

Thank you for this opportunity to share with you the efforts being done in the Eastern Agency of the Navajo Nation.

My name is Kendra Pinto. I live near Chaco Culture National Historical Park, the epicenter of one of the oldest and most advanced civilizations in the world. It holds special meaning for Native tribes because it is also the center of origin stories of multiple, local Native tribes, including the Navajo Nation. It is a place held sacred by many. It is a place we find a connection to the land and to our people. It is a sacred site now under attack by air, noise, and light pollution associated with local, resource extraction and increasingly expanding oil and gas development.

Living in the Chaco region provides a snapshot of life before encroachment of modern technology. It is common to find shards of pottery, sweat lodges, and arrowheads. Just two weekends ago I found two shards of pottery five hundred and fifty feet from my front door. How will the federal government guarantee the protection of cultural resources if they continue to ignore tribal consultation during the leasing process? Today there are thousands of cultural resources and sites that have not yet been accounted for by the Bureau of Land Management. Time after time, the BLM has failed to conduct required ethnographic studies and cultural resources inventories of the area before leasing. This sends a clear message: federal agencies are not properly consulting with tribes on the potential impacts to historic properties and cultural resources that may be eligible for listing on the National Register of Historic Places. The area is known as the Checkerboard because of its five different land jurisdictions: federal, state, tribal, allotment, and private. All of these jurisdictions are within close proximity to Chaco Culture National Historical Park.

Last year on March 8 2018, 4,434 acres of land were scheduled for a BLM oil and gas lease sale. This directly affected the inhabitants of the area due to split ownership of tribal surface rights and BLM federal mineral rights. I live on one of the parcels that were put up for lease, but never received a public notice in my mail or on my door to alert me to the potential hazards of oil and gas development.

In July 2016 a site owned by Williams Production and Exploration (WPX) exploded and 36 storage tanks holding oil and produced water caught fire. I watched as emergency vehicle after emergency vehicle showed up to the scene. I watched a massive firewall build into the night sky with a home a mere 330 feet away. I watched the fire blaze for five days. I have wondered since then if the situation was handled as best as possible or if the isolation of the area played a major factor in the decision to let the fire continue to burn and spew toxic smoke. Following this dangerous incident, questions about the real safety of drilling and stored oil so close to occupied homes became a regular precursor in conversations. Had the Bureau of Land Management thoroughly analyzed the impacts of approving development in this location and the potential impacts to public health, safety, the air, and surrounding environment then maybe 55 residents could have been spared that traumatic night of having to evacuate their homes. The shocking

distance of the fire to the house is well under what medical professionals describe as “safe doses” of continuous emissions of toxic air.

Starting in 2017 I began working alongside a group of local Diné residents and allied environmental groups to study the health effects of hydraulic fracturing on neighboring communities. We took multiple air samples and found elevated levels of volatile organic compounds at several locations. One of the tested samples had elevated levels of hydrogen sulfide located within 1,000 feet of an elementary school that exceeded the EPA reference concentration.

Last year, Counselor Chapter House applied for funding and received 16 air monitors to test the local air at 8 homes throughout the community. Our team explained particulate matter (PM 2.5) to the families and why it could contain hazardous pollutants from the wells nearby. We showed them a body graphic that explained the types of chemicals that burn off in the flares, are emitted from the well equipment, and what kind of health symptoms they might develop from breathing those pollutants. Our health committee then shared 80 health surveys with wellness and chapter groups filled out by residents of Counselor, Ojo Encino, and Torreon. The data collected was then put into a health impact assessment titled, “A Cultural, Spiritual, and Health Impact Assessment.”

The results were disturbing. For the test period of one month, the San Juan and Rio Arriba county monitors showed daily averages of “Particulate Matter (PM) 2.5” at a healthy level of 6 or 7 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$), while our Counselor community monitors showed site levels reaching hazardous levels of $>80 \mu\text{g}/\text{m}^3$. The health surveys also showed more than 80% of the residents reported they experienced 11 out of the most commonly reported symptoms from gas and oil communities nationally; the average reported symptoms was 40-50%.

In October 2018 I rode alongside Earthworks to film oil well sites with a FLIR (*Forward Looking InfraRed*) camera. This provided an up close, personal view of the venting of methane and other gases. I was horrified but not surprised. The isolation of the area and the multiplicity of jurisdiction creates an ideal situation of unenforced regulations and finger pointing. Four complaints have been filed directly with NM Environment Department as a result of the emissions we saw on that day.

These findings are not unique. The most up to date scientific studies are showing that oil and gas pollution is putting a very heavy burden on communities across New Mexico and the Navajo Nation. A recent study^[i] found that oil and gas companies operating on Navajo lands have a leak rate that is more than double the national average. This means that every year 13,000 tons of methane are emitted by companies on Navajo Nation lands, enough pollution to have the same climate impact as 235,000 vehicles per year.

Along with this methane pollution comes harmful co-pollutants that threaten the public health of Navajo communities. These include volatile organic compounds that are one of the main building blocks of ozone smog pollution that can harm respiratory health and trigger asthma attacks, especially in children and the elderly. It is concerning, though not surprising, that ozone pollution levels in San Juan County, New Mexico, where much of the Navajo Nation's natural gas production is based, are dangerously close to surpassing health safety standards for ozone. Local communities' health and wellbeing should not be put at risk by this pollution.

The Trump Administration's roll backs of methane waste and pollution regulations at the federal level are making this problem much worse. I support efforts from the State of New Mexico under Governor Lujan Grisham and the Navajo Nation under President Nez to step up as the federal government retreats. The state and tribal governments need to fill this gap to protect our people from pollution.

I understand that the Navajo Nation Environmental Protection Agency is currently considering new rules to limit air pollution from oil and gas sources and that these rules could include requirements to reduce methane pollution. I strongly support Navajo methane rules that will reduce pollution, waste and increase tribal sovereignty. By adopting a strong minor source air permitting program that includes methane requirements, the Navajo Nation can help stop the wanton waste and pollution that I have seen far too often impact my community.

The San Juan Basin is home to the largest methane "hot spot" in the U.S. Methane emissions from fossil fuel development thus exacerbate climate change and its long-term, intergenerational effects on the people and communities who call the Greater Chaco Area home. We must reduce fugitive methane emissions now, not only to prevent or mitigate long-term consequences for climate and health, but also to address the empirically demonstrated health risks and effects that are already occurring.^[ii]

In 2018 San Juan County, New Mexico received a "C" grade, while neighboring La Plata County, Colorado got a failing "F" grade from the American Lung Association for smog pollution. The effects of fugitive methane emissions are not only long-term and widespread, but also immediate and acute. We can smell the pollution, see the flares, and hear the methane being released every day. We cannot continue to adopt a "wait and see" approach to methane regulations, especially when we know there are already common-sense steps industries can take to stop venting, leaking, and flaring, *if* they are held accountable.

In New Mexico, over 30,000 students attend school within 1/2 mile of active oil and gas wells, and over 12,000 children suffer asthma attacks annually due to oil and gas ozone smog.^[iii] The smog pollution is also responsible for almost 9,000 missed school days in New Mexico children.^[iv] Children in the San Juan Basin are especially at risk. The area is home to tens of thousands of active oil and gas wells,^[v] and in San Juan County and Rio Arriba County, child

asthma hospitalizations exceed the New Mexico state average.^[vi] Rio Arriba County and McKinley County have some of the highest rates of asthma emergency department visits in Northern New Mexico ; rates are likely underestimated in this data set because many asthma-related visits in the region are to IHS facilities.^[vii]

In 2017, over 40% of San Juan county residents expressed difficulty accessing health care,^[viii] often due to geographic isolation but also economic difficulty. Lower income families and non-white families are also more likely to have homes, schools, and workplaces in close proximity to oil and gas wells and other polluting entities.^[ix] Underlying socioeconomic position, access to care, and other “social determinants of health^[x]” must be accounted for when analyzing existing methane regulations and rollbacks, and when enacting and enforcing future protections.

I highly urge this committee to consider the extent of your responsibility to me and to every, single living person affected by oil and gas extraction development on the Navajo Nation and in New Mexico. Accidents like the February 17, 2019 spill of 42,000 gallons of produced water and 12,600 gallons of oil in Counselor Chapter demonstrate the urgent need for regulations that hold industry responsible for negative impacts to public health, cultural resources, and the environment, as well as the need for robust emergency response plans to protect community members when accidents like this happen.

The regulations needed to protect me and my family go beyond fines and violations, they must ensure that all generations now and in the future are considered and treated with respect in their right to clean air and clean water.

End Notes

[i] <https://www.edf.org/energy/navajo-nation-natural-gas-waste-report>

[ii] Even the U.S. EPA has admitted that one of its proposed fall 2018 methane protection rollbacks could adversely affect human health and welfare via increased exposure to ozone, particulate matter, and hazardous air pollutants (HAP), but cited vague “data limitations” for its failure to quantify those effects. *See, e.g.*, U.S. Env’tl Protection Agency, Proposed Rule, *Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration*, 83 Fed. Reg. 52056, 52059 (“the EPA expects that the forgone VOC emission reductions may also degrade air quality and adversely affect health and welfare effects associated with exposure to ozone, PM2.5, and HAP...”)

[iii] Oil and Gas Threat Map (2018). New Mexico. *Available at* <http://oilandgasthreatmap.com/threat-map/new-mexico/>;

[iv] *Id.*

[v] *Id.*

[vi] New Mexico Dept. of Health, *The Burden of Asthma in New Mexico: 2014 Epidemiology Report* (Jan. 2014), at 41. *Available at* <https://nmhealth.org/data/view/environment/54/>

[vii] *Id.* at 33

[viii] *Id.* at 205.

[ix] *See e.g.* NAACP, Environmental and Climate Justice, *available at* <https://www.naacp.org/issues/environmental-justice/>

[x] Social determinants can include both positive and negative factors. Most broadly, social determinants of health are: “conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as ‘place.’ In addition to the more material attributes of ‘place,’ the patterns of social engagement and sense of security and well-being are also affected by where people live. Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins.” *See* Office of Disease Prevention and Health Promotion, *Healthy People 2020: Social Determinants of Health*, *Available at* <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>