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The Hon. Gina McCarthy
Administrator
U.S. Environmental Protection Agency
EPA Docket Center
Mail Code 28221T
1200 Pennsylvania Ave., NW
Washington, DC 20460

Attn: Docket ID No. EPA-HQ-OAR-2014-0606

Re: Review of New Sources and Modifications in Indian Country: Federal Implementation Plan for Managing Air Emissions from True Minor Sources Engaged in Oil and Natural Gas Production in Indian Country, 80 Fed. Reg. 56,554 (September 18, 2015)

I. Introduction

The following comments are submitted by Diné Citizens Against Ruining our Environment ("Diné CARE"), Earthjustice, Clean Air Task Force ("CATF"), National Parks Conservation Association ("NPCA"), Natural Resources Defense Council ("NRDC"), Southern Utah Wilderness Alliance ("SUWA"), Environmental Defense Fund ("EDF"), Sierra Club, and WildEarth Guardians (collectively "Environmental and Tribal Commenters") in response to EPA's proposed rule titled "Review of New Sources and Modifications in Indian Country: Federal Implementation Plan for Managing Air Emissions from True Minor Sources Engaged in Oil and Natural Gas Production in Indian Country" ("Proposed FIP").[1] Because of the growing air quality problems in Indian Country as a result of oil and gas development, Environmental and Tribal Commenters support EPA taking action to regulate emissions. However, EPA's proposal would be substantially improved by covering existing sources of air pollution and by including strong monitoring and enforcement provisions.

On August 20, 2014, a coalition consisting of CATF, NPCA, Earthjustice, WildEarth Guardians, and SUWA commented on EPA's Advance Notice of Proposed Rulemaking ("ANPR") titled "Managing Emissions From Oil and Natural Gas Production in Indian Country" ("Coalition ANPR Comments") (Appx. at 1).[2] EDF also submitted comments on September 2, 2014 ("EDF ANPR Comments") (Appx. at 34). EPA has requested that ANPR commenters resubmit their ANPR comments in this proceeding. 80 Fed. Reg. at 56,562. Environmental and Tribal Commenters thus incorporate the Coalition ANPR and EDF ANPR Comments by reference into this letter.

[1] 80 Fed. Reg. 56,554 (Sept. 18, 2015) (Docket No. EPA-HQ-OAR-2014-0606).

[2] 79 Fed. Reg. 32,502 (June 5, 2014) (Docket No. EPA-HQ-OAR-2011-0151).

The same day that EPA issued the Proposed FIP, it also proposed three other rules for the oil and gas sector: amended New Source Performance Standards ("NSPS") (Proposed Amended NSPS Rule),[3] a Source Determination Rule,[4] and Control Techniques Guidelines ("Proposed CTGs").[5] The Proposed FIP requires oil and gas sources in Indian Country to comply with the Proposed Amended NSPS Rule. Therefore, Environmental and Tribal Commenters incorporate the comments of several environmental and public health organizations on the Proposed Amended NSPS Rule by reference into this letter. Comments of CATF et al. on Proposed Oil and Natural Gas Sector: Emission Standards for New and Modified Sources, Dkt. ID No. EPA-HQ-OAR-2010-0505 (Dec. 4, 2015) ("Proposed Amended NSPS Comments").

The Proposed FIP would allow minor oil and gas sources to forego preconstruction review and permitting and instead simply certify that they will comply with six air quality regulations ("six regulations") that already apply within Indian Country: (1) current and future NSPS for new and modified sources in the oil and natural gas sector, 40 C.F.R. Part 60, Subpart OOOO and OOOOa (proposed); (2) NSPS for fuel storage tanks, 40 C.F.R. Part 60 Subpart Kb' (3) NSPS for compression ignition internal combustion engines, 40 C.F.R. Part 60, Subpart IIII; (4) NSPS for spark ignition internal combustion engines, 40 C.F.R. Part 60, Subpart JJJJ; (5) national emission standards for hazardous air pollutants ("NESHAPs") for oil and natural gas production facilities, 40 C.F.R. Part 63, Subpart HH; and (6) NESHAPs for process heaters, 40 C.F.R. Part 63, Subpart DDDDD. 80 Fed. Reg. at 56,558. However, EPA has provided no assurance that these six regulations will adequately address the air quality problems in Indian Country and ensure compliance with all applicable standards including the National Ambient Air Quality Standards ("NAAQS"), Prevention of Significant Deterioration ("PSD") Program, and the Visibility Protection program. See 42 U.S.C. §§ 7602(y), 7470–71, 7473, 7491.

Environmental and Tribal Commenters support the adoption of a FIP to regulate minor oil and gas sources in Indian Country based on the key advantage of a FIP: the authority to regulate existing sources. See Coalition ANPR Comments at 13; EDF ANPR Comments at 12. Although EPA recognized this as the primary advantage of a FIP in the ANPR, the Proposed FIP does not include any additional regulation of existing sources. Given existing air quality problems caused by oil and gas development in Indian Country—including many areas that already violate federal standards—prompt regulation of existing sources is necessary. Moreover, regulation of existing sources will help to reduce methane emissions and further the Obama Administration's goal of reducing greenhouse gas emissions to 17% below 2005 levels by 2020. As EPA recognizes and Colorado and Wyoming have proven, there are available controls for controlling emissions from existing sources at reasonable costs to the industry. Without requiring these measures nationwide, including in Indian Country, EPA has not met its obligation to protect public health and welfare, and has not fulfilled its trust responsibilities to Indian tribes. EPA should at least regulate existing sources within Indian Country located within

[3] 80 Fed. Reg. 56,593 (Sept. 18, 2015) (Docket No. EPA-HQ-OAR-2010-0505).

[4] 80 Fed. Reg. 56,579 (Sept. 18, 2015) (Docket No. EPA-HQ-OAR-2013-0685).

[5] 80 Fed. Reg. 56,577 (Sept. 18, 2015) (Docket No. EPA-HQ-OAR-2015-0216).

the boundary of a state that already regulates existing sources, in order to create a level playing field and ensure that environmental harms are not concentrated within Indian Country or in areas impacted by emission sources within Indian country.

Although EPA proposes to address existing sources in reservation- or area-specific FIPs, this approach will create further delay in addressing pressing air quality problems and will result in an uneven playing field within Indian Country. Additionally, there is little guidance for when the agency will prepare such FIPs. At a minimum, EPA should add specific criteria and triggers for reservation-specific FIPs and increase opportunities for tribes, tribal members, and members of the public to request preparation of a reservation- or area-specific FIP.

The Proposed FIP should also include requirements to improve air quality monitoring and modeling within Indian Country. As EPA recognized in the ANPR, "our understanding of the oil and natural gas sector's impact on ambient air quality in Indian Country is incomplete at this time given the absence of ambient air quality monitoring in many areas of Indian Country." 79 Fed. Reg. at 32,519. Furthermore, increased monitoring will be critical for determining whether reservation- or area-specific FIPs are necessary. EPA should also conduct modeling, especially in the process of developing reservation- or area-specific FIPs, in order to improve understanding of how oil and gas sources contribute to air quality issues in Indian Country.

Without preconstruction review, robust enforcement is necessary to ensure that regulated entities comply with the Proposed FIP and all applicable requirements. But the Proposed FIP does not provide for any additional and needed enforcement measures. EPA should remedy this shortcoming in the final rule by increasing enforcement capacity. It is critical that EPA provides for cooperation between federal, state, and tribal enforcement actions so as to ensure that the patchwork of jurisdictions that characterize many areas of Indian Country do not create a barrier to robust enforcement.

Finally, EPA should expand the scope of the Proposed FIP to include sources outside of the production segment and methane emissions. It should also provide stronger measures to ensure that other agencies fully comply with their NHPA and ESA obligations.

II. Oil and Gas Development in Indian Country is Contributing to Air Pollution and Climate Change

As EPA recognized in the ANPR, there is considerable oil and gas development in Indian Country, and that development is expected to increase. Existing oil and gas development is already contributing to: (1) ozone pollution that in some cases is exceeding or close to exceeding federal public health standards; (2) emissions of cancer-causing pollutants, like benzene;(3) substantial emissions of methane—a potent greenhouse gas; and (4) excessive emissions including nitrogen oxides and volatile organic compounds that contribute to visibility impairment, nitrogen deposition and other air quality related values at Class I area national parks and wildernesses. These problems will only be exacerbated by further development.

A. Oil and Gas Development is Increasing in Indian Country

According to EPA, recent advances in unconventional oil and natural gas production techniques have resulted in a "sizeable increase" in development throughout Indian Country, including areas in North Dakota, Montana, South Dakota, Nebraska, Kansas, Oklahoma, Michigan, Wisconsin, New York, Utah, New Mexico, Colorado, and Wyoming. 79 Fed. Reg. at 32,508. The Energy Information Administration ("EIA") reports that Indian Country produced 241 billion cubic feet (bcf) of natural gas and 324 trillion Btu of crude oil in 2014 alone. EIA, Sales of Fossil Fuels Produced from Federal and Indian lands, FY 2003 through FY 2014 at 3 (July 2015), www.eia.gov/analysis/requests/federallands/pdf/eia-federallandsales.pdf.

Indeed, EPA Region 8—which covers Colorado, Utah, Wyoming, Montana, North Dakota, and South Dakota and twenty-seven tribal nations—has already received more than 6,400 registrations from existing oil and gas minor sources in Indian Country. 79 Fed. Reg.at 32,509. Sources were required to register in response to EPA's Tribal NSR Rule. 40 C.F.R. § 49.151(c)(1)(iii); see also 76 Fed. Reg. 38,748, 38,772–73 (July 1, 2011)) (codified at 40 C.F.R. §§ 49.151–65) (establishing registration requirement); 79 Fed. Reg. 34,231, 34,234 (June 16, 2014) (extending registration period). According to EPA Region 8 staff, 5,216 of the registrations were from the Uintah and Ouray Reservation, 757 were from the Ft. Berthold Indian Reservation, and 378 were from the Southern Ute Reservation. Email from Claudia Young Smith, Environmental Scientist, EPA Region 8, to Joel Minor, Associate Attorney, Earthjustice (Nov. 25, 2015) (Appx. at 50).[6] Region 8 staff also reported that they received several registrations from the Blackfeet Reservation, Ute Mountain Ute Reservation, Wind River Reservation, and Fort Peck Reservation. Id. There is overall less oil and gas development in Indian Country within EPA Region 9, which covers Arizona, California, Hawai'i, Nevada, the Pacific Islands, and 148 tribal nations. As of November 2015, Region 9 reported having received about 155 registrations from oil and gas sector sources on the Navajo Reservation alone. Email from Lisa Beckham, Environmental Engineer, EPA Region 9, to Joel Minor, Associate Attorney, Earthjustice (Nov. 24, 2015) (Appx. at 52).[7]

EPA's registration data may underreport the number of existing sources, as some operators may be unaware of registration requirements, unsure if their operations are required to register, or unwilling to comply with registration requirements. Additionally, confusion over EPA's definition of Indian Country for the purposes of the Tribal NSR rule may have resulted in existing sources on allotted lands and other jurisdictionally complex areas being unsure whether they were required to register. Thus, although the thousands of registrations that EPA has already received demonstrates that there are significant and largely unregulated emissions from existing sources in Indian Country, registration data paints an incomplete picture of the magnitude of emissions from existing sources in Indian Country.

[6] Region 8 staff informed us that approximately 95% of these registrations were from oil and gas sector minor sources.

[7] We assume that Region 9's reference to the number of registrations received for the Navajo Nation is a reference to facilities on tribal trust lands, not on allotted lands.

In the ANPR, EPA provided additional information about the number of current and projected emission sources on several reservations. EPA reported that the Ute Tribe of the Uintah and Ouray Reservation in Utah had 7,000 wells. 79 Fed. Reg. at 32,509. EPA also reported that the Ute Tribe plans to open up an additional 150,000 acres to mineral development, and that the Bureau of Land Management ("BLM") has approved 5,000 new wells in the Uinta Basin, where the Uintah and Ouray Reservation is located. 79 Fed. Reg. at 32,508–09. In the San Juan Basin in the Four Corners region, EPA reported that the Jicarilla Apache Nation has nearly 3,000 existing active and plugged wells and nearly 2,000 miles of pipelines and roads. 79 Fed. Reg. at 32,509. In North Dakota, EPA estimated that 2,000 additional wells will be drilled on the Fort Berthold Indian Reservation ("FBIR"). 79 Fed. Reg. at 32,508. Therefore, there is substantial information before the agency demonstrating the magnitude of existing and projected oil and gas development in Indian Country.

Additionally, for the purposes of air quality, the number of facilities located in Indian country is not the only important metric. In areas like the San Juan Basin, there is significant development adjacent to tribal lands on a patchwork of state, federal, allotted, and privately-owned lands. Oil and gas development occurring near Indian Country can have just as much impact on tribal air quality as development that actually occurs within Indian Country. This reinforces the need for strong regulations nationwide as well as strong regulations within Indian Country.

B. Oil and Gas Development is Causing Significant Air Pollution in Indian Country

Many areas of Indian Country are already exceeding federal public health standards. EPA provided a table in the ANPR which shows that, among counties where Indian Country exists, six are designated as nonattainment for the 1997 annual $PM_{2.5}$ NAAQS, seventeen are designated as nonattainment for the 2006 24-hour $PM_{2.5}$ NAAQS, fifteen are designated as nonattainment for the 1987 PM_{10} NAAQS, and twenty-one are designated as nonattainment for the 2008 8-hour ozone NAAQS. 79 Fed. Reg. at 32,510–11. The same data table also shows that eighteen counties where Indian Country exist are exceeding the 2008 8-hour ozone NAAQS based on 2010-12 design values. Id. at 32,511. And, according to EPA's website, fifty-three tribes have jurisdiction over parts of Indian Country that are designated nonattainment with the 2008 8-hour ozone standard. EPA, Tribal Final Designations, http://www3.epa.gov/ozonedesignations/2008standards/final/tribalf.htm.

Current ozone nonattainment designations under the old 75 parts per billion ("ppb") standard are not the best indicator for whether ozone levels pose a danger to public health. After several years of delay, EPA recently strengthened the 8-hour ozone NAAQS to 70 ppb. See EPA, National Ambient Air Quality Standards for Ozone, 80 Fed. Reg. 65,292, 65,292 (Oct. 26, 2015) (2015 Ozone NAAQS). However, under the American Thoracic Society ("ATS") guidelines and EPA's own Clean Air Scientific Advisory Committee's ("CASAC") advice, sensitive populations experience adverse health impacts when exposed to ozone concentrations down to 60 ppb. See Comments of Am. Lung Ass'n et al. on EPA's Proposed Revisions to the

National Ambient Air Quality Standards for Ozone at 46 (Mar. 17, 2015) (Docket No. EPA-HQ-OAR-2008-0699) (Ozone NAAQS Revisions Comments) (Appx. at 55).[8]

As shown in Table 1,[9] many counties that include Indian Country have both significant oil and gas production (>10,000 barrels oil and/or >1,000,000 thousand cubic feet (mcf) gas per year) and 2012-14 design values which either exceed the 2015 ozone NAAQS or are at levels that pose a threat public health and the environment. Three counties have 2012-14 design values that exceed the NAAQS, seven counties have 2012-14 design values above 60 ppb, and two counties have 2012-14 design values above 50 ppb.

[8] CASAC found that there were "adverse effects, including clinically significant lung function decrements and airway inflammation, after exposures to 60 ppb ozone in healthy adults with moderate exertion." Ozone NAAQS Revisions Comments at 54 (citing Letter from CASAC Chair Dr. H. Christopher Frey to U.S. EPA Administrator Gina McCarthy re: Second Draft Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards (EPA-CASAC-14-004) at 7 (June 26, 2014)). CASAC further advised EPA "there is a scientific basis to anticipate that adverse effects for [sensitive] subgroups [such as children with asthma] are likely to be more significant at 60 ppb than for healthy adults." Id. Thus, EPA's Children's Health Protection Advisory Committee ("CHPAC") concluded that a 60 ppb standard was requisite to protect children's health and advised EPA to adopt a 60 ppb ozone NAAQS in order to adequately protect children's health with a sufficient margin of safety. Id. at 55–56 (citing Letter from CHPAC Chair Dr. Sheela Sathyanarayana to CASAC Chair Dr. Christopher Frey (May 19, 2014)). And the ATS has long supported a 60 ppb ozone NAAQS because of the strong scientific evidence showing relationships between ozone exposure down to the 60 ppb level and adverse health effects like hospital admissions for asthma, chronic obstructive pulmonary disorder in children and adults, lung function deficits in healthy adults, and increased mortality for the elderly and patients with chronic diseases. Id. at 56–57 (citing M.B. Rice, T.L. Guidotti, & K.R. Cromar on behalf of the ATS Environmental Health Policy Committee, Scientific Evidence Supports Stronger Limits on Ozone, AM. J. CRITICAL CARE MED. (2014)).

[9] Sources for Table 1: EPA, 2014 Design Value Reports: Ozone (July 20, 2015), http://www3.epa.gov/airtrends/pdfs/Ozone_DesignValues_20122014_FINAL_08_03_15.xlsx (county level data is available at tab four of the spreadsheet); Bureau of Indian Affairs, Indian Reservations in the Continental United States, www.nps.gov/nagpra/DOCUMENTS/RESERV.PDF; Cal. Div. of Oil, Gas, and Geothermal Res. (DOGGR), Online Production and Injection Query for the State of California, http://opi.consrv.ca.gov/opi/opi.dll (search by "County" and "Get Sums" for county level data); DOGGR, Well Finder, http://maps.conservation.ca.gov/doggr/#close (search by "PLSS" and "all wells" for Rancheria level data); Colo. Oil and Gas Conservation Comm'n, COGIS – Production Data Inquiry, https://cogcc.state.co.us/cogis/ProductionSearch.asp (search by "County"); N.M. Oil Conservation Div., County Production and Injection Summary by Month, wwwapps.emnrd.state.nm.us/ocd/ocdpermitting//Reporting/Production/CountyProductionInjectionSummaryReport.aspx; N.D. OIL AND GAS DIV., OIL IN NORTH DAKOTA: 2014 at 1404 (2015), www.dmr.nd.gov/oilgas/stats/AnnualProduction/2014AnnualProductionReport.pdf; Utah Div. of Oil, Gas & Mining, Utah Oil Production by County, http://oilgas.ogm.utah.gov/Statistics/PROD_Oil_county.cfm; Wyo. Oil and Gas Conservation Comm'n, Download Production by County and Year, http://wogcc.state.wy.us/productioncountyyear.cfm (search by "county" and "year").

TABLE 1

State	County	2014 DV (ppm)	Reservations, Rancherias (CA), and/or Pueblos (NM) Located in County
CA	Tehama	0.075	Paskenta Band of Nomlaki
CO	La Plata	0.068	Southern Ute; Ute Mountain Ute
CO	Montezuma	0.067	Southern Ute; Ute Mountain Ute
NM	Sandoval	0.063	Jicarilla Apache; Cochiti Pueblo; Jemez Pueblo; Laguna Pueblo; San Felipe Pueblo; Sandia Pueblo; Santa Ana Pueblo; Kewa (f/k/a Santo Domingo) Pueblo; Zia Pueblo
NM	San Juan	0.068	Navajo; Ute Mountain Ute
ND	Dunn	0.057	Fort Berthold Reservation (Mandan, Hidatsa, Arikara)
ND	McKenzie	0.057	Fort Berthold Reservation (Mandan, Hidatsa, Arikara)
UT	Carbon	0.068	Uintah & Ouray Reservation (Ute)
UT	Duchesne	0.077	Uintah & Ouray Reservation (Ute)
UT	San Juan	0.067	Navajo; Ute Mountain Ute (White Mesa)
UT	Uintah	0.076	Uintah & Ouray Reservation (Ute)
WY	Fremont	0.064	Wind River Reservation (E. Shoshone & N. Arapaho)

Counties for which EPA has published 2012-14 8-hour ozone Design Values which include Indian Country and which produced more than 10,000 barrels oil and/or 1,000,000 McF gas in most recent year for which data is available from relevant state agency. California Rancherias and reservations are included only if DOGGR data reveals existing wells located on tribal lands. See supra and infra nn. 9–10.[10]

The Coalition ANPR Comments provided extensive detail about the ozone pollution problems in the Uinta and San Juan Basins, which have substantial oil and gas development within portions of Indian Country. See Coalition ANPR Comments at 4-12. Oil and gas development in the Uinta Basin also contributes to visibility issues in Dinosaur National Monument. See infra pp. 13–14. In the ANPR, EPA cited a Western Regional Air Partnership study that concluded that oil and gas sources account for the majority of ozone precursor emissions in the Uinta Basin and Northern San Juan Basins. 79 Fed. Reg. at 32,508 (citing A. Bar-Ilan et al., A Comprehensive Emissions Inventory of Upstream Oil and Gas Activities in the Rocky Mountain States (2013)). A recent study in the Uinta Basin concluded that oil and gas

[10] Because EPA publishes design values and generally designates attainment at the county level, counties, rather than reservations, are the geographic units used in Table 1. See, e.g., Treasure State Res. Indus. Ass'n v. EPA, No. 13-1263, slip op. at 14 (D.C. Cir. Nov. 3, 2015). Several counties in Oklahoma may also belong on Table 1. Canadian, Caddo, Cleveland, Comanche, Creek, Dewey, Kay, McClain, Oklahoma, and Tulsa Counties all include Tribal Jurisdictional Areas, have 2012-14 design values above 70 ppb, and had 2012 annual production of either >10,000 barrels of oil or >1,000,000 mcf of gas. Okla. Corp. Comm'n, Monthly Oil and Gas Production by County (year to date) (2012), http://www.occeweb.com/og/ogmonthytd.pdf. However, following the court's decision in Oklahoma Department of Environmental Quality v. EPA, it is unclear whether Oklahoma Tribal Jurisdictional Areas qualify as "Indian country." 740 F.3d 185, 189 (D.C. Cir. 2014) ("ODEQ"), In the final rule, EPA should clarify whether its revised definition of Indian Country includes Tribal Jurisdictional Areas in Oklahoma, as well as other areas with jurisdictional issues, such as allotted lands on the eastern edge of the Navajo Reservation. Environmental and Tribal commenters encourage EPA to interpret its definition so as to maximize tribal sovereignty and clarify that the final rule covers allotted lands.

sources contribute 98 to 99% of emissions of volatile organic compounds ("VOCs"), an ozone precursor. See Coalition ANPR Comments at 7. Up to 90% of the development in the Uinta Basin is occurring within Indian Country. Id. at 8. Since 2009, the Uinta Basin has experienced wintertime ozone pollution levels that exceed those in some of the most polluted cities in the U.S. See id. at 5–6.

Additional data released since the Coalition submitted its comments on the ANPR demonstrates that the Uinta Basin continues to suffer from severe ozone pollution. According to the 2013-14 wintertime ozone season report, the nineteen monitors in the basin collectively measured eight-eight exceedances of the 2008 ozone standard, and ten of the monitors had overall daily maximum values above 70 ppb. SETH LYMAN ET AL., UTAH STATE UNIVERSITY, FINAL REPORT: 2013-14 UINTAH BASIN WINTER OZONE STUDY 6 (Oct. 31, 2014), http://rd.usu.edu/files/uploads/2014_ubos_final_report.pdf (Appx. at 341). The highest 8-hour average ozone concentration of the season was 104 ppb. Id. at 2-7.

There are similar alarming trends in the San Juan Basin. Much of the San Juan Basin is located within Indian Country, including portions of the Navajo, Southern Ute, Ute Mountain Ute, and Jicarilla Apache Reservations. The estimated 22,000 natural gas wells in the Basin are a source of concern for tribal members, including Diné CARE members, who are already impacted by air pollution from several coal-fired power plants located in the Basin. See Laura Paskus, On the Front Lines: Diné Women Stand Firm Against Increased, Unfettered Oil Development, INDIAN COUNTRY TODAY (Mar. 8, 2015), http://indianCountrytodaymedianetwork.com/2015/03/08/front-lines-dine-women-stand-firm-against-increased-unfettered-oil-development-159512. However, not all of the San Juan Basin is Indian Country. Nevertheless, as noted above, several thousand of these wells are located on the Navajo Nation, Southern Ute, and Jicarilla Apache Reservations. See supra p. 5. The Four Corners region has been referred to as a "national sacrifice area" due to the concentration of energy development and related pollution there, creating significant environmental justice concerns for the area's tribal and rural communities. Rebecca Tsosie, Indigenous People and Environmental Justice: The Impact of Climate Change, 78 U. COLO. L. REV. 1625, 1630 (2007) (Appx. at 370).

Air quality in the San Juan Basin is already poor, partially as a result of the high concentration of oil, gas, and coalbed methane development in the region. See Coalition ANPR Comments at 11–12. According to a June 2014 Southern Ute report, all eight ozone monitors on and near the tribe's reservation registered ozone levels exceeding 65 ppb in 2013. Southern Ute Tribe, Environmental Programs Division, Air Quality Program, Southern Ute Indian Tribe Ambient Air Monitoring Data/NAAQS Comparison (2001–2014) at 3 (June 25, 2014), www.southernute-nsn.gov/wp-content/uploads/2013/05/La-plata-2014.pdf (Appx. at 403). Data from EPA's published 2012-14 design values similarly show that all ozone monitors in the region for which 2012-14 design values are available exceed 65 ppb. EPA, 2014 Design Value Reports: Ozone (July 20, 2015), http://www3.epa.gov/airtrends/pdfs/Ozone_DesignValues_20122014_FINAL_08_03_15.xlsx (monitor level data is available at tab five of the spreadsheet).

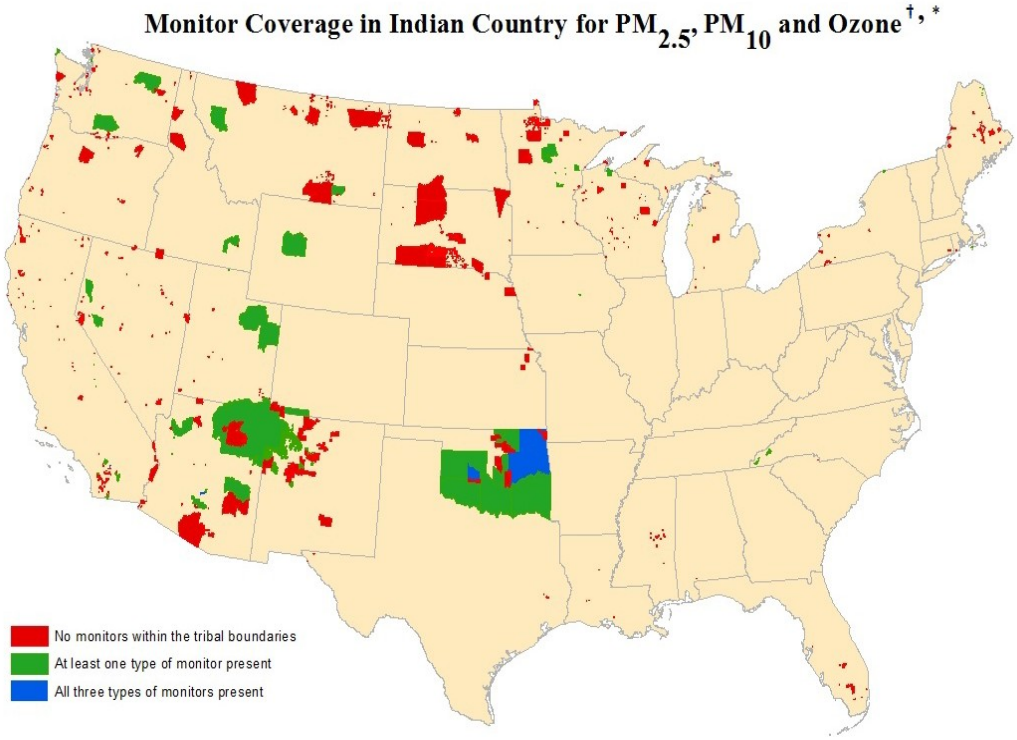
Although there is much evidence that oil and gas development in Indian Country is causing likely public health problems, without adequate monitoring, EPA cannot ensure that it is

protecting public health from the emissions associated with oil and gas development. As EPA recognized in the ANPR,

> [O]ur understanding of the oil and natural gas sector's impact on ambient air quality in Indian country is incomplete at this time given the absence of ambient air quality monitoring sites in many areas of Indian country. At the same time, with the prospect of continued significant growth in emissions from the oil and natural gas sector, it may be necessary or appropriate to impose emissions control requirements on existing emissions units. More detailed information on the air quality in a region would help us better understand whether emission reductions from existing sources are necessary or appropriate to accommodate emissions growth while still protecting public health.

79 Fed. Reg. 32,519; see also id. at 32,508 ("These uncertainties are due in part to the scarcity of ambient air monitoring in some areas of Indian country."); id. at 32,511 ("[A] number of areas of Indian country lack a robust monitoring network."). EPA provided a map (excerpted as Figure 1 below and attached, Appx. at 407), which shows that most areas of Indian Country lack any monitoring coverage. As shown on Figure 1, several reservations in oil and gas producing areas also lack monitors, including the Jicarilla Apache, Ute Mountain Ute, FBIR, and Crow Reservations.

FIGURE 1



C. Oil and Gas Emissions in Indian Country Expose Tribal Members to Toxic Air Pollution with Adverse Health Impacts

In addition to exposing tribal members to dangerous levels of ozone, oil and gas operations in Indian Country also expose tribal members to Hazardous Air Pollutants (HAP). HAPs, also known as air toxics, are pollutants which "present . . . a threat of adverse human health effects (including but not limited to, substances which are known to be, or may reasonably be anticipated to be, carcinogenic, mutagenic, teratogenic, neurotoxic, which cause reproductive dysfunction, or which are acutely or chronically toxic) or adverse environmental effects." 42 U.S.C. § 7412(b)(2).

Several HAPs emitted by the oil and gas sector, including benzene, toluene, ethyl benzene, and xylene (collectively, "BTEX"), are known or suspected carcinogens, to which there is no safe level of exposure. EPA, Regulatory Impact Analysis: Final New Source Performance Standards and Amendments to the National Emission Standards for Hazardous Air Pollutants for the Oil and Natural Gas Industry at 4-14 (Apr. 2012) (Appx. at 408); see also NRDC, DRILLING DOWN: PROTECTING WESTERN COMMUNITIES FROM THE HEALTH AND ENVIRONMENTAL EFFECTS OF OIL AND GAS PRODUCTION at v-vi (2007) (Appx. at 632).[11] The oil and gas sector also emits several other HAPs, including acrolein, methylene chloride, arsenic, polycyclic aromatic hydrocarbons, mercury, formaldehyde, and n-hexane. Petition to EPA from California Communities Against Toxics et al. for Listing and Rulemaking Under Section 112 of the Clean Air Act to Establish an Area Source Category for Oil and Gas Production Wells and Associated Equipment and to Set National Emission Standards for Hazardous Air Pollutant Standards at 35–37 (May 13, 2014), http://earthjustice.org/sites/default/files/files/OilGasToxicWellsPetition 51314.pdf ("HAPs Rulemaking Petition") (Appx. at 638) (describing these HAPs and their adverse human health impacts).[12] Some of these HAPs are persistent in the environment and bioaccumulate, building up in fish and the soil, which can cause significant harms to environmental resources that tribes and tribal members rely on for subsistence, cultural, recreational, aesthetic, and other values. See, e.g., NAT'L PARK SERV., THE FATE, TRANSPORT, AND ECOLOGICAL IMPACTS OF AIRBORNE CONTAMINANTS IN WESTERN NATIONAL PARKS at 4-8 to 4-42, 5-1 to 5-21, 5-61 to 5-67 (2008), http://www.nature.nps.gov/air/studies/air_toxics/docs/2008FinalReport/WACAP_Report_Volume_I_Main.pdf (Appx. at 2324).

[11] EPA notes in the Proposed FIP that "[b]ecause the individual HAPs pollutants regulated from glycol dehydrators by the NESHAP (and to some degree from process heaters, as well) for oil and gas production sources are also VOC, which are regulated NSR pollutants, the proposed FIP would create enforceable VOC reduction requirements for glycol dehydrators and process heaters." 80 Fed. Reg. at 56,569. EPA is thus aware that oil and gas sector HAPs emissions can also be regulated through programs designed to target other pollutants.

[12] EPA regulates new and existing sources of air toxics by establishing Maximum Achievable Control Technology ("MACT") standards. 42 U.S.C. § 7412(d)(2), (d)(3). EPA regulates air toxics emissions from the oil and gas sector through NESHAP rules. 40 C.F.R. §§ 63.760–779 & Appx. This rule and the NESHAPs rule for industrial boilers and process heaters are two of the six regulations that EPA proposes to apply in Indian Country through the Proposed FIP. 80 Fed. Reg. at 56,557–58 (listing 40 CFR pt. 63 subparts HH & DDDDD).

A growing body of scientific literature has documented the human health risks from exposure to oil and gas sector air toxics. See Bernard D. Goldstein et al., The Role of Toxicological Science in Meeting the Challenges and Opportunities of Hydraulic Fracturing, 139 TOXICOLOGICAL SCI. 271, 275–77 (2014) (Appx. at 750); Miriam Rotkin-Ellman, NRDC, More Fracking Fumes: Studies Repeatedly Find Unsafe Levels of Air Pollution Near Fracking Sites (Dec. 16, 2014), http://switchboard.nrdc.org/blogs/mrotkinellman/more_fracking_fumes_studies_re.html; HAPs Rulemaking Petition 37-43. Four studies in Colorado have identified adverse impacts of exposure to oil and gas sector air toxics. One study found elevated cumulative cancer risks for people living within 0.5 miles of wells of 10 per million people, as well as likely chronic non-cancer health impacts. Lisa M. McKenzie et al., Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources, 424 SCI. TOTAL ENV'T 79, 80–83 (2012) (Appx. at 763). Another more comprehensive public health study found elevated cancer rates of up to 100 cases per million people near wells in Garfield County, likely due to benzene exposure, and identified oil and gas operations as the likely source of the benzene. RAJ GOYAL, COLO. DEP'T OF PUB. HEALTH & ENV'T, GARFIELD COUNTY AIR TOXICS INHALATION; SCREENING LEVEL HUMAN HEALTH RISK ASSESSMENT 22–23, 29–30, 39–40, 56 (2010) (Appx. at 772). A third study found higher rates of congenital heart defects and neural tube defects among babies born to mothers living within a ten mile radius and near higher densities of natural gas wells. Lisa M. McKenzie et al., Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado, 122 ENVTL. HEALTH PERSPS. 412, 412–16 (2014) (Appx. at 844); see also Miriam Rotkin-Ellman, NRDC, New Study Finds Worrisome Pattern of Birth Defects in Fracking Communities (Feb. 4, 2014), http://switchboard.nrdc.org/blogs/mrotkinellman/new_study_finds_worrisome_patt.html. Finally, a study by NOAA scientists found emissions of benzene, a known carcinogen, at levels seven times greater than reflected in a state inventory. Gabrielle Pétron et al., A New Look at Methane and Non-methane Hydrocarbon Emissions from Oil and Natural Gas Operations in the Colorado Denver-Julesburg Basin, 119 J. GEOPHYS. RES. ATMOS. 6836, 6836 (2013) (Appx. at 856).

Evidence from oil and gas producing basins that include portions of Indian Country has also revealed concerning health impacts from exposure to air toxics. For example, a study conducted in several oil and gas basins nationwide—including Fremont County, Wyoming, where part of the Wind River Reservation is located—found benzene levels twenty-two times higher than EPA's 1/10,000 IRIS cancer risk level. Gregg P. Macey et al., Air Concentrations of Volatile Compounds Near Oil and Gas Production: A Community-based Exploratory Study, 13 ENVTL. HEALTH 82, 88 (2014) (Appx. at 873).

Other evidence indicates that more studies on exposure to oil and gas emissions are warranted. A Utah Department of Health study has concluded "the incidence of stillbirths in the [Uinta Basin] area during the 2012-2013 time period was higher than historically observed for that region." SAM LEFEVRE ET AL., UTAH DEP'T OF HEALTH, ENVTL. EPIDEMIOLOGY PRG., ADVERSE BIRTH OUTCOMES STATISTICAL REVIEW INVESTIGATING TRICOUNTY HEALTH DEPARTMENT STUDY AREA (DAGGETT, DUCHESNE AND UINTAH COUNTIES), UTAH, 1991-2013 at 22 (2015), http://health.utah.gov/enviroepi/appletree/TriCountyABO/TriCounty_ABO.pdf (Appx. at 891). The study found that the Tri-County Uinta Basin area as a whole, in which there were 11,110 active oil and gas wells at the time of the study, had a statistically significant elevation above baseline levels in: (1) low-birth-weight infants in 2005-07; (2) premature births

in 2008-09; and (3) small-for-gestational age infants in 2008-09. Id. at 6, 42–44. The study also found statistically significant elevations in adverse birth outcomes in several of the three counties individually during various time periods, most notably in the risk of infant death in Duchesne County in 2000-07. Id. at 45. The study cautioned that the methodology it used was not capable of linking the increased rate of adverse birth outcomes to any specific risk factors, such as exposures to air pollutants. Id. at 21. However, the study provides strong support for further research into potential links between exposure to emissions from the over 11,000 active oil and gas wells in the Uinta Basin and the observed adverse birth outcomes.

D. Oil and Gas Emissions in Indian Country Contribute to Climate Change

Oil and gas sector emissions contribute not only to deteriorating air quality in Indian Country, but also to climate change. In the ANPR, EPA acknowledged that reducing methane from the oil and gas sector is a key part of the Obama Administration's President's Climate Action Plan. 79 Fed. Reg. at 32,504-05. According to the Intergovernmental Panel on Climate change (IPCC), more than one-third of anthropogenic warming is due to short-lived climate pollutants such as methane, which is 87 times more powerful a greenhouse gas than carbon dioxide over a twenty-year period. EDF ANPR Comments at 2 (citing CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS, CONTRIBUTION OF WORKING GROUP 1 TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (Thomas F. Stocker et al., eds. 2013)). EPA's own Greenhouse Gas Inventory shows that the oil and gas industry is the largest source of anthropogenic methane pollution in the United States. Coalition ANPR Comments at 3 (citing A.R. Brandt et al., Methane Leaks from North American Natural Gas Systems, 343 SCIENCE 733 (2014), http://www.novim.org/images/pdf/ScienceMethane.02.14.14.pdf). To reach the Obama Administration's goal of reducing greenhouse gas emissions 17% by 2020, significant methane emissions reductions will be necessary, and the most obvious source for reducing those emissions is the oil and gas sector, including sources in Indian Country. See White House, Climate Action Plan: A Strategy to Reduce Methane Emissions 1 (March 28, 2014), https://www.whitehouse.gov/sites/default/files/strategy_to_reduce_methane_emissions_2014-03-28_final.pdf (Appx. at 954).

Satellite imagery indicates that the San Juan Basin, despite being relatively sparsely populated with rural and tribal communities, has the highest concentration of methane emissions in the country, a phenomenon known as the "Four Corners Methane Hot Spot." Jonathan Thompson, Unlocking the Mysteries of the Four Corners Methane Hot Spot, HIGH COUNTRY NEWS (Aug. 31, 2015), http://www.hcn.org/issues/47.15/in-the-southwests-four-corners-methane-has-a-dark-side; Jonathan Thompson, NASA Finds Methane Hot Spot Over Four Corners, HIGH COUNTRY NEWS (Oct. 12, 2014), http://www.hcn.org/articles/nasa-finds-methane-hot-spot-over-four-corners.[13] According to a recent NASA study, space-based observations between 2003 and 2009 reveal that emissions unaccounted for in EPA's methane emissions inventory from the Four Corners region account for 10% of EPA's estimated methane emissions nationwide, due to natural gas and coalbed methane development. Eric A. Kort, et al., Four Corners: The Largest US Methane Anomaly Viewed from Space, 41 GEOPHYS. RES. LETTERS

[13] As noted above, the San Juan Basin is home to the Navajo, Southern Ute, Ute Mountain Ute, and Jicarilla Apache Reservations. See supra p. 8.

6898, 6898-6900, 6902 (2014) (Appx. at 969). Over seventy-five researchers from NOAA, NASA, and partner organizations have converged on the Four Corners region to study the hot spot. See Peter Marcus, What's Causing the Hot Spot?, DURANGO HERALD (June 3, 2015), http://www.durangoherald.com/article/20150603/NEWS01/150609907/What--x2019-s-causing-the-hot-spot--. The results of their research will provide more information about the contributions of individual sources to the hot spot.

But even without further research, many indicators suggest that the source of the hotspot is the booming oil and gas development in the region. As shown in Table 2, EPA's Greenhouse Gas Emissions Inventory shows that the oil and gas sector contributes a significant quantity of methane emissions to the Four Corners region. EPA, 2014 Greenhouse Gas Emissions from Large Facilities (Aug. 16, 2015), http://ghgdata.epa.gov/ghgp/main.do (search for Data Year 2014, All Emitters, and filter by Greenhouse Gas = methane and county level data). Based on the Greenhouse Gas Emissions Inventory data, EPA has already identified the San Juan Basin as one of the top five basins for reported greenhouse gas emissions nationwide, and the largest source of greenhouse gas emissions from pneumatic devices nationwide. EPA, 2011-2014 GHGRP Industrial Profiles: Petroleum & Natural Gas Systems at 10, 13 (2015), http://www2.epa.gov/sites/production/files/2015-11/documents/subpart_w_2014_data_summary_10-12-15_508_km.pdf (Appx. at 975).

TABLE 2

County	Petroleum and Natural Gas Systems 2014 Methane Emissions (MT CO_2e)
San Juan, NM	264101
La Plata, CO	59914
San Juan, UT	1537
Apache, AZ	23489

Mitigating the severity of climate change as a result of oil and gas development is especially important because Indian Country is disproportionately impacted by climate change. See, e.g., Jamie Kay Ford & Erick Giles, Climate Change Adaptation in Indian Country: Tribal Regulation of Reservation Lands and Natural Resources, 41 WM. MITCHELL L. REV. 519, 524-26 (2014) (Appx. at 1001); Sarah Krakoff, American Indians, Climate Change, and Ethics for A Warming World, 85 DENV. U. L. REV. 865, 865 (2008) (Appx. at 1023); accord Press Release, U.S. Dep't of the Interior, Secretary Jewell Announces New Tribal Climate Resilience Program (July 16, 2014), https://www.doi.gov/news/pressreleases/secretary-jewell-announces-new-tribal-climate-resilience-program.

E. Oil and Gas Emissions in Indian Country Negatively Impact Visibility in Class I Areas

EPA has an obligation to protect visibility in Class I areas such as national parks and wilderness areas. 42 U.S.C. §§ 7491, 7492(e); see also 40 C.F.R. § 81.000 (listing areas in which visibility has been determined to be an important value). As discussed extensively in the Coalition ANPR Comments, emissions from oil and gas sector sources in Indian country,

especially in the Uinta and San Juan Basins, contribute to impairment of visibility in several Class I areas. Coalition ANPR Comments at 9–11. Specifically, emissions from oil and gas development on the Uintah and Ouray Reservation cause or contribute to visibility impairment in at least eight Class I areas near the Uinta Basin, including Dinosaur National Monument and Capitol Reef, Canyonlands, Arches, and Black Canyon of the Gunnison National Parks. As the National Park Service noted, modeled impacts from a recent analysis of oil and gas development in the nearby White River Field Office Resource Management Area concluded that additional oil and gas activity "would 'cause visibility impairment' at Dinosaur National monument." Memorandum from Reg'l Dir., Intermountain Region, Nat'l Park Serv., to Planning and Envt'l Coordinator, BLM 9 (2013), (Appx. at 1049). Oil and gas development in the San Juan Basin may also contribute to visibility impairment in Class I areas, including Mesa Verde National Park. See Marco A. Rodriguez, Michael G. Barna & Tom Moore, Regional Impacts of Oil and Gas Development on Ozone Formation in the Western United States, 59 J. AIR & WASTE MGMT. ASS'N 1111, 1111 (2009) (Appx. at 1061).

III. EPA's Proposed FIP is Inadequate to Protect Air Quality

The purpose of New Source Review ("NSR") permitting for both major and minor sources is to ensure protection of the NAAQS and prevent deterioration of air quality through preconstruction review in both attainment and nonattainment areas. See EPA, Tribal Minor Source Review Program, http://www3.epa.gov/air/tribal/tribalnsr.html (updated Apr. 20, 2015); see also 42 U.S.C. § 7470. Although tribes have authority under the Clean Air Act ("CAA") to develop and administer their own tribal NSR programs for minor sources within Indian Country, only a few tribes have done so. See 76 Fed. Reg. at 38,753.[14] Accordingly, in 2011 EPA adopted federal permitting regulations to fill the gap. See 76 Fed. Reg. at 38,749–50, 38,753; 80 Fed. Reg. at 56,562 (describing gap that Proposed FIP is designed to fill).

Although EPA proposes a FIP to streamline the permitting process, the Proposed FIP does not achieve the goals of the case-by-case permitting EPA established in the tribal NSR rule—namely adequate protection of public health and the environment. The Proposed FIP would allow minor oil and gas sources to forego preconstruction review and permitting altogether and instead simply self-certify that they will comply with the six regulations that already apply within Indian Country.

EPA has provided no analysis of whether these six regulations will adequately address the air quality problems in Indian Country or ensure compliance with the NAAQS, Prevention of Significant Deterioration Program, and the Visibility Protection program. See 42 U.S.C. §§ 7602(y), 7470–71, 7473, 7491. Given the existing air quality concerns and growing development within Indian Country, EPA should do more, including regulating existing sources.

[14] Various barriers, including the resources necessary to develop regulatory programs, prevent most tribes from obtaining treatment as a state status under the CAA. See Elizabeth Ann Kronk Warner, Tribes As Innovative Environmental "Laboratories", 86 U. COLO. L. REV. 789, 811–12 (2015) (Appx. at 1069); accord Purba Mukerjee, Fighting for Air in Indian Country: Clean Air Act Jurisdiction in Off-Reservation Tribal Land, 45 ENVTL. L. REP. 10,966, 10,970–71 (2015) (Appx. at 1118). This makes FIPs developed by EPA even more important to protect the health of tribal members.

Furthermore, even if EPA moves forward with standards to address existing sources on a regional basis, it should establish specific triggers for when reservation- or area-specific FIPs will be required. It should also provide opportunities for tribes, tribal members, and members of the public to request such FIPs. Finally, EPA should strengthen monitoring and enforcement.

A. EPA Has Not Analyzed Whether the Six Regulations Will Ensure Compliance with all Applicable Air Quality Standards

EPA's sole purpose for adopting the FIP appears to be streamlining the permitting process. However, EPA has streamlined the process without ensuring adequate protections for public health.

As EPA explained in the tribal NSR rule, preconstruction permitting procedures are designed to "demonstrate that [sources] will be operating in a manner that is protective of air resources and the NAAQS" and that "any economic growth occurring in Indian Country will be in harmony with the preservation of Clean Air Act resources." 76 Fed. Reg. at 38,753; see also id. at 38,760 (stating that the minor source permitting program is "primarily designed to assure that the NAAQS are achieved and to prohibit any minor source from emitting any air pollutant in amounts that would contribute to nonattainment or interfere with maintenance of the NAAQS"). Permit applications inform the regulatory authority about the amount of emissions anticipated from a new or modified source. Id. at 38,759. Each permit is subject to two types of technical review: (1) control technology review; and (2) review of the probable impact on air quality of the proposed new source. Id. at 38,760–61.

The control technology review includes consideration of "local air quality needs, typical control technology used by similar sources in surrounding areas, anticipated economic growth in the area and cost-effective control alternatives." Id. at 38,760. This case-by-case analysis "provides the reviewing authority with the flexibility to create requirements that protect public health and the environment, but also takes into consideration the needs of the area in question based on its current air quality situation, the potential air quality impacts from the growth associated with the source and the technological and economic feasibility of the control technology as well as the control technologies in use in the surrounding states." Id. at 38,761. The permitting authority also considers the impact of the source on air quality. If there is any concern that a minor source could "cause or contribute to a NAAQS or PSD increment violation," the permitting authority may require dispersion modeling. Id.

Although EPA offers the Proposed FIP as a substitute for this permitting process, EPA did not conduct any control technology review, air quality impacts analysis, or dispersion modeling for the Proposed FIP. In the ANPR, EPA seemed to acknowledge that such analysis was necessary. EPA stated that if it adopted a uniform set of control technology requirements, it would undertake a "control technology review" similar to that provided in the Indian minor source rule. 79 Fed. Reg. at 32,519. As part of that review, EPA indicated that it would consider a list of potential control technology options such as requirements currently applicable or under consideration by federal, state, and local agencies and recommendations in the CTGs. Id. EPA also planned to weigh the energy, environmental, and economic impacts of those controls. Id. However, EPA conducted no such analysis for the Proposed FIP. An analysis of existing state

regulations, such as those adopted in Colorado, and recommendations in the CTGs would have revealed that controls for existing sources are available at reasonable costs and being implemented. See infra p. 19.

EPA offers no explanation for how requiring operators to simply self-certify that they will comply with existing regulations is sufficient to ensure air quality is protected. Nor does EPA provide any analysis of how the six regulations will ensure protection of the NAAQS or adequately protect public health and the environment. Without any analysis, EPA simply states "we believe that the proposed oil and natural gas FIP contains a robust set of emission control requirements and compliance monitoring and reporting provisions that will help ensure that a new or modified true minor source would not cause or contribute to a NAAQS or PSD increment violation." 80 Fed. Reg. at 56,568. Given the existing air quality concerns in Indian Country—including existing violations of the NAAQS standards—and the expected growth in development, EPA cannot make this assumption. See infra pp. 5–8.

In support of the Six Regulation approach, EPA notes that the emissions standards encapsulated in the Six Regulation reflect the Best System of Emission Reduction ("BSER"), MACT, and Generally Available Control Technology ("GACT") for various pollutants and/or emissions sources. 80 Fed. Reg. at 56,569. However, these are not necessarily sufficient. As discussed above, the purpose of the minor source permitting program is to ensure protection of the NAAQS and prevent deterioration of air quality. Likewise, EPA's regulations state that the agency "shall promulgate without unreasonable delay such Federal implementation plan provisions as are necessary or appropriate to protect air quality." 40 C.F.R. § 49.11(a); see also 42 U.S.C. § 7602(y); Ariz. Pub. Serv. Co. v. EPA, 562 F.3d 1116, 1126 (10th Cir. 2009) ("[T]he key criterion in determining the adequacy of any [FIP] is attainment and maintenance of the national air standards."). EPA cannot demonstrate that these regulations are all that is necessary and appropriate to protect air quality in Indian Country. Given the growth of oil and gas activity in Indian Country and the existing air pollution in many parts of Indian Country, without going beyond the six regulations, the Proposed Rule will be inadequate to protect public health and the environment in Indian Country.

Furthermore, as demonstrated in comments on the Proposed Amended NSPS Rule, EPA's proposed subpart OOOOa NSPS standards, which are among the six regulations, represent a good step forward, but omit certain important elements from the scope of coverage. When finalizing the OOOOa rule, EPA must strengthen the LDAR requirements and controls for pneumatic devices and compressors, and expand coverage to include well site compressors, storage tanks, and liquids unloading events. See Proposed Amended NSPS Comments.

Similarly, as past comments and petitions have demonstrated, the NESHAPs for oil and gas sector sources also do not necessarily represent MACT or GACT. The existing NESHAPs rules are themselves inadequate to protect public health. As a 2014 rulemaking petition explains, EPA's area source category for the oil and gas sector covers only glycol dehydrators, and does not cover any other equipment. HAPs Rulemaking Petition at 24-25. Because emissions from oil and gas sector sources typically fall below the threshold for regulation as a major source under CAA § 112, by failing to regulate HAPs emissions from other emissions sources in the oil and gas sector, EPA is allowing a significant volume of air toxics to harm public health. See 42

U.S.C. § 7412(a)(1)-(2); see generally Comments of Earthjustice et al. on Source Determination for Certain Emission Units in the Oil and Natural Gas Sector, Dkt. ID No. EPA-HQ-OAR-2013-0685 (Dec. 4, 2015) ("Source Determination Comments") (discussing how EPA's source determination procedures prevent most oil and gas sector sources from being regulated as major sources). According to EPA's own analysis, the 2012 NESHAPs revisions only reduced annual oil and gas sector HAPs emissions by 12,000 to 20,000 tons per year ("tpy"), leaving over 100,000 tpy unregulated. HAPs Rulemaking Petition at at 25 (citing 77 Fed. Reg. 49,490, 49,533-34 (Aug. 10, 2012). Given this shortfall, a coalition of environmental and public health groups requested that EPA regulate HAPs emissions from all sources in the oil and gas sector in order to adequately protect public health in Indian country and nationwide. See Comments of Sierra Club et al., Comments on National Emission Standards for Hazardous Air Pollutants Review, Dkt. ID No. EPA-HQ-OAR-2010-0505 at 14 (Nov. 30, 2011) ("NESHAPs Comments") (Appx. at 1129); Earthjustice et al., Petition for Reconsideration of Oil and Natural Gas Sector: National Emission Standards for Hazardous Air Pollutants Review, Dkt. ID No. EPA-HQ-OAR-2010-0505 at 6 (Oct. 15, 2012) ("NESHAPs PFR") (Appx. at 1324). Public health and environmental organizations provided further evidence that the current regulations do not represent MACT by proving that EPA should regulate storage tanks without the potential for flash emissions, which it proposed to do, but chose not to do in the final 2012 NESHAPs rule. NESHAPs Comments at 96; NESHAPs PFR at 40. Additionally, the current regulations do not represent MACT because EPA should regulate non-BTEX HAPs emissions from small glycol dehydrators. NESHAPs Comments at 95; NESHAPs PFR at 42-44.[15]

In sum, EPA's decision to streamline permitting without ensuring protection of public health violates the CAA. Existing rules have neither been sufficient to preserve healthy air in Indian Country nor do they necessary represent MACT, and GACT. There are also important gaps in the proposed OOOOa NSPS that EPA must address. In the FBIR FIP, EPA rebutted a comment suggesting that streamlining was the purpose which animated the rule by explaining that "our primary purpose for developing rules to regulate air emissions is to meet the requirements of the CAA to protect the public health and the environment by providing those living on the Reservation the same level of air quality and health protection as people living outside the Reservation." 78 Fed. Reg. at 17,839. That should be the goal here as well.

B. The Proposed FIP Should Regulate Existing Sources

EPA should regulate existing oil and gas sector sources nationwide in order to prevent adverse impacts on public health and the environment. In the ANPR, EPA solicited comments

[15] EPA has undertaken a process to gather more information about oil and gas sector HAPs emissions. On November 4, 2015, EPA released a notice of publication in the federal register of a request for information related to HAPs emissions from the oil and gas sector. EPA, Oil and Natural Gas Sector: National Emission Standards for Hazardous Air Pollutants; Request for Information (Docket No. EPA-HQ-OAR-2015-074) (Nov. 4, 2015), http://www3.epa.gov/airquality/oilandgas/pdfs/20151104fr.pdf. EPA specifically requested data about HAPs emissions from storage tanks without potential flash emissions, a source category which it proposed to regulate, but chose not to regulate in the final 2011 NESHAPs rule. Id. at 9-12. EPA also requested data about non-BTEX HAPs emissions from small glycol dehydrators. Id. at 12–15.

on the advantages and disadvantages of available approaches to manage oil and gas sector emissions. 79 Fed. Reg. at 32,503. The options the agency considered included a FIP, a general permit, and a permit by rule. Id. EPA explained that the primary advantage of a FIP is that it could cover existing sources. Id. at 32,514. Both the Coalition and EDF ANPR comments supported a FIP approach for this reason. EDF Comments at 12; Coalition ANPR Comments at 13. But in the Proposed FIP, EPA decided not to regulate existing sources (beyond those already covered by the NESHAPs, which includes only some glycol dehydrators and process heaters, see 80 Fed. Reg. at 56,557–58; see also 42 U.S.C. § 7412(d)(3)).

By 2018, 90% of oil and gas sector emissions will be attributable to facilities that already existed in 2011. EDF ANPR Comments at 8 (discussing ICF INT'L, ECONOMIC ANALYSIS OF METHANE EMISSIONS REDUCTION OPPORTUNITIES IN THE U.S. ONSHORE OIL AND NATURAL GAS INDUSTRIES at 1-1 (2014) (Appx. at 1388)). Because many oil and gas emissions sources have long lifetimes and slow turnover, EPA will not be able to sufficiently protect public health and welfare, ensure compliance with the NAAQS, PSD, the Class I visibility protection mandate, and reduce greenhouse gas emissions unless it requires existing sources to adopt some of the affordable emissions controls which some states already require. See Coalition ANPR Comments at 14–16.

1. There Are Emissions Controls for Existing Sources at Reasonable Costs

There are many ways of regulating existing sources at reasonable costs, some of which have already been adopted by states. See, e.g., Comments of EDF et al. on Proposed Control Techniques Guidelines for the Oil and Natural Gas Industry, Dkt. ID No. EPA-HQ-OAR-2015-0216 (Dec. 4, 2015) ("Proposed CTGs Comments"); EDF ANPR Comments at 7; Coalition ANPR Comments at 19–28.

Many states already regulate a variety of existing sources. In February 2014, Colorado revised its oil and gas sector emissions regulations, becoming the first state in the country to directly regulate methane emissions. See Bruce Finley, Colorado Adopts Tougher Air Rules for Oil, Gas Industry, DENVER POST (Feb. 23, 2014), http://www.denverpost.com/environment/ci_25213661/colorado-adopts-tougher-air-rules-oil-gas-industry; Stephanie Paige Ogburn, Colorado First State to Limit Methane Pollution from Oil and Gas Wells, SCIENTIFIC AMERICAN (Feb. 25, 2014), http://www.scientificamerican.com/article/colorado-first-state-to-limit-methane-pollution-from-oil-and-gas-wells/. Among other things, Colorado adopted regulations governing several existing sources at reasonable costs, including combustion devices, storage tanks, compressors, and well production facilities. See Colo. Dep't Pub. Health & Env't, Revisions to Colorado Air Quality Control Commission's Regulation Numbers 3, 6, and 7: Fact Sheet at 1–4 (2014), https://www.colorado.gov/pacific/sites/default/files/AP_Regulation-3-6-7-FactSheet.pdf (Appx. at 1503). Additionally, Wyoming regulates existing sources in nonattainment areas. Wyoming regulates all existing oil and gas well production facilities and compressor stations in the Upper Green River Basin ozone nonattainment area. Wyo. Admin. Code Env. AQ Ch. 8 § 6. California's Bay Area Air Quality Management District regulates existing pneumatic controllers. See Jimmy Cheng, Permit Handbook, Chapter 3.5: Natural Gas Facilities and Crude Oil

Facilities 5 (2013), http://hank.baaqmd.gov/pmt/handbook/rev02/PH_00_05_03_05.pdf (Appx. at 1507).

Analysis conducted by these state governments indicates just how reasonable the costs of these requirements are. For example, Colorado calculated that replacing existing high-bleed pneumatic devices with low-bleed pneumatic devices statewide would result in annualized cost-savings of $1,084 over a fifteen-year period (assuming a 5% rate of return and natural gas value of $3.5/mcf). Colo. Air Pollution Control Div., Initiation Economic Impact Analysis: Regulation Number 7 at 22 (Nov. 13, 2013), https://www.colorado.gov/pacific/sites/default/files/062_R7-Initial-EIA-request-11-21-13-26-pgs-062_1.pdf (APCD EIA) (Appx. at 1514). As a result of complying with Colorado's regulations, operators will collectively save $10,172,256 a year. Id. at 23. Collectively, over a fifteen year period, this accounts to total cost-savings of $152,583,840. See id. Although capturing gas and using it for a beneficial purpose is always preferable to flaring and should be required whenever and wherever possible, there may be instances in which a source's only option to avoid venting gas is to route it to a completion control device. This can be done at a reasonable cost level, although this method will not necessarily result in net cost savings for operators because it does not allow for the capture and use of additional natural gas. Colorado calculated that the total annualized cost of installing an auto-igniter control device at existing sources statewide was $475, for a cost effectiveness of $272/ton of VOC emissions reduced. Id. at 21. Colorado calculated the annualized cost of controlling VOC emissions from existing glycol dehydrators at a 6-tpy emissions threshold at $6,286.80 per device, for a cost-effectiveness of $632/ton. Id. at 24; see also Proposed Amended NSPS Comments. Again, we emphasize that capture and use of gas should always be the first line of defense against venting; flaring should only be seen as an option of last resort against venting.

EPA's proposed CTGs also identify many emissions control strategies that can readily be implemented for existing sources at reasonable costs, and that some states have already implemented. See, e.g., Proposed CTGs at 6-19 (discussing Colorado's requirement that operators install no- or low bleed pneumatic controllers at all new and existing operations statewide); see also Proposed CTGs Comments. EPA should consider adopting some of the affordable emissions control strategies identified in the Draft CTG in the final rule.

Independent consultant ICF International has determined that 40% of methane emissions from the oil and gas sector could be eliminated by 2018 at a total cost of one cent per mcf of gas produced. ICF INT'L at 1-1. According to ICF, that 40% reduction would save the United States as a whole $100 million annually. Id. at 1-1 to 1-2. ICF's report breaks down costs and cost savings of reducing emissions from existing sources by equipment and segment of the oil and gas production process. See id. at 4-10. This demonstrates that reducing emissions from some specific existing sources, such as capturing gas from existing centrifugal compressors, can save operators as much as $5/mcf.

CATF has also conducted extensive analysis of strategies to reduce emissions from existing sources. DAVID MCCABE ET AL., WASTE NOT: COMMON SENSE WAYS TO REDUCE METHANE POLLUTION FROM THE OIL AND NATURAL GAS INDUSTRY (2015), http://www.catf.us/resources/publications/files/WasteNot.pdf (Appx. at 2142). Its analysis shows that EPA can

make significant gains in reducing methane emissions by regulating existing sources, and that proven technologies and practices can reduce methane pollution from existing sources by up to 1,350,000 metric tons per year. Id. at 3. Existing pneumatics and compressors account for 30% of the oil and gas sector's methane emissions. Id. at 18. CATF identified technologies to reduce methane pollution from existing pneumatics and compressors by 45% and 85%, respectively. Id. at 40. Overall, CATF found its recommendations to be extremely cost-effective. The average abatement cost of the measures recommended in CATF's report was only $8 to $18 per metric ton of carbon dioxide equivalent, which is just $0.04 to $0.09 per mcf of natural gas sold. Id. at 44. And some specific emissions reductions at existing sources are even more cost effective—CATF estimates that operators will save $200 per metric ton of avoided methane pollution from reduced emissions from compressors in the processing segment. Id. at 30.

2. EPA Has Legal Authority to Regulate Existing Sources

As EPA has recognized, it has well-established legal authority to issue a FIP to control emissions in Indian Country. 80 Fed. Reg. at 56,570; see also 79 Fed. Reg. at 32,513–14; EDF ANPR Comments at 8–10.[16]

Under the CAA, EPA is "authorized to treat Indian tribes as States," and must promulgate regulations "specifying those provisions of [the CAA] for which it is appropriate to treat Indian tribes as States." 42 U.S.C. § 7601(d)(1)(A), (2). Pursuant to this requirement, EPA issued the Tribal Air Rule (TAR). 63 Fed. Reg. 7254 (Feb. 12, 1998). In this rule, EPA concluded that it was not appropriate to treat tribes as states under CAA §§ 110(a)(1) and 111(c)(1), which govern SIP submission and approval. 40 C.F.R. § 49.4(a), (d). EPA determined that it was not appropriate to subject tribes to the strict deadlines for implementation plan development set by § 110(c)(1).

But this does not mean that there are no implementation plans for tribal lands—EPA still retains the responsibility to protect air quality in Indian Country, just as it does nationwide. See 76 Fed. Reg. at 38,752–53. As EPA itself explained, including § 110(c)(1) on the list does "not relieve [EPA] of its general obligation under the CAA to ensure the protection of air quality throughout the nation, including throughout Indian Country. In the absence of an express

[16] In fact, EPA must regulate existing oil and gas sources nationwide without further delay. See Proposed Amended NSPS Comments. Under EPA's own regulations, the agency has an obligation to promulgate emission guidelines applicable to existing sources "[c]oncurrently upon or after" it proposes § 111(b) regulations for pollutants that are neither listed under §§ 108–110's NAAQS program nor regulated for that source under § 112's NESHAPs provisions. See 40 C.F.R. § 60.22. Methane is neither covered under the NAAQS program nor regulated for oil and gas sources under § 112; therefore, EPA must propose emissions guidelines governing methane pollution from existing sources in the oil and gas sector because it has now proposed § 111(b) rules governing new source emissions for that sector in the Proposed Amended NSPS Rule. Although § 111(d) requires states to submit plans to EPA consistent with the agency's emission guidelines, EPA has already developed a process for tribes to comply with § 111(d) regulations in the recently promulgated Clean Power Plan. See 80 Fed. Reg. 64,662, 64,703 (Oct. 23, 2015) (discussing 42 U.S.C. § 7411(d)). EPA should follow a similar approach for tribes with regard to § 111(d) methane regulations.

statutory requirement, EPA may act to protect air quality pursuant to its gap-filling authority under the Act as a whole." Id.[17]

When EPA determines that treating tribes as states is inappropriate, the CAA gives EPA discretion to create regulations or otherwise directly administer those provisions of the CAA to "achieve the appropriate purpose." 42 U.S.C. § 7601(d)(4). Under this § 7601(d)(4) authority, the agency "shall promulgate without unreasonable delay such Federal implementation plan provisions as are necessary or appropriate to protect air quality." 40 C.F.R. § 49.11(a) (emphasis added); see also 42 U.S.C. § 7602(y) (defining a FIP as "a plan (or portion thereof) promulgated by [EPA] to fill all or portion of a gap or otherwise correct all or a portion of an inadequacy in a SIP").[18] Thus, EPA has ample authority to regulate existing source in Indian Country to fulfill the purposes of the Act.

Moreover, when EPA issues a FIP in Indian Country, it is standing in the shoes of a tribe. ODEQ, 740 F.3d at 193 (explaining that EPA's jurisdiction to regulate air quality is concurrent with the jurisdiction of the tribe in whose shoes EPA is standing). As discussed above, states can (and do) regulate existing sources. Tribes have similar authority to regulate existing sources within their boundaries if doing so will protect the health, safety, and welfare of their people, so long as such regulations do not conflict with any act of Congress. See Michigan v. Bay Mills Indian Cmty., 134 S. Ct. 2024, 2030 (2014) (explaining that tribes retain their rights as sovereigns "unless and until Congress acts" to diminish their authority); see also Sandra D. Benischek, Clean Air in Indian Country: Regulation and Environmental Justice, 12 VILL. ENVTL. L.J. 211, 214 (2001) (Appx. at 1540) (discussing the ability of tribes to regulate existing sources). Thus, when standing in the shoes of a tribe, EPA also has authority to regulate existing sources.

EPA has already issued one reservation-specific FIP that covers new, modified, and existing oil and gas production operations at FBIR. 78 Fed. Reg. 17,836 (Mar. 22, 2013). As EPA explained, regulating existing sources through the FBIR FIP furthered the agency's purposes under the CAA: "Our primary goal, as always is with regard to regulations developed under the CAA, was to ensure increased protection to the public health and the environment. This FIP provides these benefits through promulgation of enforceable requirements to limit VOC emissions from [existing] facilities." Id. at 17,838; see also Ariz. Pub. Serv. Co., 562 F.33d at

[17] In addition to EPA's general obligation to ensure air quality protection nationwide, EPA also has a specific obligation to Indian Country under its trust responsibilities. See Nance v. EPA, 645 F.2d 701, 711 (9th Cir. 1981) ("[A]ny Federal government action is subject to the United States' fiduciary responsibilities toward the Indian tribes.").

[18] EPA need not issue a FIP if it instead approves a Tribal Implementation Plan (TIP). 40 C.F.R. § 49.11(a). But "there are . . . no currently approved TIPs specifically applying to the issuance of general permits with respect to the reduction of emissions related to oil and natural gas production facilities." 80 Fed. Reg. at 56,562. Accordingly, EPA has discretion to issue a FIP governing NSR permitting for minor oil and gas production facilities nationwide. See Michigan v. EPA, 268 F.3d 1075, 1079 (D.C. Cir. 2001) ("In the absence of a tribal implementation plan, EPA may provide a federal operating plan for lands under the tribe's jurisdiction.").

1125–26 (upholding FIP that applies to an existing source located within an area of Indian Country that is designated as attainment).[19]

Several industry commenters on the ANPR questioned EPA's legal authority to regulate existing sources in Indian Country. None of their comments have merit. For example, some industry commenters argue that EPA cannot issue a FIP covering existing sources because the agency has not identified a gap that needs filling. See, e.g., Comments of QEP Energy Company on Managing Emissions from Oil and Natural Gas Production in Indian Country; Docket ID Number EPA-HQ-OAR-2011-0151 at 2–3 (Aug. 18, 2014) ("QEP Comments"). But as explained above, there is no existing regulatory mechanism governing NSR at sources in Indian Country, and SIPs governing regulations for both attainment and nonattainment areas do not apply in Indian Country. The industry commenter claims support from Louisiana Public Service Commission v. FCC, 476 U.S. 355, 374 (1986). QEP Comments at 3. But this case involves an FCC regulation governing the depreciation of telephone plants and equipment. La. Pub. Serv. Comm'n, 476 U.S. at 358. It has nothing to do with EPA's authority to directly implement the CAA in Indian Country. The cited page includes a general truism that "[a]n agency may not confer power upon itself." Id. at 374. Yet, EPA would not be conferring power upon itself if it chose to regulate existing sources through a FIP. EPA would be exercising the power that Congress has conferred upon it to "directly administer such provisions [which EPA has determined it is inappropriate for tribes to be treated as states] so as to achieve the appropriate purpose." 42 U.S.C. § 7601(d)(4). Nothing in the language of the statute limits EPA's authority to regulate new and modified sources.

Industry commenters also argue that EPA lacks authority to regulate existing sources because doing so is beyond the scope of the 1998 TAR and the tribal NSR rule, which explicitly only applied to new and modified sources. See, e.g., QEP Comments at 3 (discussing 63 Fed. Reg. at 7263 and 76 Fed. Reg. at 38,749). But nothing prevents EPA from accomplishing two regulatory purposes in a single FIP. Although EPA has elected in the Proposed FIP to conclude that compliance with the proposed FIP will also constitute compliance with minor source NSR permitting, see 80 Fed. Reg. at 56,558, nothing prevents EPA from addressing other related issues.

Relatedly, industry commenters argue that EPA can only take action to carry out the statutory directives contained in 42 U.S.C. §§ 7410(a)(2)(C) and 7601(d). See, e.g., QEP Comments at 3. They rely on a D.C. Circuit case which states that "EPA cannot rely on its general authority to make rules necessary to carry out its functions when a specific statutory directive defines the relevant functions of EPA in a particular area." Am. Petrol. Inst. v. Browner, 52 F.3d 1113, 1119 (D.C. Cir. 1995). But § 7601(d) gives EPA extremely broad authority to "directly administer" any provision of the CAA that EPA determines it is not appropriate for tribes to carry out themselves.

[19] EPA has also already issued the tribal NSR rule, which is a nationally applicable FIP governing NSR for non-oil and gas sources in Indian country. 76 Fed. Reg. 38,748 (July 1, 2011) (codified at 40 C.F.R. §§ 49.151–72). A reviewing court declined to address whether EPA exceeded its authority by issuing this nationally applicable FIP. See ODEQ, 740 F.3d at 189.

An industry commenter also claimed that "The D.C. Circuit has twice rejected EPA's attempt to use 301(a) and 304(d) to directly regulate sources in Indian Country outside of its limited authority under the CAA." QEP Comments at 3–4 (citing ODEQ, 740 F.3d at 193; Michigan, 268 F.3d at 1082). This is not true. Both ODEQ and Michigan concerned EPA's authority to implement federal rules in areas for which Indian Country status was in question. ODEQ, 740 F.3d at 189; Michigan, 268 F.3d at 1078. Neither case casts any doubt on EPA's authority to issue FIPs in order to implement the CAA in areas clearly under tribal jurisdiction.

Similarly, industry commenters highlighted language from a D.C. Circuit opinion concluding that the word "necessary" in another CAA section CAA limited EPA's discretion. See QEP Comments at 4 (discussing Virginia v. EPA, 108 F.3d 1397, 1409 (D.C. Cir. 1997)). The issue in Virginia was whether the 1990 CAA Amendments granted EPA independent authority to condition approval of ozone SIPs on adoption of specific control technologies. Id. at 1410. The court held that while § 7410 did not provide this authority, § 7511c did. Id. Nothing about the case impacts the scope of EPA's authority to determine that it is "necessary" to issue a FIP for tribal lands under the terms of EPA's own regulation, 40 C.F.R. § 49.11(a).

Finally, some industry commenters raised dicta from a footnote in Luminant Generation Company v. EPA, 675 F.3d 917, 932 n.12 (5th Cir. 2012), which states that "[t]he provisions of the CAA that apply to minor NSR require state regulation only insofar as is necessary to assure achievement of the NAAQS." See, e.g., QEP Comments at 4. This dicta is part of a footnote in which the court muses about whether EPA might be able to disapprove of a SIP provision on grounds that were not at issue in the case. See United States v. Barela, 797 F.3d 1186, 1190 (10th Cir. 2015) ("[S]tatements and comments in an opinion concerning some rule of law or legal proposition not necessarily involved nor essential to determination of the case in hand." (quotations omitted)). It has no bearing on EPA's broad regulatory authority to issue a FIP when standing in the shoes of a tribe, a completely separate inquiry from what a state is required to do under one section of the CAA. Moreover, the statement does not limit EPA's ability to regulate existing sources through minor NSR if doing so is necessary to achieve the NAAQS.[20] Given that many areas of Indian Country are already in nonattainment despite the six regulations already being in place, it may well be necessary for EPA to regulate existing sources in other areas in order to prevent them from dipping into nonattainment.

3. To Protect Public Health, EPA Must Regulate Existing Sources

As the ANPR, Proposed FIP, and ANPR comments demonstrate, air quality in Indian Country is deteriorating due to oil and gas operations. 79 Fed. Reg. at 32,508–13 (ANPR); 80

[20] EPA notes in the Proposed FIP that "[b]ecause the individual HAP pollutants regulated from glycol dehydrators by the NESHAP (and to some degree from process heaters, as well) for oil and gas production sources are also VOC, which are regulated NSR pollutants, the proposed FIP would create enforceable VOC reduction requirements for glycol dehydrators and process heaters." 80 Fed. Reg. at 56,569. Thus, even the NESHAP components of the FIP may be necessary to assure achievement of the ozone NAAQS, because many HAPs are also VOCs, and thus contribute to tropospheric ozone formation. Compare 40 C.F.R. § 51.100(s) (defining VOCs) with 40 C.F.R. § 63 Table 1 (listing HAPs for glycol dehydrator NESHAPs).

Fed. Reg. at 56,570; EDF ANPR Comments at 2–8; Coalition ANPR Comments at 2–12. EPA acknowledges in the Proposed FIP that "managing emissions from existing oil and natural gas sources in some areas of Indian Country also may be important" in order to protect public health and the environment. 80 Fed. Reg. at 56,570. EPA also expressed "concern[] that the rapid growth of the oil and natural gas production segment . . . could result, or in some cases already has resulted, in adverse air quality impacts." Id. As EPA acknowledged in the ANPR, "[a]vailable evidence indicates that cumulative emissions from existing sources in the oil and natural gas production industry are causing elevated ambient ozone levels in areas outside of Indian Country . . . [and] air quality in Indian Country may be similarly at risk of reaching unhealthy levels." 79 Fed. Reg. 32,513. Although there is some uncertainty due to the lack of monitoring and other data, EPA acknowledges that "air quality levels may violate the 8-hour NAAQS in some areas and also may cause increases in ozone concentrations in area already violating the 8-hour ozone NAAQS." Id.

In fact, many areas of Indian Country already have design values which put them in nonattainment with the ozone NAAQS, and others are approaching the NAAQS. See supra pp. 5–8; accord 79 Fed. Reg. at 32,508–13; 80 Fed. Reg. at 56,570; EDF ANPR Comments at 2–8; Coalition ANPR Comments at 2–12. Regulation of existing sources is necessary to remedy these air quality concerns. EPA regulations provide that the agency "shall promulgate without unreasonable delay such Federal implementation plan provisions as are necessary or appropriate to protect air quality" in Indian Country. 40 C.F.R. § 49.11(a); see also 42 U.S.C. § 7602(y) (requiring EPA to "provide for attainment"). Ensuring compliance with the NAAQS—which EPA sets to protect public health and the environment—is necessary and appropriate.

Furthermore, the existence of a large number of unregulated existing sources that have not undergone NSR review makes it necessary for EPA to regulate them in order to ensure that they do not pose a threat to human health or the environment. In the FBIR FIP, EPA "determined that existing facilities should also be subject to the FIP . . . given the number of existing facilities that were operating as unregulated sources." 78 Fed. Reg. at 17,841. EPA found that regulating these sources was necessary to achieve its goal of "protect[ing] the public health and the environment by providing those living on the Reservation the same level of air quality and health protection as people living outside the Reservation." Id. at 17,839. The same is true throughout Indian Country. Moreover, emissions control technologies that are applicable to existing sources have reasonable costs, are readily available, and are already required in some states such as Colorado. 79 Fed. Reg. at 32,513; 80 Fed. Reg. at 56,569. Therefore, it makes sense for EPA to regulate existing sources throughout Indian Country.

4. EPA Should Regulate Existing Sources in Order to Take Precautions Against Harming Public Health and the Environment, and to Further the Obama Administration's Goals for Methane Emission Reductions

Regulation of existing sources is also warranted given the uncertainties associated with air quality in Indian Country. See supra pp. 8–9; see also Phillip M. Kannan, The Precautionary Principle: More Than A Cameo Appearance in United States Environmental Law?, 31 WM. & MARY ENVTL. L. & POL'Y REV. 409, 441–47 (2007) (Appx. at 1557) (discussing how the precautionary principle is embedded within the Clean Air Act). Given the existing data showing

serious air quality problems associated with oil and gas development is some areas of Indian Country and the lack of monitoring data in other areas, EPA should regulate existing sources now, rather than exposing tribal members, other residents, and natural and cultural resources to harmful air pollution for additional years while the agency installs new monitors and gathers data.

Regulation of existing sources will also further the White House's goal of reducing methane emissions from the oil and gas sector. In March 2014, the White House identified reducing oil and gas sector methane emissions as a key part of the Administration's strategy to reduce greenhouse gas emissions 17% by 2020. See White House at 1. In the ANPR, EPA acknowledged that reducing methane from the oil and gas sector is a key part of the Obama Administration's President's Climate Action Plan. 79 Fed. Reg. at 32,504–05. Given that by 2018, 90% of methane emissions from the oil and gas sector will be from existing sources, see supra p. 18, the earlier that EPA acts to reduce methane emissions from those sources, the more feasible it will be for the Administration to achieve its climate goals.

5. At Minimum, EPA Should Regulate Existing Sources in States that Already Do So

Even if EPA chooses not to regulate existing sources throughout Indian Country, it should at least regulate existing sources located in states that already do so. EPA notes in the Proposed FIP that "[a]ddressing existing sources through a FIP could be especially useful in areas of Indian Country for which surrounding state requirements apply to existing oil and natural gas sources located on lands that are within a state's jurisdiction." 80 Fed. Reg. at 56,570. Putting state and tribal lands on a level playing field will protect the health of tribal members by avoiding a race to the bottom that concentrates pollution on tribal lands. EPA acknowledged in the FBIR FIP that it was especially important to regulate existing sources because North Dakota already did so on the surrounding state lands. See 78 Fed. Reg. at 17,837, 17,840. EPA intended to "level the health protections between the residents living on the FBIR and the residents living in the State of North Dakota." 78 Fed. Reg. at 17,841. EPA should do the same here.

In certifying compliance with Executive Order 12,898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, EPA claims that the Proposed FIP will not have such a disproportionate impact. 80 Fed. Reg. at 56,572. But this is not the case. On tribal lands that are located within the boundaries of states that already regulate existing sources, like Colorado, tribal members will face additional burdens from pollution that their neighbors who live on state lands do not face. Accordingly, EPA should at least regulate existing sources on tribal lands in located within states that already regulate existing sources.

C. EPA's Proposals For Protecting the NAAQS Should Be Improved

EPA offers two options for areas with air quality issues: (1) reservation-specific FIPs, and (2) site-specific permitting. Both of these proposals need clarification and improvement.

1. Reservation-Specific FIPs

Rather than address the air pollution caused by existing oil and gas operations in Indian Country on a systematic basis nationwide, EPA proposes to address them as needed in "area- or reservation-specific FIPs." 80 Fed. Reg. at 56,570. EPA plans to prepare reservation-specific FIPs when "necessary or appropriate." Id. Beyond these two vague criteria EPA states only that "[a]t a minimum, the EPA or tribes will need to develop area-specific plans if and when areas of Indian Country become nonattainment for ozone or other NAAQS pollutants." Id. Environmental and Tribal Commenters support EPA's authority to issue reservation-specific FIPs to cover existing sources.

However, designation of a nonattainment area is a poor criterion to guide EPA's discretion about when issuing a FIP is "necessary or appropriate." Waiting for a nonattainment designation can take years, leaving public health unnecessarily at risk. See Memorandum from Janet G. McCabe, EPA Acting Assistant Administrator to EPA Regional Administrators, Regions 1-10 at 5 (Oct. 1, 2015), http://www3.epa.gov/ozonepollution/pdfs/20151001memo.pdf (Appx. at 2111) (setting deadline to finalize designations at October 1, 2017). Indeed, many areas are already suffering from unhealthy levels of air pollution. As EPA acknowledges in the ANPR, a nonattainment trigger is problematic given the lack of monitoring in Indian Country. See 79 Fed. Reg. at 32,517 ("Using design values or attainment status to identify areas in need of enhanced environmental protection may yield results that are not equitable and/or fully protective of air quality, due to the scarcity of monitoring in Indian Country."). Even in areas of Indian Country that have monitors, nonattainment designations may not be forthcoming if monitors are not considered "regulatory" monitors. See Miss. Comm'n on Envtl. Quality v. EPA, 790 F.3d 138, 154–56 (D.C. Cir. 2015). A better approach would be for EPA to exercise its well-established legal authority to implement technologically feasible regulations for existing sources located in Indian Country nationwide, through a single, nationally applicable FIP. This would reduce uncertainty, prevent EPA from undergoing unnecessary regulation, and most importantly protect the health of tribal members and others immediately, rather than waiting additional years before putting pollution reduction rules in place. Even with a nationally applicable FIP covering existing sources, certain areas may need more attention, like the Uinta Basin and the San Juan Basin.

Alternatively, if EPA goes ahead with its current proposal to initiate reservation-specific FIPs, it should revise the proposal in three key ways. While EPA should retain flexibility to develop a FIP when it deems it necessary and appropriate, it should also provide some criteria that will trigger a reservation-specific FIP. EPA should increase opportunities for tribes, tribal members, and other members of the public to petition for a reservation-specific FIP. Additionally, EPA should conduct modeling to improve understanding of how oil and gas sources contribute to air quality issues in Indian Country.

First, EPA should define "necessary or appropriate" by identifying more specific criteria for when reservation-specific FIPs will be issued. One such criterion would be that the ozone concentrations in an area of Indian Country (or the surrounding area under state jurisdiction) are close to the NAAQS. Given the extensive and robust body of scientific evidence establishing that ozone causes a wide range of adverse impacts to human health at levels of 60 ppb, design

values above 60 ppb should be the minimum criterion. See Ozone NAAQS Revisions Comments at 20–24 (documenting scientific evidence).

EPA should also base its decision on the availability of two years of valid monitoring data to prevent substantial delay. And EPA should consider data from all available, reliable monitors, such as those operated by tribes or the industry, regardless of whether EPA has certified them as regulatory monitors. Other factors that can guide EPA's decision to implement reservation-specific FIPs include public health studies showing health impacts, such as increased asthma rates, hospitalizations, and premature deaths. EPA should also consider the current and projected levels of oil and gas production on or near tribal lands.

Second, EPA should provide tribes, tribal members, and members of the public with a means to request a reservation-specific FIP. The Proposed FIP contemplates public involvement only after EPA determines that it is "necessary and appropriate" to issue a reservation-specific FIP, and includes no provisions for tribes to ask for such a FIP. Such a provision would be in accord with EPA's trust responsibility towards tribes and tribal members to promote open, government-to-government consultation with tribes. See Exec. Order No. 13,175, 65 Fed. Reg. 67,249, 67,249–50 (Nov. 6, 2000).

Third, when EPA develops a reservation-specific FIP, it should conduct modeling so that tribes and operators can understand how particular sources will contribute to degradation of air quality. Tribal governments can use this modeling data to develop their own tribal air quality plans, or to apply for treatment as a state status. See Kronk Warner, supra n. 14 (discussing barriers to tribes applying for treatment as a state status). Such modeling data will also be crucial to other land and minerals management agencies, including BLM, the Forest Service, and the Bureau of Indian Affairs ("BIA"), which are tasked with assessing the environmental impacts of proposed oil and gas development projects. EPA should also request available monitoring data from past National Environmental Policy Act ("NEPA") analyses conducted by these surface management agencies during the process of developing reservation-specific FIPs.

2. Site-Specific Permits

EPA should similarly provide criteria for when site-specific permits will be required for new sources and increase opportunities for public and tribal engagement around site-specific permits. EPA states that it "may require owners or operators to obtain a site-specific permit in lieu of complying with the proposed FIP to ensure protection of the NAAQS." Id. Environmental and Tribal Commenters support EPA retaining the flexibility to require site-specific permitting prior to a nonattainment designation, but recommend that EPA provide additional criteria for when this will occur.

EPA states that "the Reviewing Authority may determine that the source is not sufficiently controlled under the proposed FIP to protect the NAAQS in the area of the proposed project (e.g. if the measured design value for the area is close to or above the level of the NAAQS)." 80 Fed. Reg. at 56,564. Rather than these vague and undefined criteria, we recommend that EPA require site-specific permitting under similar scenarios as FIPs. For example, EPA should require site-specific permitting when two years of monitoring data

establishes average fourth-highest values above 60 ppb. As with reservation-specific FIPs, EPA should rely on all reliable monitoring data in the region. EPA should also provide tribes, tribal members, and members of the public with a means to request site-specific permits. Finally, EPA should implement procedures to ensure that tribes and members of the public receive sufficient notice and opportunity to comment on any future site-specific permits that will be issued.

As noted above, it is crucial for EPA to conduct modeling and cooperate with other agencies that have already conducted modeling when developing reservation- or area-specific FIPs. However, modeling is also useful outside of the reservation-specific FIP process. EPA should consider requiring operators to conduct modeling to determine whether and how proposed new and modified sources will contribute to degradation of air quality as part of the site-specific permitting process.

D. EPA Should Improve Monitoring and Enforcement in the Final Rule

1. EPA Must Add Additional Monitoring Requirements to the Proposed Rule in Order to Adequately Protect Public Health in Indian Country

In response to the ANPR, there were extensive comments detailing EPA's authority to expand monitoring, why additional monitoring is necessary, monitoring programs that EPA could implement in Indian Country. EDF ANPR Comments at 11, 13–14; Coalition ANPR Comments at 29–30. Environmental and Tribal Commenters hereby incorporate our ANPR monitoring comments by reference, and ask EPA to consider them in the current rulemaking. More detailed comments on specific ways that EPA should improve monitoring requirements in the final rule are included below. See infra pp. 30–31.

As discussed above, see supra pp. 8–9, in the ANPR, EPA recognized that the lack of monitors in Indian Country poses a significant barrier to implementing the regulations necessary to protect public health. The agency sought comments on "whether and how we might use our CAA section 114 or other CAA authority to require oil and natural gas sources in Indian Country to install and operate ambient air monitors." Id. Despite this earlier recognition, the Proposed FIP does not contain increased monitoring requirements. In fact, the agency makes no reference to the lack of monitoring in Indian Country. EPA briefly references monitoring requirements by noting that some of the elements of the six regulations implemented by the FIP include monitoring requirements. See 80 Fed. Reg. at 56,563 ("The proposed FIP requirements cover . . . monitoring . . . ."); 56,569 ("The rationale supporting the . . . monitoring . . . for each of the six federal rules is found in the preambles and background documents for those rulemakings."). But the Proposed FIP does not include any additional monitoring requirements to remedy the lack of monitors in Indian Country.

This lack of monitors is especially concerning because, in the Proposed FIP, EPA states that it will address nonattainment in Indian Country by implementing reservation-specific FIPs when necessary. 80 Fed. Reg. at 56,570. But as EPA itself observed in the ANPR, many reservations lack monitors, or lack sufficiently detailed or robust monitors to demonstrate that an area is in nonattainment. In EPA's own words, "[u]sing design values or attainment status to identify areas in need of enhanced environmental protection may yield results that are not

equitable and/or fully protective of air quality, due to the scarcity of monitoring in Indian Country." 79 Fed. Reg. at 32,517.

The most efficient and expedient method of providing such a monitoring network is requiring operators to install and operate monitors. See Coalition ANPR Comments at 29; EDF ANPR Comments at 11. Monitoring data must also be made readily available to tribes, tribal members, and the public.

Monitoring options are available at very reasonable costs. For example, EPA recently certified inexpensive, portable ozone monitors as a federal equivalent method for monitoring ambient ozone concentrations. 75 Fed. Reg. 22,126, 22,126 (Apr. 27, 2010). Such "Model 202" monitors are commercially available and require only a power adapter plugged into a vehicle's cigarette lighter. Id. at 22,126-27.

EPA has authority under CAA § 114 to require operators to install and operate air quality monitors. Coalition ANPR Comments at 29; EDF Comments at 11. Section 114 authorizes EPA, for the purpose of "carrying out any provision of [the CAA]," to "require any person who owns or operates any emission source" to "install, use, and maintain such monitoring equipment" and "provide such other information as [EPA] may reasonably require." 42 U.S.C. § 7414(a)(1)(C), (G). This gives EPA authority to require operators to install and operate ambient air quality monitors at emissions sources. EPA recently relied on § 114 to require oil and gas sector sources to monitor and report their methane emissions. 75 Fed. Reg. 74,458 (Nov. 30, 2010).

Two industry ANPR commenters questioned EPA's § 114 authority to require operators to install monitors. QEP, Specific Responses to EPA Request for Comments tbl. at 8 (Aug. 27, 2014); Comments of Gas Processors Association on Managing Emissions from Oil and Natural Gas Production in Indian Country; Docket ID Number EPA-HQ-OAR-2011-0151 at 9–10 (Aug. 20, 2014) ("GPA Comments") (citing 42 U.S.C. § 7414(a)(1)(A)–(D)). Both commenters claim that § 114 only authorizes EPA to create source-specific monitoring requirements, and that ambient air quality monitoring is beyond the scope of § 114. However, nothing in the language of § 114(a) limits EPA's authority to source-specific monitoring. Although the subsections of § 114(a)(1) that GPA quotes are focused on source-specific monitoring, GPA conveniently omitted other subsections which give EPA authority to require operators to "provide such other information as [EPA] may reasonably require." 42 U.S.C. § 7414(a)(1)(G).

Additionally, EPA has authority to require monitoring "[f]or the purpose of developing or assisting in the development of any implementation plan under section 7410 or section 7411(d) of this title." 42 U.S.C. § 7414(a). Accordingly, EPA has explicit authority to require monitoring to develop a FIP.

GPA also argues the CAA's 1970 legislative history, which discussed EPA's authority to enter the premises of a regulated entity, indicates that EPA only has authority to conduct source-specific monitoring under § 114. GPA Comments at 10. Although EPA's authority to enter premises for inspection is discussed in both the 1970 legislative history and the statute itself, 42 U.S.C. § 7414(a)(2), Congress did not preclude EPA from also requiring ambient monitoring.

The two forms of monitoring can provide synergistic information to the agency to aid it in developing rules that appropriately regulate emissions at the source-specific level while simultaneously protecting air quality on a broader scale.

When EPA requires operators to install monitors, it should also ensure that that the monitors are operated in the appropriate season. Meteorology and geography make some parts of Indian Country—notably the Uintah and Ouray Reservation in Utah and the Wind River Reservation in Wyoming—susceptible to thermal inversions that result in significant wintertime ozone formation.[21] Recognizing this phenomenon, the 2015 Ozone NAAQS rule extends the ozone monitoring season in states that are potentially subject to wintertime ozone formation, including Utah, Wyoming and Colorado. 80 Fed. Reg. at 65,416. EPA should similarly ensure that monitors installed in Indian Country operate during the appropriate season. If they are located in geographically-confined basins with winter snowpack, monitors should operate in the winter in addition to the traditional summertime ozone season.

In the Proposed FIP, EPA notes that during consultation with the Mandan, Hidatsa, and Arikara Nations of FBIR, Ute Tribe of the Uintah and Ouray Reservation, and Crow Nation, the tribes "expressed a need for greater resources so that they can implement their own environmental programs as they determine in their own lands." 80 Fed. Reg. at 56,572. In its ANPR comments, the Southern Ute Tribe expressed support for requiring larger emission sources to install monitors, and stated that it "strongly supports any actions taken to increase the presence of air quality monitoring stations in Indian Country that are maintained by an appropriate governmental or regulatory agency to ensure proper quality assurance and quality control checks are performed, siting criteria are met, and these data are un-biased." Comments of Clement J. Frost, Chairman, Southern Ute Indian Tribal Council on Docket No. EPA-HQ-OAR-2011-0151 – Managing Emissions from Oil and Natural Gas Production in Indian Country

[21] See, e.g., Samuel Oltmans et al., Anatomy of a Wintertime Ozone Associated with Oil and Natural Gas Extraction Activity in Wyoming and Utah, 2 ELEMENTA 24, 24 (2014) (Appx. at 2220) (describing how geographic and meteorological differences between the Upper Green River Basin and Uinta Basin contribute to differential ozone formation patterns in the two regions); D. Helmig et al., Highly Elevated Atmospheric Levels of Volatile Organic Compounds in the Uintah Basin, Utah, 48 ENVTL. SCI. & TECH. 4707, 4714 (2014) (Appx. at 2235) (describing how multi-day inversions can contribute to extreme ozone buildup in intermountain valleys); Marc Mansfield & Courtney Hall, The Potential for Ozone Production in the Uintah Basin: A Climatolotical Analysis, in UTAH DEP'T ENVTL. QUALITY, 2012 UINTAH BASIN WINTER OZONE & AIR QUALITY STUDY: FINAL REPORT 251, 253 (Seth Lyman & Howard Shorthill eds., 2013) (describing how thermal inversions form in intermountain basins during the winter) (Appx. at 1597); P.M. Edwards et al., Ozone Photochemistry in Oil and Natural Gas Extraction Region During Winter: Simulations of a Snow-Free Season in the Uintah Basin, Utah, 13 ATMOSPHERIC CHEMISTRY & PHYSICS DISCUSSIONS 8955, 8967–68 (2013) (Appx. at 2125) (explaining how snow-cover albedo contributes to ozone formation and describing potential for multi-day ozone precursor buildup because VOCs do not disperse at night); William P.L. Carter & John H. Seinfeld, Winter Ozone Formation and VOC Incremental Reactivities in the Upper Green River Basin of Wyoming, 50 ATMOSPHERIC ENVT. 255, 255 (2012) (Appx. at 1628) (explaining how geography of walled-in intermountain basins contributes to ozone buildup); JOHN H. SEINFELD & SPYROS N. PANDIS, ATMOSPHERIC CHEMISTRY & PHYSICS: FROM AIR POLLUTION TO CLIMATE CHANGE 721–22, 729–30 (2d ed. 2006) (describing how thermal inversions contribute to ozone formation).

at 6 (Aug. 18, 2014). Providing additional monitors which tribes can use to implement environmental programs on their own lands is one source of such resources. Requiring operators to install monitors, and ensuring that tribal governments have access to data from them, would provide tribal governments with resources they can use to apply for Treatment as a State status, develop TIPs, and enforce federal and tribal environmental laws.

2. Monitoring Must Be Paired with Robust Enforcement

EPA acknowledges that robust enforcement is crucial to the success of a FIP, due to the lack of preconstruction review. See 80 Fed. Reg. at 56,568 ("In comparison to a general permit, a FIP would provide less upfront scrutiny of an individual new construction or modification project"). Yet the Proposed FIP provides few, if any, enforcement tools. Although EPA notes that citizens (and EPA itself) can initiate enforcement suits against operators that violate the terms of the FIP, such post hoc enforcement strategies likely involve lengthy and costly lawsuits well after the harm from increased air pollution has been suffered. See 80 Fed. Reg. at 56,570. EPA should clarify and expand enforcement requirements in the final rule.

For example, § 113 provides mechanisms for EPA to enforce non-compliance with SIPs, which involve notifying states. See 42 U.S.C. § 7413(a)(1)-(2). EPA should specify in the final rule how this will apply on tribal lands, and whether and how tribal governments will be notified of violations. EPA should also provide guidance about the role of tribal governments in enforcing the six regulations that make up the FIP. Many of these regulations already involve operators submitting information to the EPA. See, e.g., 40 C.F.R. § 60.5420. But some contemplate roles for states. For example, a section of the current NSPS regulations, 40 C.F.R. § 60.5423(e), provides that EPA can delegate and approve state compliance programs as an alternative to operators reporting excess emissions directly to EPA. EPA should specify whether tribes can similarly apply for delegation of compliance authority.

EPA should also add enforcement requirements to the final rule. In the ANPR, EPA solicited comments about Next Generation Compliance techniques. 79 Fed. Reg. at 32,519–20. However, EPA makes no reference of Next Generation Compliance in the Proposed FIP. ANPR comments identified Next Generation Compliance techniques that EPA can implement in Indian Country. See EDF ANPR Comments at 14–15 (self-certification and photographic verification); Coalition ANPR Comments at 30-–31 (optical gas imaging, LDAR, and cavity ring-down spectroscopy). Environmental and Tribal Commenters incorporate these comments by reference and encourage EPA to implement Next Generation Compliance techniques in the final rule. However, any Next Generation Compliance techniques that are chosen must actually reduce emissions. Adopting Next Generation Compliance options should not sacrifice emissions reductions in order to lessen the burden on industry.

Beyond innovative compliance strategies, EPA should also robustly pursue standard enforcement procedures in Indian Country. The agency should ensure that Regional Offices have sufficient personnel dedicated to enforcing the FIP. Because Indian Country is geographically large, dispersed, and remote, EPA should explain how it plans to enforce the FIP nationwide, including intra-agency delegation of responsibility and methods for tribes and citizens to report violations. Moreover, EPA should provide tribes with resources, training, and

legal authority to initiate their own enforcement actions. Although some tribes have robust environmental agencies and ample legal support to enforce environmental laws, most tribes do not. See Jana B. Milford, Out in Front? State and Federal Regulation of Air Pollution Emissions from Oil and Gas Production Activities in the Western United States, 55 NAT. RES. J. 1, 13–14 (2014) (Appx. at 1640). In the final rule, EPA should identify training sessions, publish guidelines, and offer contact information for agency staff who can support tribal governments that wish to take a more active role in enforcing the FIP.

Finally, EPA should add provisions to the final rule that govern how EPA enforcement staff will cooperate with other federal agencies, tribal officials, state officials, and local government authorities. In areas like the San Juan Basin, development occurs on a patchwork of tribal trust, federal, state, allotted, and privately-owned lands. Air pollution moves readily across these jurisdictional boundaries, and any successful enforcement strategy must involve cooperation and coordination between government officials from all levels of government.

IV. EPA Should Expand the Scope of the Proposed FIP

By inappropriately confining the Proposed FIP in several ways, EPA misses crucial opportunities to protect public health and welfare in Indian country and nearby areas from the detrimental impacts of oil and gas emissions. Two specific examples of how EPA should avoid unnecessarily narrowing the scope of the Proposed FIP are discussed below. Additionally, we incorporate by reference the comments of several environmental and public health organizations on the Proposed Source Determination Rule. See Source Determination Comments. Given the number of rulemakings that have the potential to affect oil and gas emissions in Indian Country, including the Source Determination Rule, we expect that EPA will take the effect of the other rules into account as it considers which sources will be affected by the Proposed FIP.

A. The FIP Should Include Sources Outside the Production Segment

The Proposed FIP regulates only sources in the production segment of the oil and gas sector. 80 Fed. Reg. at 56,562. EPA's only rationale for limiting the scope is that it "believe[s] the oil and natural gas production segment includes the majority of the true minor sources in the sector." Id. But there are other minor sources that can potentially create significant emissions in Indian Country, including compressor stations in the transmission segment and non-major gas processing plants. See Coalition ANPR Comments at 17. In order to fill the "gap" in the CAA, EPA should regulate these sources in the final rule. Otherwise, these pollution sources and their health impacts will be concentrated in Indian Country.

B. The Final Rule Should Cover Methane Emissions

The Proposed FIP states that the pollutants it regulates are VOCs, NO_x, SO_2, PM, PM_{10}, $PM_{2.5}$, H_2S, CO, and various sulfur compounds. 80 Fed. Reg. at 56,563. Notably absent is methane. Methane is an extremely potent greenhouse gas with 87 times the warming potential of carbon dioxide over a 20-year timeframe. Coalition ANPR Comments at 4; EDF ANPR Comments at 2. The oil and gas industry is the largest source of anthropogenic methane pollution in the United States. Coalition ANPR Comments at 3. As EPA recognizes in the

Proposed Amended NSPS Rule, "reducing methane from [the oil and natural gas] source category . . . is something that should be directly addressed through standards for methane . . . and, as such, would be an important step towards mitigating the impact of GHG emissions on climate change." 80 Fed. Reg. at 56,599. Further, EPA explains that "there are cost-effective controls that can simultaneously reduce both methane and VOC emissions from . . . equipment across the industry, which in some instances would no occur were we to focus solely on VOC reductions." Id. Accordingly, EPA proposes to directly regulate methane emissions in the Proposed Amended NSPS Rule. Id. at 56,600. In the Proposed FIP, EPA states that it will incorporate the Proposed Amended NSPS Rule into the FIP. 80 Fed. Reg. at 56,563. The final rule should thus also cover methane emissions to provide operators and tribes with certainty that the parts of the NSPS rule governing methane emissions also apply in Indian Country. This would also further EPA's stated interest in regulating greenhouse gases through minor source NSR review. See 76 Fed. Reg. at 38,759 n.19 (discussing potential for future permitting of greenhouse gas emissions through the PSD program). And it would further the Obama Administration's goal of reducing greenhouse gas emissions to 17% below 2005 levels by 2020. White House at 1.

It is also important for EPA to regulate methane directly in the final rule because regulations that do not address methane emissions result in significantly less pollution abatement. According to CATF, direct methane standards would reduce about half of the sector's methane emissions, while VOC standards would reduce methane emissions by only about 5%. CATF at 42.

V. EPA Should Ensure that Other Agencies Comply with the ESA and NHPA

The Proposed FIP includes provisions to ensure that all operators fully comply with the Endangered Species Act ("ESA") and National Historic Preservation Act ("NHPA"). 80 Fed. Reg. at 56,566-67. If an operator has already fulfilled its ESA and NHPA obligations through a BLM or BIA NEPA analysis at the Application for Permit to Drill ("APD") stage, the operator need only submit evidence of the other agency's NEPA determination to EPA. 80 Fed. Reg. at 56,567. If the operator has not yet conducted ESA or NHPA analysis when it applies for a permit from EPA, then the Proposed FIP makes EPA the agency responsible for the analysis. Id.

Environmental and Tribal Commenters commend EPA for ensuring compliance with its ESA and NHPA responsibilities. However, we request that EPA provide a procedure for reviewing the ESA and NHPA analysis conducted by other agencies to ensure that it is adequate. EPA must ensure that emissions from a proposed project do not adversely impact threatened or endangered species or their habitat. 16 U.S.C. § 1536(a)(2). For example, emissions of ozone precursors can have significant negative impacts on plant species. As EPA explains in the preamble to the 2015 Ozone NAAQS, ozone is causally linked to visible foliar injury, decreased photosynthesis, changes in reproduction, decreased growth, decreased ecosystem productivity, decreased crop yield, and changes in ecosystem composition. 80 Fed. Reg. at 65,369–410. EPA also noted that several tribes have indicated that many ozone sensitive species are culturally significant. Id. at 65,379. EPA must use its expertise in ozone's impacts to ensure that the BLM and BIA provide adequate analysis to ensure that threatened and endangered plants are not harmed by oil and gas-related air pollution. In particular, EPA can review the accuracy and

adequacy of air quality modeling and other analysis conducted by the surface management agencies to ensure that it accurately conveys whether and how new and modified sources will adversely impact air quality in already-polluted regions.

EPA should also ensure that the NHPA analysis conducted by the BIA and BLM is sufficient. There are many sensitive cultural sites and areas of special cultural and spiritual significance to tribes and their members located within Indian Country, and it is crucial that these areas receive the full protection they deserve under the law. In particular, EPA should ensure that particulate matter emissions do not cause soot damage to cliff paintings and other cultural artifacts that can be harmed by soot deposition. See, e.g., KRISTA DEAL ET AL., WILDLAND FIRE IN ECOSYSTEMS: EFFECTS OF FIRE ON CULTURAL RESOURCES AND ARCHAEOLOGY 18 (2012) (describing impacts of particulate deposition on cultural resources) (Appx. at 2244); BLM, Final EIS West Tavaputs Plateau Natural Gas Full Field Development Plan at 4-239 to 4-244 & App. G at 14–18, 35–40 (2010), www.blm.gov/ut/st/en/fo/price/energy/Oil_Gas/wtp_final_eis.html (Appx. at 1673) (describing impacts of dust and other pollutants related to oil and gas development on cultural resources, including rock art, in Utah).

VII. Conclusion

Environmental and Tribal Commenters appreciate the opportunity to submit comments on this Proposed FIP. We encourage EPA to take the steps necessary to protect public health and air quality in Indian Country in the final rule by regulating existing sources, increasing monitoring, and expanding enforcement. We look forward to working with the agency and tribes to ensure that EPA adopts robust protections for public health and the environment.

Sincerely,

Robin Cooley
Joel Minor
Earthjustice
633 17th Street, Suite 1600
Denver, CO 80202
(303) 996-9628
rcooley@earthjustice.org
jminor@earthjustice.org

Carol Davis
Coordinator
Diné Citizens Against Ruining our Environment
HCR 63, Box 272
Winslow, AZ 86047
(928)-221-7859
caroljdavis.2004@gmail.com

Darin Schroeder
Associate Attorney
Clean Air Task Force
18 Tremont, Suite 530
Boston, MA 02108
(303) 579-4165
dschroeder@catf.us

Stephanie Kodish
Senior Director & Counsel,
Clean Air Program
National Parks Conservation Association
(865) 329-2424 x28
skodish@npca.org

Meleah Geertsma
Natural Resources Defense Council
20 N. Wacker Drive, Suite 1600
Chicago, IL 60606
(312) 663-9900
mgeertsma@nrdc.org

Peter Zalzal
Staff Attorney
Environmental Defense Fund
2060 Broadway, Suite 300
Boulder, CO 80302
(303) 447-7214
pzalzal@edf.org

Jeremy Nichols
Climate & Energy Program Director
WildEarth Guardians
1536 Wynkoop St., Suite 310
Denver, CO 80202
(303) 437-7663
jnichols@wildearthguardians.org

Andres Restrepo
Sierra Club
50 F St. NW, Eighth Floor
Washington, DC 20001
(202) 650-6073
andres.restrepo@sierraclub.org

David Garbett
Staff Counsel
Southern Utah Wilderness Alliance
425 East 100 South
Salt Lake City, UT 84111
(801) 428-3992
david@suwa.org