons). Mercury is a “potent neurotoxin.” AR:1-2-14-1990. Mercury exposure

both dietary and *in utero* through maternal consumption is associated with neurological effects in infants and children, including delayed achievement of development milestones and poor results on neurobehavioral tests—attention, fine motor function, language, visual-spatial abilities, and memory. Seafood consumption has caused 7% of women of childbearing age to exceed the mercury reference dose set by EPA, and 45 states have issued fish consumption advisories.

. . . .

Direct costs of mercury emissions from coal-fired power plants causing mental retardation and lost productivity in the form of IQ detriments were estimated . . . to be \$361.2 million and \$1.625 billion, respectively

AR:1-2-14-1000. “Exposure to high levels of metallic, inorganic, or organic mercury can permanently damage the brain, kidneys, and developing fetus.” AR:1-2-14-432. “Even

in small amounts, mercury can cause a variety of physiological problems, illness, and even death” AR:2-1-1-12410. “Once ingested, and absorbed into the blood, there is no known way for an organism to excrete it.” AR:1-2-14-1990.

The communities and environment surrounding the Navajo Mine-FCPP complex have suffered and continue to suffer significant impacts from this pollution. A community health profile prepared for San Juan County found that “San Juan County is the worst county in New Mexico for release of toxic materials to the environment, and is ranked in the top 10% of worst counties in the United States for toxic releases to the environment.” AR:2-1-1-12410.⁵ “Ozone levels, particulate matter [“PM”] and mercury are all recognized concerns in San Juan [County, where the mine-power-plant complex is located,] and the Four Corners in general. Especially vulnerable populations to pollutants include pregnant women and infants, seniors, and persons with already compromised lung capacity.” AR:2-1-1-12428. “Environmental pollutants in San Juan and the Four Corners region [have] received state-wide and national attention, particularly as San Juan began to edge dangerously into the Federal ambient ozone standards. The connection between ozone levels and hospital emergency visits for asthma has been documented.” AR:2-1-1-12418. Monitoring in San Juan County has recently measured exceedances of national ambient air quality standards (“NAAQS”) for ozone. AR:2-1-1-12410. “In San Juan County, a recent study highlights that exposure to ozone is associated with increased emergency room visits for asthma.” AR:2-1-1-12410. Rates of chronic lower respiratory

⁵ See also AR:1-2-14-260 (noting high rate of toxic releases in San Juan County and citing EPA’s toxic release inventory: <http://www.epa.gov/tri/>).

disease (which includes chronic bronchitis, asthma, and emphysema) are significantly higher in San Juan County than in New Mexico or the United States. AR:2-1-1-12406 to -12407. “[A]sthma is a recognized concern in San Juan County, and has been connected to high levels of ozone in the county.” AR:2-1-1-12407.

Mercury pollution too is a significant problem in the San Juan Basin:

[M]ercury is a pollutant that is of particular concern in the Four Corners region. Mercury is released into the environment from coal-fired power plants and from mining. The San Juan Watershed Group, a task force that began meeting in 2001, suggests the primary sources of fish tissue mercury in the San Juan basin are most likely atmospheric depositions, and runoff from areas impacted by historic and current mining.

AR:2-1-1-12410. “[M]ercury can be found in toxic levels in fish in many areas of San Juan County.” AR:2-1-1-12410. Studies of sediment from lake bottoms in southwestern Colorado “show a clear increase in mercury deposition in the 1960s and 1970s,” “likely due, in part, to the Four Corners area power plants built between 1963 and 1977.” AR:1-2-14-1945. “[T]otal mercury concentrations in precipitation at Mesa Verde National Park are among the highest measured in the United States.” AR:1-2-14-1945. The vast majority of this mercury “trace[s] back to within 50 km of the FCPP and SJGS [San Juan Generating Station]” power plants. AR:1-2-14-1945. Coal from the Navajo Mine, it turns out, contains high concentrations of mercury, and other pollutants. AR:1-2-14-1877.

A draft biological opinion (“BiOp”)⁶ written in 2009 by the U.S. Fish and Wildlife Service (“Service”) for the proposed Desert Rock Energy Project (“Desert Rock”), a proposed large coal-fired power plant (1,500 MW) that would burn coal from Area IV South and Area V of the BHP lease at the Navajo Mine, AR:1-2-14-1879 to -1880,⁷ found that mercury pollution in the San Juan River is causing significant harm to a small population of endangered Colorado pikeminnow. AR:1-2-14-1904 (estimating 19-50 adult Colorado pikeminnow in San Juan River). Ten percent of Colorado pikeminnow “may currently be experiencing brain lesions and impairment of essential behaviors” due to mercury exposure, and “64 percent of Colorado pikeminnow may be experiencing reproductive impairment currently” due to mercury exposure. AR:1-2-14-1964 to -1965. Ultimately, the Service concluded that a 0.1 percent (or 171 lbs.) increase in mercury deposition in the San Juan River due to Desert Rock was likely to “jeopardize the continued existence of the Colorado pikeminnow.” AR:1-2-14-1965, -1990.

The waters directly adjacent to the Navajo Mine and FCPP are also heavily contaminated with mercury pollution. In water-quality testing in the Chaco River by the U.S. Geological Survey, one-hundred percent of samples exceeded Navajo Nation Environmental Protection Agency (“NNEPA”) mercury standards for chronic aquatic and

⁶ The Service is required to prepare a BiOp in the consultation process under the Endangered Species Act (“ESA”), when an agency action may adversely affect a threatened or endangered species. 15 U.S.C. § 1536(b); 50 C.F.R. § 402.14.

⁷ Among the “related environmental studies” listed in the EA, OSM omitted reference to the environmental studies prepared for Desert Rock, even though like the WECSO Coal Gasification Project, environmental study of which is listed, Desert Rock would develop coal from the southern portions of the Navajo Mine lease. *See* AR:8-1-1-31 to -31; AR:1-2-14-1880.

wildlife habitat. AR:5-1-1-52. One-hundred percent of samples also exceeded NNEPA mercury standards for acute aquatic and wildlife habitat. AR:5-1-1-52. And one-hundred percent of samples exceeded NNEPA mercury standards for fish consumption. AR:5-1-1-52. Median mercury values were “14 times the NNEPA fish consumption criteria” and “2,100 . . . times greater than the NNEPA chronic aquatic and wildlife habitat criteria.” AR:5-1-1-52 (emphasis added). The Chaco River, which now flows perennially due to discharges from Morgan Lake, the reservoir created to supply water for mine and power-plant operations, joins the San Juan River a short distance from the mine and power plant. AR:1-2-11-67 to-68.

The shockingly high concentrations of mercury in the Chaco River are due to not only atmospheric deposition from coal plants, but also CCW disposal at the mine-power-plant complex, which is another significant problem. Mercury is a one of the “contaminants of most environmental concern” in CCW. AR:1-2-14-401.⁸ An independent study of available water quality monitoring data found significant increases in mercury pollution downstream of FCPP’s CCW disposal sites. AR:5-2-1-42 (attachment to email entitled “Four Corners Ross Report” at 15-16 [hereinafter, “Ross Report”]); *see also id.* (attachment entitled “NM Four Corners CCW Damage Case” at 58-59 [hereinafter, “Out of Control”]). The same study found increased concentrations of numerous other pollutants downstream of the power plant’s CCW disposal areas, including mercury. Ross Report at 15-18. An earlier study had similarly found

⁸ Other concerning contaminants in CCW are antimony, arsenic, barium, beryllium, cadmium, chromium, lead, nickel, selenium, silver, and thallium. AR:1-2-14-401.

significant increases of multiple pollutants in the Chaco River downstream of CCW disposal sites. AR:1-2-14-306 to -307 [hereinafter “Zimmerman Report”].⁹ A different study documented seepage from one CCW disposal site, and also documented indicators of seepage at another site (tamarisk trees growing at the base of the site). AR:2-1-1-6929. The extent of surface and ground-water pollution remains largely unknown to both the public and regulators, in part, because BHP and APS have refused to release detailed monitoring data to regulators, including NNEPA, or independent scientists. Ross Report at 1 (attached to AR:5-2-1-42); Zimmerman Report at 6-10 (AR:1-2-14-278 to -282) (reporting companies’ refusal to provide information relevant to evaluating potential migration of pollution from CCW disposal sites); Out of Control at 61 (attached to AR:5-2-1-42).

C. History of regulatory oversight

The courts of the United States have long recognized a general trust relationship between the United States and Native Americans. *See, e.g., United States v. Mitchell*, 463 U.S. 206, 225-26 (1983) (citing cases); *Jicarilla Apache Tribe v. Supron Energy Corp.*, 728 F.2d 1555, 1563-64 (10th Cir. 1984) (Seymour, J., concurring in part and dissenting in part), *adopted as majority opinion*, 782 F.2d 855, 857 (10th Cir. 1986) (per curium). Indeed, the U.S. Department of the Interior (“Interior”) acknowledged this relationship in a 1976 EIS for a proposed gasification plant to be built next to the Navajo Mine: “As Trustee, the Federal Government is responsible for the protection and

⁹ Both independent studies were hampered by unwillingness of the mine and power plant owners, BHP and APS, respectively, to share information. Zimmerman Report at 6-10, 33 (AR:1-2-14-278 to -282, -305); Ross Report at 1.

management of property to which title is vested in Indian Tribes, or in individual members of Indian Tribes holding trust allotments.” AR:8-1-1-257. The conduct of federal agencies regarding energy development in Indian Country and particularly on the Navajo Nation, however, has on repeated occasion fallen below this standard. *E.g.*, *United States v. Navajo Nation*, 537 U.S. 488, 518-20 (2003) (Souter, J., dissenting) (describing intervention of Secretary of Interior on behalf of coal corporation in dispute with Navajo Nation over coal royalties, following secret *ex parte* meetings between coal company and Secretary); *N. Cheyenne Tribe v. Hodel*, 851 F.2d 1152, 1154, 1157 (9th Cir. 1988) (Secretary of Interior violated NEPA and trust responsibilities to tribe by leasing eight coal tracts along the north, east, and south border of reservation without consulting tribe or considering impacts to tribe); Rebecca Tsosie, *Indigenous People and Epistemic Injustice: Science Ethics and Human Rights*, 87 Wash. L. Rev. 1133, 1168-1175 (2012) (discussing history of uranium mining on Navajo Nation). This insouciance toward the environmental impacts of energy development in Indian Country characterizes federal oversight of the Navajo Mine.

The Navajo Mine-FCPP complex, constructed prior to passage of NEPA, has largely avoided close environmental scrutiny over the past fifty years. *Diné Citizens Against Ruining Our Environment v. Kline (Diné CARE)*, 747 F. Supp. 2d 1234, 1240-41 (D. Colo. 2010). Since the middle 1980s to 2001, the Navajo Mine—touted by Interior as “one of the largest coal mines in the western hemisphere,” AR:8-1-1-252—has steadily grown via incremental expansions of 12,092 acres, 829 acres, 508 acres, and 708 acres. AR:8-1-1-2266; AR:8-1-1-2296; AR:8-1-1-2325; AR:8-1-1-2355. Each

expansion was accompanied by a cursory EA ranging in length from 31 to 11 pages; the actual analyses of environmental impacts in these EAs ranged from 8 pages to 5 paragraphs. *Compare* AR:8-1-1-2286 to -2293 (1989 EA), *with* AR:8-1-1-2362 to -2364 (2001 EA). Each EA acknowledged that coal had only one destination (FCPP), or that the power plant would not be able to continue operations without the proposed mining, or both.¹⁰ Yet no EA even addressed the impacts of the intended coal combustion at the power plant or the subsequent CCW disposal, much of which at that time was being backfilled in the mine. OSM concluded in each case that the each incremental mine expansion would not significantly affect the quality of the human environment and in each case issued a FONSI. AR:8-1-1-2295; AR:8-1-1-2323; AR:8-1-1-2340; 8-1-1-2365.

Continuing this trend, in 2005, OSM prepared a 14-page EA in connection with a 3,800-acre mine expansion into Area IV North of the mine lease. AR:8-1-1-2415. The EA again confirmed that the coal had only one destination—FCPP—yet OSM again declined to consider the impacts of coal-combustion. AR:8-1-1-2416. As in prior EAs, OSM concluded that the mine expansion would have no significant environmental impacts. AR:8-1-1-2429. This decision was eventually challenged in court, a summary

¹⁰ AR:8-1-1-2264 (noting “[c]oal has been produced from the Navajo mine since 1963 solely for use at the Four Corners powerplant”); *id.* at 2293 (noting that if mine expansion did not proceed “[t]his would probably result in the shutdown of the Four Corners Powerplant and disruption of a major power supply in the Southwest unless coal could be obtained from another source”); AR:8-1-1-2296 (noting coal produced “solely for use at the Four Corners powerplant”); AR:8-1-1-2325 (same); AR:8-1-1-2355 (“Coal is trucked to stockpiles where it is loaded on the mine’s internal electric railroad for transport to the adjacent Four Corners Power Station.”).

of which is provided below. First, however, there was an intervening event: the Desert Rock Energy Project.

Desert Rock, as noted, was a proposal to construct another large coal-fired mine-mouth power plant to be fueled by coal from the Navajo Mine (Areas IV and V). AR:1-2-14-1880 to -1881. Though this proposal has not yet come to fruition, the environmental review of Desert Rock is relevant to the instant case. It reveals repeated efforts of certain federal agencies to avoid close analysis of the impacts of mercury and CCW disposal in the San Juan Basin, as OSM has done here. Federal review of the project began in the early 2000s, with the Bureau of Indian Affairs (“BIA”) as the lead agency for the project and OSM as a consulting agency. AR:1-2-14-1877; 72 Fed. Reg. 34,035, 34,035 (June 20, 2007). In its early consultations with the Service, BIA repeatedly failed to provide the Service with sufficient information for the wildlife agency to evaluate the effects of the proposal on threatened and endangered species; particularly, BIA failed to supply information necessary to determine mercury emissions from the plant. AR:1-2-14-1877. Independent information showed that the coal in the “Navajo Coal Field has, on a whole-coal basis, higher concentrations of mercury, selenium, and other contaminants than reported” by BIA. AR:1-2-14-1877. BIA also failed repeatedly to adequately address bioaccumulation of mercury or mercury contributions from FCPP and SJGS. AR:1-2-14-1877. After BIA issued a draft EIS, 72 Fed. Reg. at 34,035, EPA raised concerns about, among other things, CCW disposal, adequacy of groundwater monitoring, and mercury emissions, 72 Fed. Reg. 51,441, 51,441 (Sept. 7, 2007). Two years later the Service prepared its draft BiOp in which it

found, as mentioned, that existing mercury pollution including the two largest local sources (FCPP and SJGS) was causing significant harm to the San Juan River's small population of endangered Colorado pikeminnow and that even a very small increase in mercury emissions would jeopardize the continued existence of this population. AR:1-2-14-1965, -1990. Likely due in part to the jeopardy finding in the Service's draft BiOp, Desert Rock is no longer considered by OSM to be a current proposal. *See* AR:1-2-16-06 (mentioning the "formerly proposed Desert Rock Energy Project").

While Desert Rock was playing out, a coalition of citizens' groups, including three of the plaintiffs in the instant case, challenged OSM's 2005 EA, which evaluated the proposed 3,800-acre mine expansion into Area IV North. This Court subsequently ruled that the cursory EA violated various procedural requirements of NEPA, vacated OSM's decision, and remanded the matter to OSM. Specifically, the Court concluded that OSM failed to adequately explain why the mine expansion, which due to its size would normally require an EIS under to agency guidelines, was not analyzed in an EIS. *Diné CARE*, 747 F. Supp. 2d at 1253. OSM also failed adequately to consider connected actions; alternatives; and mitigation of scientific, historic and cultural resources. *Id.* at 1254, 1256, 1259. The agency further failed to involve the public—particularly members of the Navajo Nation—in its NEPA decision-making process. *Id.* at 1261-62.

D. The current dispute

On remand, OSM did not address whether an EIS should be prepared in light of agency guidelines. Instead, in the resubmittal of its mine expansion application, BHP reduced the acreage of the requested expansion from 3,800 acres to 800 acres, which it

deemed necessary to meet its contractual coal-supply obligations to FCPP. AR:1-1-1-1. The expansion would allow BHP to strip mine approximately 12.7 million tons of coal from a portion of Area IV North. AR:1-2-11-29. OSM subsequently prepared a draft EA for the scaled-back mine expansion proposal. AR:2-1-1-439. OSM's stated purpose and need of the mine expansion was "to continue to provide a coal supply in accordance with [BHP]'s contractual obligations with the FCPP through July 6, 2016." AR:2-1-1-466. The EA further noted that FCPP was constructed specifically to burn Navajo Mine coal and that it would not be feasible for FCPP to obtain coal from any other source. AR:1-2-11-20, -283, -294 to -295. However, once more, OSM refused to include coal combustion within the scope of its analysis and refused to address the indirect effects of coal combustion at FCPP and subsequent disposal of CCW. OSM avoided any discussion of Desert Rock, mentioning in passing only an ethnographic assessment prepared in association with that project. AR:1-2-11-139. The Service's draft BiOp and the draft EIS were not listed among the "related environmental studies." AR:1-2-11-26 to -27. There was no mention of mercury contamination from atmospheric deposition or CCW.

The Citizens submitted extensive comments, arguing among other things that OSM had failed to adequately consider impacts of coal combustion and disposal at FCPP and that preparation of an EIS was required. AR:1-2-14-207, to -208, -216 to -217, -231 to -244. The Citizens specifically asserted that OSM had failed entirely to discuss the impacts of mercury pollution due to coal combustion at FCPP and disposal of CCW. AR:1-2-14-232 to -233, -241 to -242. OSM published a response to comments. AR:1-2-

16-1. With regard to air pollution from FCPP, OSM offered two, inconsistent positions. With regard to PM and NO_x, OSM appeared to assert that it adequately evaluated the impacts of such emissions from both the strip mine and power plant and concluded that there would be no significant impacts because such emissions would not violate ambient air quality standards and because of expected pollution reductions after 2018. AR:1-2-16-8 to -9. Besides, OSM added as an afterthought, the strip mines' NO_x emissions (as opposed to those of FCPP) are very small. AR:1-2-16-9. Regarding mercury, OSM took a different tack, tacitly acknowledging its failure to address this issue but suggesting first that it was not required to consider the power plant's mercury pollution because *the strip mine's* mercury pollution is very small. AR:1-2-16-12. Later, however, OSM seemed to assert that it did not consider impacts of mercury contamination due to coal combustion and future CCW disposal because it does not have "regulatory authority over the burning [of] coal at the FCPP." AR:1-2-16-13. In sum, OSM concluded that it had adequately analyzed the air pollution from FCPP which it considered insignificant (NO_x and PM), but insisted that it had no jurisdiction to analyze the air pollution from FCPP (mercury) that it knew to be causing serious problems because of well documented harm to endangered species and violations of water quality standards. OSM cannot have it both ways.

On March 16, 2012, contemporaneously with the issuance of its response to comments, OSM issued a finding of no significant impact ("FONSI") and approved the mine expansion. AR:1-2-10-1; AR:1-2-8-1. The FONSI was based on the impacts of strip mining, with no consideration of the impacts of coal combustion and CCW disposal.

AR:1-2-10-1 to -6. Also on March 16, 2012, OSM released its cumulative hydrologic impact assessment (“CHIA”) for the proposed mine expansion. AR:1-2-16-7. The public had had no opportunity to review the CHIA (no draft CHIA was made publically available) before OSM issued its FONSI. As noted, the CHIA disclosed levels of mercury in the Chaco River downstream of the strip mine and power plant that exceeded applicable Navajo Nation water quality standards by, in some cases, three orders of magnitude. AR:5-1-1-52.

The Citizens subsequently brought the instant suit challenging OSM’s EA and FONSI pursuant to NEPA.

IV. STANDARD OF REVIEW

Agency compliance with NEPA is reviewed pursuant to the APA which provides that a “reviewing court shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A); *WildEarth Guardians v. Nat’l Park Serv.*, 703 F.3d 1178, 1182-83 (10th Cir. 2013) (agency NEPA compliance reviewed under “arbitrary and capricious” standard). Arbitrary and capricious review requires a court to “determine whether the agency considered all relevant factors and whether there has been a clear error of judgment.” *Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1574 (10th Cir. 1994). Accordingly, agency action will be set aside if

the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicle Mfrs. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). A reviewing court may not “supply a reasoned basis for the agency’s action that the agency itself has not given.” *Id.* (quoting *SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947)). Instead, “[a]n agency’s action must be upheld, if at all, on the basis articulated by the agency itself.” *Id.* at 50. Though this standard of review is ultimately narrow and agency action is “entitled to a presumption of regularity,” review must nevertheless be “searching and careful,” “thorough, probing, and in-depth.” *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415, (1971).

V. NEPA

“The National Environmental Policy Act (NEPA) is our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a). The statutory purpose of NEPA is sweeping:

To declare national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; [and] to enrich the understanding of the ecological systems and natural resources important to the Nation.

42 U.S.C. § 4321.

The national policy established by NEPA is realized through its exacting procedural provisions. The statute’s central procedural provision requires federal agencies to document and evaluate the potential impacts of a proposed course of action before committing resources to that action:

The Congress authorizes and directs that, to the fullest extent possible, . . . all agencies of the Federal Government shall . . . include in every . . . major

federal action significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

- (i) the environmental impact of the proposed action;
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between the local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Id. § 4332(2)(C). In preparing such “detailed statement[s],” agencies must “utilize a systematic, interdisciplinary approach.” *Id.* § 4332(2)(A). These provisions are “action-forcing,” requiring agencies to “carefully consider detailed information concerning significant environmental impacts” prior to making a decision and to disseminate such information to the public. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989); *Citizens’ Comm. to Save Our Canyons v. Krueger*, 513 F.3d 1169, 1177-78 (10th Cir. 2008).

[B]y requiring agencies to take a ‘hard look’ at how choices before them affect the environment, and then place their data and conclusions before the public, NEPA relies upon democratic processes to ensure to ensure—as the first appellate court to construe the statute in detail put it—that the “most intelligent optimally beneficial decision will ultimately be made.”

Or. Natural Desert Ass’n v. Bureau of Land Mgmt., 625 F.3d 1092, 1099-1100 (9th Cir. 2010) (quoting *Calvert Cliffs Coordinating Comm., Inc. v. U.S. Atomic Energy Comm’n*, 449 F.2d 1109, 1114 (D.C. Cir. 1971) (citation omitted)). The procedural standards of

NEPA “establish a strict standard of compliance.” *Calvert Cliffs*, 449 F.2d at 1112.

“Ultimately, of course, it is not better documents but better decisions that count. NEPA’s purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action.” 40 C.F.R. § 1500.1(c).

VI. ARGUMENT

A. OSM unlawfully segmented connected actions and unlawfully constrained the scope of its NEPA analysis.

As noted above, the Navajo Mine and FCPP are inextricably connected, like a car’s gas tank and motor. Because they are so interdependent, OSM violated NEPA by evaluating one without including the other in the scope of its analysis.

In defining the scope of analysis under NEPA agencies “shall consider . . . connected actions.” 40 C.F.R. § 1508.25(a)(1). The purpose of requiring consideration of connected actions is to “prevent agencies from minimizing the potential environmental consequences of a proposed action (and thus short-circuiting NEPA review) by segmenting or isolating an individual action that, by itself, may not have a significant environmental impact.” *Citizens’ Comm. to Save Our Canyons v. U.S. Forest Serv.*, 297 F.3d 1012, 1028 (10th Cir. 2002). This requirement also prevents private permit applicants from avoiding NEPA by “submitting a gerrymandered series of permit applications.” *Save Our Sonoran, Inc. v. Flowers*, 408 F.3d 1113, 1122 (9th Cir. 2005). Council on Environmental Quality (“CEQ”) regulations, which are “mandatory” for all federal agencies and “entitled to substantial deference,” *Andrus v. Sierra Club*, 442 U.S. 347, 358 (1979), establish standards for determining whether actions are connected:

Actions are connected if they:

- (i) Automatically trigger other actions which may require environmental impact statements[;]
- (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously[; or]
- (iii) Are independent parts of a larger action and depend on the larger action for their justification.

40 C.F.R. § 1508.25(a)(1). Tenth Circuit case law applies an “independent utility” test to determine if two actions are connected: “The crux of the test is whether each of the two projects would have taken place with or without the other and thus had independent utility.” *Wilderness Workshop v. U.S. Bureau of Land Mgmt.*, 531 F.3d 1220, 1229 (10th Cir. 2008) (quoting *Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 969 (9th Cir. 2006)); *see, e.g., Thomas v. Peterson*, 753 F.2d 754, 758-59 (9th Cir. 1985) (holding construction of “logging road” and timber sale were connected actions: “It is clear that the timber sales cannot proceed without the road, and that the road would not be built but for the contemplated timber sales”).

Non-federal and private actions that would not take place but for the occurrence of federal action are connected actions that must be included in the scope of an agency’s NEPA analysis. *E.g., Davis v. Morton*, 469 F.2d 593, 594-98 (10th Cir. 1972) (enjoining private development on Navajo Nation because Secretary of Interior had not conducted NEPA analysis prior to approving lease between Navajo Nation and developer); *Port of Astoria v. Hodel*, 595 F.2d 467, 477-78 (9th Cir. 1979) (holding that agency NEPA analysis had to consider both contract to supply of federal power and the construction of

private aluminum plant that would use the power because the actions were connected); *Sierra Club v. U.S. Dep't of Energy*, 255 F. Supp. 2d 1177, 1180-81, 1183-84 (D. Colo. 2002) (holding that issuance of road easement by federal agency and non-federal gravel-mining activities were connected actions); *Alpine Lakes Protection Soc'y v. U.S. Forest Serv.*, 838 F. Supp. 478, 482-83 (W.D. Wash. 1993) (holding that issuance of federal easement and subsequent logging on private land were connected actions); *Save Our Sonoran*, 408 F.3d at 1121-23 (holding that U.S. Army Corps of Engineers ("the Corps") "improperly constrained its NEPA analysis" of proposed private development by only considering impacts of fill of jurisdictional wetlands and not considering private development in uplands that could not occur without filling wetlands); *White Tanks Concerned Citizens, Inc. v. Strock*, 563 F.3d 1033, 1042 (9th Cir. 2009) (holding the Corps improperly limited NEPA analysis of private development to jurisdictional wetlands and limited uplands: because the "project's viability" was "founded on [the Corps'] issuance of a Section 404 permit, the entire development was within [the Corps'] purview"); *see also* 40 C.F.R. § 1508.18(a) ("Actions include new and continuing activities, including projects and programs entirely *or partly* . . . assisted, conducted, regulated, or approved by federal agencies" (emphasis added)); *Sierra Club v. Hodel*, 848 F.2d 1068, 1089-90 (10th Cir. 1988) (noting CEQ regulations "establish that major federal action encompasses not only actions by the federal government but also actions by non-federal actors" and stating that non-federal activities may become federal when federal approval is necessary for the activities to go forward), *overruled on other*

grounds, Village of Los Ranchos de Albuquerque v. Marsh, 956 F.2d 970, 973 (10th Cir. 1992) (en banc).

Here, the proposed mine expansion into Area IV North and combustion of the coal pursuant to the coal supply contract between BHP and APS are connected actions, which OSM was required to analyze together. 40 C.F.R. § 1508.25(a)(1). Fifty years of history shows that operations at the Navajo Mine and FCPP are mutually interdependent, and that—like the road and timber sale in *Thomas*, and the easement and gravel mining in *Sierra Club v. Department of Energy*—each, standing on its own, wholly lacks independent utility. The mine and power plant were conceived together and began operating in tandem. AR:8-1-1-1309 to -10; AR:8-1-1-2264; AR:7-4-1-10. FCPP was constructed specifically to burn and has only ever burned coal from the Navajo Mine. AR:1-2-11-20; AR:1-2-11-294 to -295 (not feasible for FCPP to obtain coal from other sources). The Navajo Mine, in turn, has only ever produced coal for FCPP. AR:8-1-1-2264; Doc. 1 ¶ 74; Doc. 13, ¶ 74. At various points, both OSM and the FCPP’s owners have stated that without the Navajo Mine, the power plant could not operate. AR:8-1-1-2293; AR:1-2-14-193 to -94. Further, FCPP has historically shipped its CCW to the mine for disposal in mined-out pits. AR:8-1-1-1325; AR:1-2-11-19, -223. The water used to cool the power plant and generate electricity is supplied via the mine owner’s water rights. AR:5-1-1-26. The two operations are directly adjacent to each other, and are physically connected by the railroad that hauls coal from the mine to the plant and the power cords that return electricity from the plant to the mine. AR:1-2-11-40.

Furthermore, the specific strip-mining proposed in Area IV North lacks utility independent of FCPP. BHP has specifically sought the permit to mine this section of Area IV North in order to fulfill its coal supply contract with APS and the power plant. AR:1-1-1-1. As in *Thomas*, 753 F.2d at 758-59, where the stated need for the road was to allow logging, here, OSM's stated purpose and need of the mine expansion is to "continue to provide a coal supply in accordance with [BHP's] contract obligations with the FCPP through July 6, 2016." AR:1-2-11-28. It would not be feasible for FCPP to obtain coal from another source given the lack of infrastructure to transport the coal in an economical manner. AR:1-2-11-294 to -95. These same logistical difficulties prevent the sale of Navajo Mine coal to other customers. *See* AR:1-2-11-294 to -295.

Ultimately, the record is definitive: BHP would not strip mine 12.7 million tons of coal but for the contract to burn the coal at FCPP, and FCPP will not burn 12.7 tons of coal unless BHP can strip mine that coal from Area IV North. *Cf. Port of Astoria*, 595 F.2d at 477 (agency required to include private aluminum plant in NEPA analysis because federal power supply contract "enables Alumax [the private company] to build the plant"); *Sierra Club*, 255 F. Supp. 2d at 1184-85 (holding that "[b]ut for" road easement "mining company could not access the mine site" and "absent the mine, there is no independent utility" for road; accordingly they were connected actions and agency required to "consider and evaluate the mine's impacts on the environment"); *Save Our Sonoran*, 408 F.3d at 1121-23 (because "denial of a permit would prevent" development, agency "improperly constrained" NEPA analysis by excluding development from scope).

Thus, combustion of the coal at FCPP is a connected action that, pursuant to 40 C.F.R. § 1508.25(a), OSM was duty bound to include within the scope of the NEPA analysis for the mine expansion into Area IV North. Such combustion was not, however, included in the scope of OSM's NEPA analysis. *See* AR:1-2-11-34 to -47 (describing proposed action and including only mining activities). Instead, OSM's FONSI is based entirely on the segmented analysis of mining activities, with no consideration of the harms that would result from combustion of the coal at FCPP. *See* AR:1-2-10-2 to -6. As such, OSM failed entirely to consider a relevant factor and important aspect of the problem, rendering the agency's action arbitrary and capricious. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

OSM made two arguments in response to the Citizen's comments that coal combustion had to be considered as a connected action. First, OSM argued that it did adequately consider these impacts (in its cumulative effects analysis) and, second, the agency argued that it did not even have to consider these impacts because it had no jurisdiction over coal combustion at FCPP. AR:1-2-16-6 to -7, -11 to -12. Neither argument is availing.

OSM's first argument fails for a simple reason: An agency's duty to consider connected actions is distinct from and more demanding than the duty to consider cumulative effects. *Compare* 40 C.F.R. § 1508.25(a), *with id.* § 1508.7. Cumulative effects analysis considers only the "incremental impact of the action when added" to related impacts of other actions. *Id.* § 1508.7. Connected actions, on the other hand, must be fully evaluated in their own right, including their direct, indirect, and cumulative

effects, as well as alternatives (even when an alternative is “not within the jurisdiction of the lead agency”). *Id.* §§ 1502.14(c), 1508.25(c). Such analysis, in turn, must inform an agency’s determination of whether to prepare an EIS or FONSI and, ultimately, an agency’s choice of alternatives. *Id.* §§ 1502.14, 1508.27.

Accordingly, OSM’s duty to consider “connected actions” cannot be satisfied by a brief—and cursory—mention in the EA’s cumulative impacts analyses of air pollution and CCW, analyses which, again, exclude any discussion of mercury pollution. *See* AR:1-2-11-222 to -224 (briefly mentioning CCW disposal at FCPP, but omitting mercury pollution); AR:1-2-11-229 to -232 (mentioning in cursory fashion air pollution from FCPP, but omitting mention of mercury). Nor can it be satisfied by OSM’s FONSI, which failed entirely to consider the impacts of pollution from coal combustion at FCPP. AR:1-2-10-1 to -6.

Furthermore, even if the EA’s cursory analysis of cumulative effects were sufficient to demonstrate inclusion of FCPP within the scope of the NEPA analysis (it is not, as explained above), OSM’s action would still be arbitrary and capricious. This is because the cumulative effects analysis of pollution from FCPP (both air emissions and CCW disposal) failed entirely to consider the deleterious impacts of mercury—impacts which are a relevant factor, demanding a hard look analysis, as the record shows. *See* AR:1-2-11-222 to -224, -229 to -231; *cf.* AR:2-1-1-12410 (San Juan County Community Health Profile detailing impacts of mercury); AR:1-2-14-1877, -1946, -1965, -1990 (Desert Rock BiOp detailing significance of mercury emissions from Navajo Mine coal combusted at FCPP and impacts on endangered species); AR:5-1-1-52 (OSM’s own

CHIA disclosing mercury pollution in Chaco River); Ross Report at 15-16 (attached to AR:5-2-1-42) (showing elevated mercury levels in Chaco); Out of Control at 58-59 (attached to AR:5-2-1-42) (same). With the exception of the San Juan County Community Health Profile, none of the other documents noted here—though supplied to OSM for the record by the Citizens and others—were cited, discussed, or disclosed in OSM’s EA. *See* AR:1-2-11-241 to -248. Additional shortcomings of OSM’s air pollution analysis are detailed below. *See infra* Part IV.C.2.

Second, in its response to comments, OSM argued that it was justified in ignoring the impacts of air pollution from coal combustion and CCW from FCPP because the agency’s foundational statute SMCRA, 30 U.S.C. §§ 1201-1328, does not grant the agency authority to regulate such activities. This argument also fails. It was precisely this kind of disregard of environmental impacts due to the narrow focus of mission-oriented agencies (like OSM) that led Congress to enact NEPA in the first place. A Dan. Tarlock, *Balancing Environmental Considerations and Energy Demands: A Comment on Calvert Cliffs’ Coordinating Committee, Inc. v. AEC*, 47 Ind. L.J. 645, 658 (1972).¹¹ Thus, NEPA “makes environmental protection a part of the mandate of every federal agency and department.” *Calvert Cliffs*, 449 F.2d at 1112. To further its sweeping goals, NEPA requires agencies to consider environmental effects “to the fullest extent possible.” 42 U.S.C. § 4332. The Supreme Court has explained how this language was intended to

¹¹ *Calvert Cliffs*, 449 F.2d at 1112 (“The Atomic Energy Commission, for example, had continually asserted, prior to NEPA, that it had no statutory authority to concern itself with the adverse environmental impacts of its actions. Now, however, its hands are no longer tied.”) (footnote omitted).

prevent agencies from narrowly construing their statutory authority to avoid consideration of adverse environmental effects, as OSM did here:

The purpose of the new language is to make it clear that each agency of the Federal Government Shall comply with the directives set out in (s 102(2) [42 U.S.C. § 4332(2)]) Unless the existing law applicable to such agency's operations expressly prohibits or makes full compliance with one of the directives impossible Thus, it is the intent of the conferees that the provision "to the fullest extent possible" shall not be used by any Federal agency as a means of avoiding compliance with the directives set out in section 102. Rather, the language in section 102 is intended to assure that all agencies of the Federal Government shall comply with the directive set out in said section "to the fullest extent possible" under their statutory authorizations and that no agency shall utilize an excessively narrow construction of its existing statutory authority to avoid compliance.

Flint Ridge Development Co. v. Scenic Rivers Ass'n of Okla., 426 U.S. 776, 787-88 (1976) (quoting 115 Cong. Rec. 39,702 (1969)). Regarding impacts, NEPA specifically mandates that agencies evaluate "*any* adverse environmental effects which cannot be avoided should the proposal be implemented." 42 U.S.C. § 4332(2)(C)(ii) (emphasis added).

NEPA's regulations further implement the congressional mandate to agencies to broadly consider environmental impacts, even beyond the bounds of their narrow missions. For example, agencies must consider the cumulative impacts of "reasonably foreseeable future actions *regardless of what agency (Federal or non-Federal) or person undertakes such other actions.*" 40 C.F.R. § 1508.7 (emphasis added). Agencies must further consider alternatives (and, thus, weigh impacts) "*not within the jurisdiction* of the lead agency." *Id.* § 1502.14(c) (emphasis added). Agencies must also consider indirect impacts, which are "later in time or farther removed in distance" from a given agency

action. *Id.* § 1508.8(b). Of particular importance here, regulations define “actions” to include “new and continuing activities, including projects and programs entirely or *partly* assisted, conducted, *regulated, or approved by federal agencies.*” *Id.* § 1508.18(a) (emphasis added).

Most relevant to the instant case, agencies must include within the scope of their analysis “connected actions,” which include actions that “cannot or will not proceed unless other actions are taken previously or simultaneously.” *Id.* § 1508.25(a)(1)(ii); *see also id.* § 1508.25(a)(1)(i), (iii). Consistent with this regulation, federal courts have from the enactment of NEPA to the present required agencies to consider in their NEPA analyses non-federal actions (actions by states or private parties) over which agencies do not enjoy direct regulatory authority if those actions would not occur but for the occurrence of actions over which agencies do have authority, or if the actions otherwise lack independent utility. Thus, in *Port of Astoria*, 595 F.2d at 477, the Ninth Circuit held that before entering into a power supply contract with an aluminum company, the Bonneville Power Administration was required to consider in its NEPA analysis the construction of the aluminum plant, which was “enable[d]” by the power supply contract.¹² Recently, in *Save Our Sonoran*, 408 F.3d at 1121-23, and *White Tanks*

¹² *See also, e.g., Davis v. Morton*, 469 F.2d 593, 594-98 (10th Cir. 1972) (enjoining private development action because Bureau of Indian Affairs (“BIA”) has not performed NEPA analysis prior issuing lease that allowed development to proceed); *Scientists’ Inst. for Pub. Info., Inc. v. Atomic Energy Comm’n*, 481 F.2d 1079, 1088-89 (D.C. Cir. 1973) (“Thus, there is ‘Federal action’ within the meaning of [NEPA] not only when an agency proposes to build a facility itself, but also whenever an agency makes a decision that permits action by other parties which will affect the quality of the environment.”). *Sierra Club v. Hodel*, 848 F.2d at 1089-90 (same).

Concerned Citizens, Inc., 563 F.3d at 1042, the Ninth Circuit required the Corps to include consideration of development in uplands in its NEPA analysis for wetlands dredge-and-fill permits because though beyond the Corps' jurisdiction such development would not occur as planned but for issuance of the dredge-and-fill permits.¹³ So too here: OSM indirectly controls the impacts of coal combustion because if it does not permit the mine expansion, the coal will not be burned (and FCPP will not be able to obtain replacement coal). AR:1-2-11-29, -294 to -295. Nothing in SMCRA "expressly prohibits" OSM from conducting a full NEPA analysis or "makes full compliance" with the scope provisions of NEPA "impossible." *Flint Ridge*, 426 U.S. at 787-88. Indeed, SMCRA expressly provides that it does not in any way alter application of NEPA. 30 U.S.C. § 1292(a) ("Nothing in this chapter shall be construed as superseding, amending, modifying, or repealing . . . the National Environmental Policy Act of 1969 . . .").

Thus, NEPA's text, legislative history, implementing regulations, and nearly forty years of case law refute OSM's assertion that it was excused from including coal combustion at FCPP and resultant CCW disposal (particularly, the resultant mercury contamination) in its NEPA analysis because such actions were not within the scope of its authority under SMCRA.

¹³ See also *Dickman v. City of Santa Fe*, 724 F. Supp. 1341, 1343, 1345-48 (D.N.M. 1989) (enjoining construction of road segment which was funded entirely by non-federal parties because project was "inextricably linked" to larger federally-funded road construction project); *Sierra Club v. U.S. Dep't of Energy*, 255 F. Supp. 2d at 1180, 1183-85 (requiring agency to consider impacts of non-federal sand and gravel mining (regulated wholly by state department) in NEPA analysis of grant of road easement because the mine and road were interdependent).

Even if it were the case that OSM's obligation to consider connected actions is delimited by its regulatory duties and authority (even though it is not), OSM would nonetheless still be obliged to consider FCPP's operations within the scope of NEPA review for the mine expansion. This is because, notwithstanding OSM's cramped view of its duties under NEPA, the agency does in fact bear responsibility for—and have a measure of control over—the consequences of FCPP's operations. Specifically, OSM must consider the impacts of FCPP's operations—here, namely mercury pollution from coal combustion and CCW disposal—to endangered species pursuant to the Endangered Species Act (“ESA”) and, as necessary, take action to protect endangered or threatened species. *See* 40 C.F.R. § 1500.2(c) (providing that agencies shall “integrate” NEPA “with other planning and environmental review procedures,” such as the ESA). Section 7(a)(1) of the ESA provides: “All . . . Federal agencies shall . . . utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the conservation of endangered species and threatened species” 16 U.S.C. § 1536(a)(1). Section 7(a)(2) of the ESA provides for similar mandatory consideration of impacts to endangered species: “Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical habitat].” *Id.* § 1536(a)(2).

In considering whether the effects of an agency action will jeopardize species or modify habitat, agencies must consider both “direct and indirect effects,” as well as the

effects of “interrelated” and “interdependent” actions. 50 C.F.R. § 402.02 (definition of “Effects of the action”). The definitions of interrelated and interdependent actions under the ESA mirror those of connected actions under NEPA. *Compare id.* (“Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.”), *with* 40 C.F.R. § 1508.25(a)(1) (defining connected actions to include actions that “[c]annot or will not proceed unless actions are taken previously or simultaneously” and actions that “[a]re interdependent parts of a larger action and depend on the larger action for their justification”). Notably, under SMCRA regulations, OSM is prohibited for approving a strip-mining permit application if the operation would violate the ESA, “as determined under the Endangered Species Act of 1973.” 30 C.F.R. § 773.15(j). Thus, OSM possessed the regulatory authority (and duty) to deny a permit if the direct or indirect effects of the action or any “interrelated” or “interdependent” (i.e., connected) action would adversely affect endangered species or critical habitat. The Service’s draft BiOp for Desert Rock strongly suggested that combustion of Navajo Mine coal at FCPP is adversely impacting Colorado pikeminnow. AR:1-2-14-1946, -1965, -1990. And the overall impact of FCPP may be greater, because the draft BiOp did not consider mercury pollution from CCW disposal, which is likely causing the extremely high mercury levels in the Chaco River, just above its confluence with the San Juan. Ross Report at 15-16; Out of Control at 58-59; AR:5-1-1-27, -52. Accordingly, OSM’s assertion that it did not have to include the connected actions of

coal combustion and CCW disposal in the scope of its NEPA analysis due to want of regulatory authority to deny the permit on the basis of such impacts is legally mistaken.

In addition, OSM possesses authority to broadly consider the impacts of mercury pollution from atmospheric deposition and CCW waste pursuant to the provisions of SMCRA and its general trust obligation over actions on the Navajo Nation. Under SMCRA, OSM may not issue a permit unless the agency makes an assessment of the probable “cumulative impact of all anticipated mining in the area on the hydrologic balance” and then determines that the proposed strip mine has been “designed to prevent material damage to [the] hydrologic balance outside [of the] permit area.” 30 U.S.C. § 1260(b)(3). This provision plainly gives OSM the authority to consider water quality in waters affected by the mine and then deny issuance of a permit if the receiving waters cannot accept additional pollution. Accordingly, in its CHIA for the Area IV North expansion, OSM considered the level of mercury contamination in the Chaco. AR:5-1-1-52. Because OSM had and exercised the authority to consider mercury pollution in its CHIA, it certainly had the authority and necessary information to consider such pollution, including its source (coal combustion and CCW disposal) in its NEPA analysis. By failing to do so, OSM failed to comply with NEPA “to the fullest extent possible.” 42 U.S.C. § 4332.

In addition, the Indian Trust Doctrine, which Interior has acknowledged, AR:8-1-1-257, and which imposes on federal agencies procedural obligations to disclose relevant

information¹⁴ and substantive duties to protect Indian property from environmental damage or destruction¹⁵ from federal action on tribal lands, provides OSM with additional authority to consider the impacts of mercury pollution from coal combustion and CCW disposal. While the exact contours of OSM's trust obligations need not be defined here (it is clear that OSM never considered these duties as part of its authority, AR:1-2-16-14), it does provide additional authority and responsibility for OSM to consider the full impacts of the agencies' actions, here, approval of coal mining for the specific purpose of coal combustion on the Navajo Nation. AR:1-2-11-28.

For the foregoing reasons, OSM's asserted bases for refusing to include the connected actions of coal combustion at FCPP pursuant to the coal supply contract and subsequent CCW disposal within the scope of its NEPA analysis fail. And because OSM failed to include these actions within the scope of its analysis, it failed to consider relevant factors and important aspects of the decision to allow expansion of the Navajo Mine. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574. Accordingly, OSM's NEPA analysis was arbitrary and capricious. 5 U.S.C. § 706(2)(A).

¹⁴ *Navajo Tribe of Indians v. United States*, 364 F.2d 320, 322-24 (Ct. Cl. 1966) (holding that pursuant to trust obligation towards tribe U.S. Bureau of Mines was obliged to provide tribe with information regarding potential assignment of helium lease).

¹⁵ *White Mountain Apache Tribe v. United States*, 11 Cl. Ct. 614, 672 (1987) (holding federal government liable for damages for breaching trust obligation to tribe by over-harvesting tribal timber); *Blue Legs v. U.S. Bureau of Indian Affairs*, 867 F.2d 1094, 1100-01 (8th Cir. 1989) (federal agencies "general trust relationship" with tribe reinforce and strengthened agency's statutory duties of environmental protection).

B. OSM unlawfully failed to analyze indirect impacts resulting from coal combustion and CCW disposal.

Independent of its obligation to include connected actions within the scope of its NEPA analysis, OSM was obliged to fully consider the reasonably foreseeable indirect effects of its decision to allow expansion of the Navajo Mine into Area IV North. 40 C.F.R. § 1508.8(b). By failing to consider the impacts of coal combustion and CCW disposal (particularly mercury pollution)—impacts that were reasonably foreseeable because the express purpose of the mine expansion was to provide coal for combustion—OSM acted arbitrarily and capriciously and in violation of NEPA. As the D.C. Circuit put it, in a case involving cumulative impacts that nonetheless resonates here, OSM did not “give a realistic evaluation of the [mine expansion’s] total impacts” but “isolate[d] [the expansion], viewing it in a vacuum.” *Grand Canyon Trust v. Fed. Aviation Admin.*, 290 F.3d 339, 342 (D.C. Cir. 2002).

The essential thrust of NEPA is that federal agencies must consider the environmental impacts of proposed actions—the proverbial “look before you leap.” 42 U.S.C. § 4332(2)(C)(i) (analysis must consider “the environmental impact of the proposed action”); 40 C.F.R. § 1508.25(c); *id.* § 1508.9(b) (in EAs, agencies must discuss “the environmental impacts of the proposed action”). NEPA broadly requires agencies to consider “*any* adverse environmental effects which cannot be avoided should the proposal be implemented.” 42 U.S.C. § 4332(2)(C)(ii) (emphasis added). CEQ regulations further specify that environmental impacts include both direct and indirect effects. *Id.* § 1508.8(a)-(b). Indirect effects are defined as effects “which are caused by

the action and are later in time or farther removed in distance, but are still reasonably foreseeable,” including “effects on air and water and other natural systems, including ecosystems.” *Id.* § 1508.8(b).

NEPA requires agencies to consider those effects that have a “reasonably close causal relationship” to the agency action. *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983); *see also Dep’t of Transp. v. Public Citizen*, 541 U.S. 752, 767 (2004) (reaffirming requirement for reasonably close causal relationship). Thus, “agencies need not consider highly speculative or indefinite impacts.” *Sierra Club v. Marsh*, 769 F.2d 868, 878 (1st Cir. 1985) (Breyer, J.). However, the effects of a related non-federal action are sufficiently foreseeable, 40 C.F.R. § 1508.8(b), and therefore must be considered as indirect effects if the non-federal action is the purpose, “selling point,” or “raison d’etre” of a related federal action. *Sierra Club*, 769 F.2d at 878-79 (noting that private industrial development was “one of the important factors” behind federal development of port and causeway and therefore the effects of that development had to be considered); *accord Sierra Club v. Sigler*, 695 F.2d 957, 979 (5th Cir. 1983) (bulk cargo activities were “selling point” for project, so EIS had to consider activities’ impacts); *City of Davis v. Coleman*, 521 F.2d 661, 676-77 (9th Cir. 1975) (agency had to consider growth-inducing effects of federal highway project because they were the “raison-d’etre” of highway project); *Chelsea Neighborhood Ass’n v. U.S. Postal Serv.*, 516 F.2d 378, 387-88 (2d Cir. 1975) (construction of new housing was “selling point” of federal project, so EIS had to give “full consideration” to impacts).

Courts have already held that agencies must consider foreseeable upstream and downstream impacts of energy development. In *Mid-States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 532 (8th Cir. 2003), the Eighth Circuit considered the adequacy of the Surface Transportation Board's (Board) NEPA analysis of the construction of a new railroad line to haul coal from Wyoming to markets in the Mid-West. The plaintiffs asserted that the agency "failed wholly to consider the effects on air quality that an increase in the supply of low-sulfur coal to power plants would produce." *Id.* at 548. The court agreed that it was "reasonably foreseeable" that construction of the rail line would lead to increased coal consumption and that the resultant air pollution should have been analyzed in the Board's EIS as an indirect effect. *Id.* at 549-50. In reaching this conclusion, the court found "significant" that the agency had acknowledged that construction of the line would lead to increased availability and utilization of coal. *Id.* at 549.

Similarly in *Border Power Plant Working Group v. Department of Energy*, 260 F. Supp. 2d 997, 1006, 1017 (S.D. Cal. 2003), the court held that in approving the construction of two electricity transmission lines the Department of Energy was required in its NEPA analysis to consider as "indirect effects" air pollution from two upstream power plants in Mexico. The court found that operation of the two power plants and the attendant air pollution were reasonably foreseeable effects of construction of the transmission lines because the lines would be the only means for the power plants to transmit electricity to their intended markets in the United States. *Id.* at 1017.

In *Northern Plains Resource Council, Inc. v. Surface Transportation Board*, 668 F.3d 1067, 1081-82 (9th Cir. 2011), the Ninth Circuit overturned the Board’s NEPA analysis of a proposed railroad line, because it did not consider the “foreseeable” development of a proposed coal strip mine at one terminus of the railroad. In reaching this conclusion, the court found it most significant that “the Board relied on the coal development in Otter Creek [the proposed strip mine] to justify the financial soundness of the proposal.” *Id.* at 1082.

Here, like the fossil fuel combustion in *Mid-States Coalition for Progress* and *Border Power Plant Working Group*, coal combustion at FCPP and subsequent CCW disposal are reasonably foreseeable effects of the expansion of the Navajo Mine into Area IV North, which OSM was required, but failed, to fully consider in its NEPA analysis. As in *Mid-States Coalition for Progress*, here, OSM acknowledged in its EA that the 12.7 million tons of coal to be strip mined is destined for combustion at FCPP. AR:1-2-11-28. Indeed, the foreseeability of combustion of the coal at FCPP—and subsequent disposal of CCW—is even more pronounced in this case than was the coal combustion in *Mid-States Coalition for Progress*, because, here, combustion of the coal at FCPP was OSM’s express purpose (or the “raison d’etre”) for allowing expansion of the mine into Area IV North. AR:1-2-11-28 to -29. Because providing coal to FCPP for combustion was the express purpose of the mine expansion, as in *Northern Plains Resource Council, Sierra Club v. Marsh, City of Davis, Chelsea Neighborhood Association, and Sigler*, the effects of the coal combustion at FCPP were foreseeable indirect effects under 40 C.F.R. § 1508.8(b) that required “full consideration” in OSM’s NEPA analysis. *Chelsea*

Neighborhood Ass’n, 516 F.2d at 389. Furthermore, as in *Border Power Plant Working Group*, which employed an “independent utility” test to determine the scope of indirect effects,¹⁶ here the mine expansion and subsequent combustion of coal are interdependent and lack independent utility, as demonstrated above. *See supra* Part IV.A. Finally, unlike *Metropolitan Edison*, 460 U.S. at 775, there are no attenuated links in the chain of causation: here, BHP will strip mine the coal and ship it directly to FCPP on its electrified railroad, AR:1-2-11-40; FCPP will then burn the coal and dispose of the CCW, AR:1-2-11-19 to -20. By failing to fully consider the indirect impacts of the mine expansion—air pollution from coal combustion and CCW disposal, particularly mercury pollution—OSM failed to consider a relevant factor and important aspect of the problem. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574. As such, its analysis was arbitrary and capricious and a violation of NEPA. 5 U.S.C. § 706(2)(A).

In its response to comments, OSM suggested both that it had adequately evaluated air impacts and CCW disposal and that it was not required to do so under NEPA. AR:1-2-16-8 to -9, -13 to -14. As elaborated above, and even viewing the record most generously to the agency, OSM still failed entirely to analyze the significant impacts of mercury pollution from coal combustion and CCW disposal,¹⁷ and OSM is simply mistaken in its narrow interpretation of the mandate of NEPA and its narrow

¹⁶ 260 F. Supp. 2d at 1014. While the independent utility test is met here, use of such a test conflates indirect effects, which are reasonably foreseeable, 40 C.F.R. § 1508.8(b), with connected actions, which must be closely interrelated, *id.* § 1508.25(a)(1). *Cf. N. Plains Resource Council, Inc.*, 668 F.3d at 1082 (holding that Board had to consider mine’s effects because they were “foreseeable”).

¹⁷ *See also infra*, Part IV.C.2 (elaborating additional flaws in OSM’s analysis of air pollution impacts).

interpretation of its regulatory authority. *See supra* Part IV.A. As discussed above, the scope of an agency’s NEPA analysis may not be limited to the extent of its regulatory authority unless statutory authority prohibits compliance with NEPA or renders NEPA compliance impossible. *Id.*; *see also Flint Ridge*, 426 U.S. at 787-88. And even if an agency’s NEPA analysis could be so limited, OSM substantive regulatory authority (and duties) under the ESA and SMCRA and its trust obligations toward the Navajo Nation are sufficient to allow and require OSM to consider the effects of pollution from coal combustion and CCW disposal, here in particular, those effects related to mercury. *See supra* Part IV.A.

Two additional points bear emphasis with specific regard to indirect effects. First, contrary to OSM’s suggestion, an agency does not need to possess direct control over any given *effect* as a prerequisite to analysis of that effect under NEPA. OSM’s reasoning confuses control over *actions* that trigger an agency’s duty to complete a NEPA analysis with control over *effects* that must be considered within a NEPA analysis—a position that, if accepted, would largely render the requirement to consider indirect effects meaningless. Agency control is relevant only to whether an agency must prepare a NEPA analysis for a particular action in the first place—i.e., for actions that are, at least, “*partly* financed, assisted, conducted, regulated, or approved” by a federal agency. 40 C.F.R. § 1508.18(a) (emphasis added). But there is no mandatory element of control applicable to an agency’s duty to take a hard look at effects, particularly indirect and cumulative effects. Indeed, agencies are expressly required to consider cumulative effects under NEPA “regardless of what agency (Federal or non-Federal) or person

undertakes them.” *Id.* § 1508.7. Similarly, agencies are required to consider “indirect effects” such as “growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate.” *Id.* § 1508.8(b). Such indirect effects are typically beyond agencies’ direct control, but are nevertheless subject to analysis under NEPA. Thus, in *Sierra Club*, then-Judge Stephen Breyer required the Corps and the Federal Highway Administration, prior to issuing permits for construction of a port and causeway to an island in Maine, to consider, as indirect effects, the impacts associated with industrial development in upland portions of the island, even though such development was beyond the agencies’ direct permitting authority. 769 F.2d at 870, 878-82. And in *Northern Plains*, the Ninth Circuit required the Board to analyze the impacts of foreseeable strip-mining, even though regulation of such activities is the domain of OSM, not the Board. 668 F.3d 1067; *accord Mid-States Coal. for Progress*, 345 F.3d 549-50 (requiring Board to analyze air pollution from power plants, which is not within agency’s regulatory authority, *see* 42 U.S.C. §§ 7601(a)(1), 7602 (EPA regulates air pollution under the Clean Air Act)).

Second, even accepting OSM’s dubious postulate that the agency’s duty to take a hard look at *indirect* effects extends no further than its *direct* authority to regulate, OSM would still not be justified in excluding analysis of mercury pollution from coal combustion and CCW disposal at FCPP. As mentioned above, *supra* Part IV.A, OSM has the ability to prevent coal combustion at FCPP by not approving the mine expansion. Further, OSM possesses the authority and obligation under the ESA to prevent any actions whose effects would jeopardize endangered species or adversely modify critical

habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.02 (definition of “effects” includes “indirect effects”). This duty specifically extends to “indirect effects,” which, as defined under the ESA, are essentially coextensive with indirect effects under NEPA. *Compare* 50 C.F.R. § 402.02, *with* 40 C.F.R. § 1508.8(b).

Fundamentally, OSM was required to consider the indirect effects of mercury pollution from coal combustion and CCW disposal, which, as the record shows, impacts endangered Colorado pikeminnow in the San Juan River and may even be jeopardizing their continued existence. AR:1-2-14-1946, -1965, -1990.

For these reasons, OSM arbitrarily and capriciously failed to consider pollution from coal combustion and CCW disposal (relevant factors and important aspects of the strip-mine-power-plant complex) in its NEPA analysis.

C. OSM’s determination not to prepare an EIS was arbitrary and capricious because it failed to adequately consider numerous significance factors.

OSM also violated NEPA by concluding that an EIS was not required.

Federal agencies must prepare an EIS for any “major Federal action[] significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). To determine whether an EIS is required, an agency must evaluate the context and intensity of the action. 40 C.F.R. § 1508.27(a)-(b). CEQ regulations enumerate a non-exclusive list of ten factors relevant to the evaluation of the intensity of a given action. *Id.* § 1508.27(b). Courts have found that the existence of a single significance factor may be sufficient to warrant preparation of an EIS. *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 865 (9th Cir. 2005). “If [an] agency determines that its proposed action *may*

‘significantly affect’ the environment, the agency *must* prepare a detailed statement on the environmental impact of the proposed action in the form of an EIS.” *Airport Neighbors Alliance, Inc. v. United States*, 90 F.3d 426, 429 (10th Cir. 1996) (emphasis added). Similarly, the Ninth Circuit teaches that “an EIS must be prepared if substantial questions are raised as to whether a project may cause significant degradation to some human environmental factor.” *Klamath Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 562 (9th Cir. 2006) (quoting *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998), *rev’d on other grounds*, *Lands Council v. McNair*, 537 F.3d 981, 997 (9th Cir. 2008) (en banc)).

In reviewing an agency’s decision not to prepare an EIS, a court must determine “whether the agency acted arbitrarily and capriciously in concluding that the proposed action will not have a significant impact on the human environment.” *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1274 (10th Cir. 2004).

Here, OSM’s decision to expand the strip mine into Area IV North enabled continued operations at FCPP, one of the most prolifically polluting energy complexes in the country, a complex which, for the past half century, has emitted a daily miasma of harmful and toxic pollution that has choked the surrounding San Juan Basin. Multiple significance factors suggest that the proposed expansion *may* significantly affect the human environment, including context, adverse environmental effects, significant impacts to public health and safety, unique characteristics of the geographic area, highly controversial effects, highly uncertain risks, adverse effects to threatened and endangered species, and potential violations of environmental standards. *See* 40 C.F.R. § 1508.27(a),

(b)(1), (2), (3), (4), (5), (9), (10). OSM failed to properly consider these significance factors. Accordingly, its decision not to prepare an EIS was arbitrary and capricious.

1. Regional pollution, regional context

Consideration of context requires an agency to analyze the significance of an action “in several contexts such as society as a whole (human, national), the affected region, the affected region, the affected interests, and the locality.” *Id.* § 1508.27(a). “Significance varies with the setting of the proposed action.” *Id.* In considering the context of an action, “[t]he ‘setting’ selected should neither be artificially large, thus diluting the actual impact on the immediate area, nor should an involved project or complex of related projects be artificially ‘segmented’ whereby individually minor impacts are not studied in their cumulative role.” *Simmans v. Grant*, 370 F. Supp. 5, 16 (S.D. Tex. 1974).

Here, regarding the project’s context, OSM’s FONSI inappropriately severed the mine expansion from coal combustion at FCPP:

The approval of the Area IV North Permit Revision Application with additional conditions is a site-specific action directly involving lands within the BNCC coal permit area that does not in and of itself have international, national, or regional importance. The proposed Area IV North [expansion] and the realignment of the Burnham Road (in Areas III and IV) are entirely within the Navajo Mine permit area.

AR:1-2-10-2. As demonstrated above, *supra* Parts IV.A-B, the scope of the NEPA analysis and the relevant impacts include air pollution from FCPP. This air pollution has broad regional impacts, including harm to human health from ozone, AR:2-1-1-12407 to -12408, -12410; harm to people and fish from mercury pollution, AR:2-1-1-12410; AR:1-

2-14-1945 to -46, -1965, -1990; and harm to surrounding national parks, national monuments, wilderness areas, and states from haze and mercury deposition, AR:1-2-14-1945 to -46; AR:1-2-14-1093 to -94. By ignoring this broader context, OSM failed to consider a relevant factor and important aspect of the problem, rendering its FONSI arbitrary and capricious. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

2. Adverse impacts: mercury, ozone, and coal combustion waste

Adverse effects may render a project significant. *Id.* § 1508.27(b)(1). “A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.” *Id.*

Here, mining, combustion, and disposal of the 12.7 million tons of coal from Area IV North may have significant adverse effects. As noted, air pollution from FCPP causes dramatic negative effects throughout the region. FCPP—which is fueled solely by coal from Navajo Mine—is the single largest source of NO_x pollution in the country. AR:1-2-14-1094. This pollution is a precursor to ground level ozone. AR:1-2-14-625 to -626. Defendants acknowledge that ozone pollution “is approaching the level of the ozone NAAQS [national ambient air quality standards]” at one site and is “cause for concern” at two other sites, AR:1-2-11-230. There is increased incidence of respiratory disease in San Juan County, and the relationship between ozone levels and increased asthma-related medical visits is documented. AR:1-2-11-146 to -147. Additionally, ozone levels have exceeded ambient standards in recent years. *See* AR:2-1-1-12410.

In addition to ozone, mercury pollution is a significant environmental concern in San Juan County and the Four Corners Region. FCPP is one of the largest sources of mercury pollution in the nation. AR:1-2-14-1946. Mercury is a potent neurotoxin, which causes hundreds of millions of dollars of harm due to adverse health impacts in this country each year. AR:1-2-14-1000. Mercury from FCPP (and SJGS) rains down on surrounding areas, such as Mesa Verde National Park, at some of the highest levels in the nation. AR:1-2-14-1945. Fish throughout the region have toxic levels of mercury. AR:2-1-1-12410. Mercury pollution from FCPP is contributing to significant harm to the tiny population of endangered Colorado pikeminnow in the San Juan River. AR:1-2-14-1990. In addition to mercury deposition from air pollution from FCPP, it is likely that mercury contained in CCW from the plant is causing and contributing to significant contamination of the Chaco River downstream of the mine and power plant. AR:5-1-1-52; Ross Report at 15-16; Out of Control 58-59.

OSM's EA briefly but inadequately discussed some air pollution issues in its EA but then ignored them entirely in its FONSI. This is perhaps due to the fact that, in its cumulative impacts section, the EA provided only a cursory discussion of NO_x and PM pollution from FCPP, and wholly failed to discuss mercury pollution from coal combustion. AR:1-2-11-229 to -232. The EA also neglected to mention exceedances of ozone standards or the elevated levels of respiratory disease in San Juan County connected to ozone pollution. Instead, the EA suggested that ozone was not a problem because FCPP is required to make significant reductions of its worst-in-class NO_x emissions by no later than July 2018. Such reasoning, however, is flawed. These future

emissions reductions hardly mitigate the impacts of the proposed action because the proposed action will end by July 2016, AR:1-2-11-29, whereas the reductions are not mandated to occur (and, thus, in all likelihood will not occur) until two years later in July 2018. AR:1-2-11-230. Also unavailing is OSM's assertion that there are no significant health impacts from ozone because even though ozone levels are approaching the NAAQS threshold, OSM does not anticipate exceedances. This analysis fails both by not addressing actual impacts of these high ozone levels, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1216 (9th Cir. 2008) (agency violated NEPA because, even though it quantified amount of expected air pollution, it did not "discuss the actual environmental *effects* resulting from those emissions"), and by discounting effects without analysis just because air pollution is subject to regulation under the Clean Air Act, *South Fork Band Council of W. Shoshone v. U.S. Dep't of Interior*, 588 F.3d 718, 726 (9th Cir. 2009) (insufficient NEPA analysis to state that air pollution will be regulated under existing laws).

The EA also failed to consider that rising temperatures in the Southwest due to climate change are likely to worsen ozone pollution. AR:1-2-14-626, -661. And nowhere does the EA discuss mercury pollution from CCW disposal.

Compounding OSM's failure to adequately consider the impacts from coal combustion and CCW disposal in its EA, AR:1-2-11-222 to -224 (failing to consider impacts to surface water in Chaco River, failing to consider mercury pollution, and failing to address independent reports revealing CCW pollution in Chaco River and alluvium, *see infra* Part IV.C.5), the agency's FONSI failed entirely to consider any

impacts from coal combustion and CCW disposal. AR:1-2-10-2 to -3. Rather, the FONSI listed only direct impacts associated with the strip-mining process (e.g., minor impacts to soils, short-term blasting impacts, and relocation of grazing areas). By wholly ignoring impacts from coal combustion and CCW disposal, the FONSI failed to adequately consider the adverse effects of continued operations of the mine-power-plant complex. As this was a relevant factor and important aspect of the problem, OSM's FONSI is arbitrary and capricious. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

3. Significant impacts to public health: neurotoxins and asthma

The impacts of a proposed action may also be significant due to the “degree to which [they] affect[] public health or safety.” 40 C.F.R. § 1508.27(b)(2).

Evidence in the record shows that strip mining Area IV North, along with the subsequent coal combustion and CCW disposal, may also have significant negative effects on public health. A 2010 “health profile” prepared for San Juan County raised significant concerns about ozone, particulate matter, and mercury pollution, and their related effects. AR:2-1-1-12407 (“San Juan County’s rate of CLRD [chronic lower respiratory disease] is *higher* than both New Mexico’s rate of 46.4 and the U.S. rate of 42.6. Of the three diseases that comprise CLRD (chronic bronchitis, asthma, and emphysema), asthma is a recognized concern in San Juan County, and has been connected to high levels of ozone in the county.”); AR:2-1-1-12408 (noting high rates of asthma in San Juan County and stating that “asthma, or more specifically, emergency visits for asthma, is associated with high ozone levels of *great concern* in the county”

(emphasis added)); AR:2-1-1-12410 (noting that ozone and particulate matter are pollutants of concern in San Juan County); *id.* (“[S]an Juan County is in the top 10% of the worst counties in the United States for PM 2.5 emissions, PM-10 emissions, and sulfur dioxide emissions. Area power plants are the major contributor of these three pollutants.”); *id.* (“[M]ercury is a pollutant of particular concern in the Four Corners region. Mercury is released into the environment from coal-fired power plants and from mining. . . . Mercury . . . can be found in toxic levels in fish in many areas in San Juan County. Even in small amounts, mercury can cause a variety of physiological problems, illness, and even death, according to Dr. Grossman, a Durango physician researching the effects of mercury on pregnant women and their newborn infants.”).

Combustion of coal from the Navajo Mine is a significant contributor to these harms. As mentioned previously, FCPP is the nation’s largest source of NO_x (an ozone precursor) and one of the nation’s largest sources of mercury pollution, both of which have significant public health impacts. *Supra* Part IV.C.2. It is likely that impacts of ozone are being and will continue to be exacerbated by higher temperatures due to climate change. AR:1-2-14-626, -661. Mercury pollution in the Chaco River dramatically exceeds various water quality standards, and is likely due in part to CCW disposal. AR:5-1-1-52; Ross Report at 15-16; Out of Control 58-59.

This record evidence demonstrates that pollution from the proposed action may have a significant impact on public health and safety. *Cf. Ctr. for Biological Diversity*, 538 F.3d at 1222 (holding that evidence submitted in record by plaintiffs “shows that global warming will have an effect on public health and safety”). Yet in its FONSI, OSM

neglected entirely to consider the public health impacts that would result from combustion and disposal of the 12.7 million tons of coal from Area IV North. AR:1-2-10-3. By ignoring these effects, OSM failed to consider a relevant factor and important aspect of expanded coal production at the Navajo Mine, which was arbitrary and capricious. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

4. Unique geographical characteristics: Polluting the Golden Circle of National Parks

An action may also be significant if it effects “[u]nique characteristics of the geographic area such as . . . historic or cultural resources, park lands, prime farmlands, wetlands, and wild and scenic rivers, or ecologically critical areas.” 40 C.F.R. § 1508.27(b)(3). Federally protected areas such as wilderness and national parks require special attention under NEPA. *Sierra Club v. Kimbell*, 595 F. Supp. 2d 1021, 1028 (D. Minn. 2009) (stating that Boundary Waters Canoe Area Wilderness merited special attention).

Strip mining Area VI North, along with the subsequent coal combustion at FCPP, may cause significant adverse effects to unique characteristics of the geographic area. The Navajo Mine and FCPP complex is surrounded by “numerous Class 1 areas . . . that are sometime known as the Golden Circle of National Parks.” AR:1-2-14-1094. Pollution from FCPP harms these areas. In addition to causing extremely high levels of mercury to rain down on Mesa Verde National Park, AR:1-2-14-1945, pollution from FCPP causes regional haze that impairs visibility in numerous Class 1 Federal areas surrounding the mine-power-plant complex, including: Arches National Park, Bandelier

National Monument, Black Canyon of the Gunnison Wilderness Area, Canyonlands National Park, Capitol Reef National Park, Grand Canyon National Park, Great Sand Dunes National Park, La Garita Wilderness Area, Maroon Bells-Snowmass Wilderness Area, Mesa Verde National Park, Pecos Wilderness Area, Petrified Forest National Park, San Pedro Parks Wilderness Area, West Elk Wilderness Area, Weminuche Wilderness Area, and Wheeler Park Wilderness Area. AR:1-2-14-1094; AR:1-2-14-1093 (“FCPP contributes to impairment at many surrounding Class I areas well in excess of [the regulatory] threshold.”).

While OSM acknowledged in its EA that FCPP (along with SJGS) is an “existing large contributor[] to regional haze,” and that this haze affects “15 mandatory federal Class 1 areas,” the agency nevertheless finds the impacts of the proposed action not to be significant for two equally untenable reasons. AR:1-2-11-231 to -232. First, OSM states that EPA will require FCPP to significantly reduce pollution that contributes to regional haze by 2018. AR:1-2-11-232. Second, OSM asserts that the mine’s direct emissions will be too small to have impacts beyond the immediate area of the mine. AR:1-2-11-232; AR:1-2-10-2 to -3. OSM’s second assertion errs by failing to consider the indirect impacts of coal combustion at FCPP. *See supra*, Part IV.B. And OSM’s first assertion, while correct, fails because it is based on emission reductions that will occur two years *after* the proposed action is completed. AR:1-2-11-29 (mining authorized by expansion will be complete in 2016). Thus, OSM’s conclusions fail to consider a relevant factor and important aspect of the problem (emissions from combustion) and run counter to the

evidence, rendering them arbitrary and capricious. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

5. Controversy and uncertainty: What’s polluting the Chaco?

An EIS may also be warranted if the effects of a proposed action are “likely to be highly controversial” or if the “possible effects” of the proposed action are “highly uncertain.” 40 C.F.R. § 1508.27(b)(4), (5). “Controversy in the NEPA context does not necessarily denote public opposition to a proposed action, but a substantial debate as the size, nature, and effect of the action.” *Middle Rio Grande Conservation Dist. v. Norton*, 294 F.3d 1220, 1229 (10th Cir. 2002). Expert reports that contradict an agency’s conclusions are a strong indication of controversy warranting preparation of an EIS. *Sierra Club v. U.S. Forest Serv.*, 843 F.2d 1190, 1193 (9th Cir. 1988). Significant display of public opposition on substantive grounds can also demonstrate high controversy. *Ctr. for Biological Diversity*, 538 F.3d at 1222-23.

The effects of mining in Area IV North, along with the subsequent coal combustion at FCPP and disposal of CCW, are both highly controversial and highly uncertain, particularly with regard to the impacts of CCW disposal. The results of two independent studies of CCW disposal at both the mine and impoundments at the power plant site strongly suggested pollution from CCW is migrating to adjacent surface and groundwater in the Chaco River, posing a serious problem. Zimmerman Report at 33-35 (AR:1-2-14-305 to -307); Ross Report at 15-18 (attached to AR:5-2-1-42); Out of Control at 59-61 (attached to AR:5-2-1-42). This possibility is supported by another report commissioned by EPA that revealed that water was seeping from the plant’s CCW

disposal areas. AR:2-1-1-6929. This conclusion is further bolstered by OSM’s own CHIA, which documented significant levels of various pollutants—including mercury levels 1,000 times greater than relevant standards—in the Chaco River downstream of the mine-power-plant complex. AR:5-1-1-52. The Navajo Nation EPA also raised concerns about exceedances of water quality standards in the Chaco River. AR:5-2-1-124 (attachment entitled “Navajo Mine CHIA comments NNEPA” at 1 (“[I] think it is inappropriate to use median concentrations when comparing sample results with surface water quality standards. . . . [I]t is difficult to support OSM’s conclusions regarding material damage without seeing an assessment compared to our surface water quality standards using our impairment determination guidance.”)). Moreover, over 2,000 people submitted comments in opposition to the proposed mine expansion based, in part, on concerns over water pollution and impacts from coal combustion. AR:1-2-16-3 to -4.

Despite the evidence and widespread concern about CCW and pollution of water, OSM’s EA stated only that there is “no indication[] that other activities at FCPP have affected the Chaco River alluvial groundwater.” *See* AR:1-2-11-222. OSM failed entirely, however, to address water pollution from CCW to *surface* water in the Chaco River. OSM also failed entirely to consider the Ross Report and Zimmerman Report, both of which had been presented to OSM and both of which indicated that CCW disposal was likely impacting water quality in the Chaco River, as noted previously. Then in its FONSI, OSM simply reported that “[b]ased on comments from the public, coupled with the environmental analysis,” nothing in the project was highly

controversial. AR:1-2-10-04. In similarly conclusory fashion, OSM stated that “[n]o highly uncertain or unknown risks . . . were identified.” AR:1-2-10-04.

An agency’s complete failure to address expert reports that contradict its position both evidences arbitrary and capricious decision-making, *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1167-68 (9th Cir. 2003), and indicates that an agency has not taken the requisite hard look. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998). Here, assertions in the EA about lack of water pollution in the Chaco conflicts both with the Ross and Zimmerman Reports and with OSM’s own conclusions in its CHIA. This conflict, together with the large public outcry over impacts of coal combustion and water pollution, demonstrates that the proposed action may be highly controversial and highly uncertain. By failing to address this conflicting information in its EA or FONSI, OSM neglected to consider—and disclose to the public—relevant factors and important aspects of the problem, which was arbitrary and capricious. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

6. Harm to threatened and endangered species: Mercury, again

Another significance factor considers “the degree to which the action may affect an endangered or threatened species.” 40 C.F.R. § 1508.27(b)(9). As stated above, *supra* Parts IV.A-B, C.2, and as show in the Service’s draft BiOp for Desert Rock, AR:1-2-14-1945 to 1946, -1965, -1990, mercury pollution from FCPP is causing significant impairment, and possible jeopardy, to the small population endangered Colorado Pikeminnow in the San Juan River. This is a strong indication that an EIS may be

warranted. OSM ignored this issue altogether and by so doing, acted arbitrarily and capriciously. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

7. Threatened Violation of Environmental Laws

An action may also warrant preparation of an EIS if it “*threatens* a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” 40 C.F.R. § 1508.27(b)(10) (emphasis added). The proposed action here threatens to violate multiple environmental protection standards. The impacts of mercury from FCPP and CCW disposal are harming the population of endangered Colorado pikeminnow in the San Juan River, which threatens to violate the ESA by causing take of individual fish or jeopardy to the fish population, as indicated in the Service’s draft BiOp for Desert Rock. *See* 16 U.S.C. § 1536(a)(2) (jeopardy prohibition); *id.* § 1538(a)(1)(B) (take prohibition); AR:1-2-14-1946, -1965, -1990. Further, NO_x emissions have violated ambient air quality standards for ozone in the recent past, AR:2-1-1-12410, and *threaten* to violate ambient standards in the near future, AR:1-2-11-230 (“Ambient levels of ozone are likely to raise [sic] within 95 percent of the ozone NAAQS in the next few years”). Finally, water pollution in the Chaco River exceeds Navajo Nation water quality standards for numerous criteria, mostly associated with CCW. Zimmerman Report at 33-35 (AR:1-2-14-305 to -307); Ross Report at 15-18 (attached to AR:5-2-1-42); Out of Control at 59-61 (attached to AR:5-2-1-42); AR:5-1-1-52. Continued operations of the mine and power plant threaten to continue and exacerbate these violations. OSM discounted these threatened violations of environmental standards by ignoring impacts from coal combustion and disposal at FCPP. AR:1-2-10-06. By so doing, the agency

failed to consider and disclose relevant factors and important aspects of the mine expansion, which was arbitrary and capricious. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

To summarize, multiple significance factors indicate that the proposed mine expansion “may” significantly affect the environment and, consequently, that an EIS is required. OSM, however, failed adequately to consider these significant factors, which was arbitrary and capricious, and in violation of NEPA.

VII. CONCLUSION

For the reasons stated herein, the Citizens respectfully request that this Court declare OSM’s NEPA analysis of the Area IV North Permit Revision Application arbitrary and capricious, set aside its approval of the Area IV North Permit Revision Application, and remand the matter to OSM with instructions to prepare an EIS.

Respectfully submitted this 30th day of August, 2013.

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CERTIFICATE OF SERVICE

I hereby certify that on this 30th day of August 2013, I electronically filed the foregoing with the Clerk of Court using the CM/ECF system which will send notification of such filing to the following email addresses:

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