
**In the Permanent Peoples' Tribunal Session
on Human Rights,
Fracking and Climate Change**

**ON PETITION FOR AN ADVISORY OPINION ON THE QUESTION OF
THE IMPACTS OF FRACKING AND CLIMATE CHANGE**

**BRIEF OF AMICUS CURIAE
COMMUNITY ENVIRONMENTAL LEGAL DEFENSE FUND
IN SUPPORT OF PETITIONERS**

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Amicus is **Community Environmental Legal Defense Fund**, a United States-based, nonpartisan, non-profit organization whose mission is to advance rights to self-governance and the rights of nature.

Amicus files this brief to provide the Tribunal with information on the environmental and climate impacts of unconventional oil and gas extraction on the human right to a healthy environment and the rights of nature.

Because no other *amicus* brief contains this material, a separate brief is necessary.

Community Environmental Legal Defense Fund (CELDF) is a federally recognized non-profit organization which assists communities, civil society organizations, and governments in the United States and outside the United States to advance democratic and environmental rights, including the human right to a healthy environment and the rights of nature. CELDF assisted the Ecuador Constituent Assembly to develop constitutional rights of nature provisions; the City Council of the City of Pittsburgh, Pennsylvania, to develop statutory provisions establishing the human right to water and the rights of nature, and prohibit hydraulic fracturing of natural shale gas; the people of the City of Lafayette, Colorado, to develop a Climate Bill of Rights and Protections which prohibits all fossil fuel development and establishes the human right to a healthy environment and the rights of nature; and other communities, civil society organizations, and governments to do the same.

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INTRODUCTION AND SUMMARY OF ARGUMENT

This brief will focus on Questions 3 and 4 under review by the *Permanent Peoples' Tribunal Session on Human Rights, Fracking and Climate Change*:

- Third, what is the extent of responsibility and liability of States and non-state actors for violations of human rights and for environmental and climate harm caused by these oil and gas extraction techniques?
- Fourth, what is the extent of responsibility and liability of States and non-state actors, both legal and moral, for violations of the rights of nature related to environmental and climate harm caused by these unconventional oil and gas extraction techniques?

Questions 3 and 4 before the Tribunal focus on the responsibility and liability of State and non-state actors for violations of the human right to a healthy environment and the rights of nature from environmental and climate harm caused by unconventional oil and gas extraction.

As the following demonstrates, the growing practice of unconventional oil and gas extraction is impacting air and water quality, affecting human health and particularly children, harming nature and wildlife, and accelerating climate change.

Despite all of these impacts, State actors are continuing to enact laws and regulations which authorize unconventional extraction at the behest of non-state actors, i.e. oil and gas corporations.

Amicus will argue that, from a *scientific, legal, moral, and spiritual perspective*, State and non-state actors are responsible and therefore liable for environmental and climate harm caused by unconventional oil and gas extraction.

Such harm is making the fulfillment of the human right to a healthy environment and the rights of nature unattainable. Thus, *State and non-state actors – in legalizing and conducting unconventional oil and gas extraction – are violating the human right to a healthy environment and the rights of nature.*

I. How the Law is Used, by State and Non-State Actors, to Legalize Environmental and Climate Harm

Governments around the globe pass laws and rules which legalize activities and practices which directly cause climate and environmental harm. This includes legalizing unconventional oil and gas extraction, which is a major contributor to climate change and environmental harm.

This is not a new phenomenon. Governments have long established laws (or through inaction have failed to prevent activities) which cause such harm. And, the oil and gas industry has long partnered with governments to craft laws and rules which legalize mining, drilling, and other fossil fuel extractive activities which cause climate and environmental harm.

The enactment of environmental laws which legalize unconventional oil and gas extraction are, therefore, *part of a pattern by governments to legalize activities that cause environmental and climate harm.*

The degradation of nature and the acceleration of climate change, following decades of environmental laws and regulations being enacted in countries around the world, is well documented. We see this in terms of massive die-off of coral reefs, acidification of the oceans, species extinction occurring at more than 1,000 times natural background rates, deforestation, and, of course, climate change, which is accelerating far faster than even the most optimistic scientific models predicted. Thus, despite thousands of laws and regulations purported to protect nature, the failure of governments to protect nature in a meaningful way is clear.

A. Environmental Laws Legalize the Use of Nature

Laws authorizing unconventional oil and gas extraction are written similarly to other environmental laws which regulate certain *uses* of nature.

Under these environmental laws, governments attempt to protect ecosystems through regulations that attempt to limit the degree of harm that can be inflicted upon nature. *Environmental laws, thus, legalize harm, while attempting to regulate the extent of those harms.*

For instance, mining corporations are issued permits, or licenses, by government to extract coal and other fossil fuels, with those permits establishing legally permissible levels of pollution for the corporation. Forestry laws regulate how much of a forest can be logged and how it is to be “managed.” Fishing laws regulate how much marine life can be “harvested” from the sea.

i. Environmental Laws Legalize Unconventional Oil and Gas Extraction

Environmental laws today legalize unconventional extraction of oil and gas, and put certain conditions on how that extraction is to take place.

For instance, in the United States, there are host of national and state laws which legalize and regulate unconventional oil and gas extraction. In the State of Ohio, the law legalizing such extraction states:

The regulation of oil and gas activities is a matter of general statewide interest that requires uniform statewide regulation, and this chapter and rules adopted under it constitute a comprehensive plan with respect to all aspects of the locating, drilling, well stimulation, completing, and operating of oil and gas wells within this state, including site construction and restoration, permitting related to those activities, and the disposal of wastes from those wells.¹

To implement this law, the State of Ohio issues permits to corporations to conduct unconventional oil and gas extraction, such that:

No person shall drill a new well, drill an existing well any deeper, reopen a well, convert a well to any use other than its original purpose, or plug back a well to a source of supply different from the existing pool, without having a permit to do so issued by the chief of the division of oil and gas resources management...²

Environmental laws across the United States, and across the globe, legalize unconventional oil and gas extraction and establish processes for corporations to apply for and receive permits to conduct this extraction.

Thus, corporations are conducting this extraction under laws which legalize the extraction and operating under permits issued to them by government. *The environmental and climate harm that is caused by unconventional oil and gas extraction, therefore, is legal.*

Further, in the United States and other countries, corporations that have been issued a government permit to conduct unconventional oil and gas extraction are generally subject to what's known as the "permit shield" defense.³ That is, they are protected from liability for the environmental and climate harm that result from their activities because they are conducting them under law and with permission of government. Therefore, because they are operating under the color of law, they largely can't be held responsible for the harm caused by their operations.

ii. Environmental Laws Are Written By, and at the Behest of, Corporations

Oil and gas laws authorize unconventional extraction and largely protect extractors from the harm caused by their operations. This is perhaps made less surprising when we learn that

¹ Ohio Revised Code, Section 1509.02.

² Ohio Revised Code, Section 1509.05.

³ "The Clean Water Act Permit Shield—Recent Battles," Douglas A. Henderson, E. Fitzgerald Veira, and Brooks M. Smith, *Natural Resources & Environment*, Volume 29, Number 4, Spring 2015.

environmental laws, including oil and gas laws, are largely written and lobbied for by the very corporations that the laws are ostensibly to regulate.⁴

It is resource and other extraction corporations which possess the unequal ability to access the legislative and regulatory processes. It is also those corporations that engage in these activities that are often treated as the experts on the harmful effects those activities produce. That access and expertise, coupled with structures of law in most countries which treat the permit itself as a protected property interest, has guaranteed that most environmental protection efforts have come up short in actually stopping the degradation of nature.

B. Environmental Laws Treat Nature as Property, as Without Legal Rights

There's another, overriding reason why efforts to protect nature have not stopped the degradation of nature. Under these structures of law, ecosystems and natural communities are treated as *property* – either as private property whose owner's use is to be regulated, or as the government's "common property" whose use is to be controlled to guarantee equal use and access by all aspects of society.

Under that "property" construct, nature is viewed legally as a "thing," rather than as a rights-bearing entity. As such, natural systems are not "seen" by a court (much in the way that slaves were viewed as property, and not as persons), rather, only those experiencing damages as a result of environmental degradation are "seen" by the mechanisms of government.

Environmental laws, thus, are designed to regulate how we use property, or nature. This means that laws legalize environmental harm by regulating how much pollution or destruction of nature can occur under law.

For instance, under the federal *Clean Water Act* and *Surface Mining Control and Reclamation Act* in the United States, coal corporations are legally authorized to blow the tops off of mountains to access coal seams and dump the debris into streams on the mountainside and valley floor. This has destroyed and damaged nearly 2,000 miles of streams.⁵

Violations of such laws may result in fines, the amount of which are unrelated to the cost of remedying the true amount of harm inflicted on an ecosystem. Private actions brought to remedy environmental harm largely rest on the extent to which a person using the ecosystem has been damaged by the activity. Thus, the focus of damages rests not on the natural system itself, but on the financial damage caused to the individual using the ecosystem.

⁴ The millions of dollars spent by the oil and gas industry in support of candidates for public office who support pro-industry legislation is well documented. The lobbying by industry for laws that favor the industry is also well documented. See "How ALEC Helps Companies Keep Fracking Ingredients Secret," Cora Currier, ProPublica, April 24, 2012; "Annual Lobbying on Oil and Gas," Open Secrets, <https://www.opensecrets.org/lobby/indusclient.php?id=E01>, accessed March 29, 2018.

⁵ "Mountaintop Removal Mining: Digging Into Community Health Concerns," David C. Holzman, Environmental Health Perspectives, 119:a476-a483, 2011.

Since the adoption of environmental laws around the world, by almost every criterion, nature is in worse condition than it was four or five decades ago. As described above, we see this in terms of ecosystem collapse, species extinction, and, of course, climate change.

What we learn from this is that conventional environmental laws have created a framework that is inherently unsustainable. In fact, *they make sustainability illegal*. Thus, these laws not only codify practices that are environmentally destructive, they also prevent sustainable practices from being established in their place.

II. Unconventional Oil and Gas Extraction

Unconventional oil and gas extraction – often called hydraulic fracturing, or fracking – is a technique increasingly utilized by fossil fuel corporations in countries around the world.

Fracking combines water, chemicals, and sand, which are injected under high pressure into underground rocks. The pressure fractures the rock releasing shale oil or gas.

In Alberta, Canada, the fracking process has been found to cause earthquakes.⁶ Frack wastewater disposal wells have also been connected to earthquakes in Texas, Oklahoma, and other states in the United States.⁷

With the growth of fracking, there has been subsequent growth in the infrastructure needed to support the industry – including frack wastewater injection wells used to dispose of frack wastewater – as well as infrastructure to transport and process fracked oil and gas, including new pipelines, compressor stations, sand mines, and shipping terminals.

Laws legalize unconventional gas and oil extraction. Further, the infrastructure supporting the growth of fracking, is similarly being legalized, regulated, and permitted by government.

A. Impacts on Human Health, Nature, and the Climate from Unconventional Oil and Gas Extraction

As unconventional oil and gas extraction and its infrastructure expand, the impacts on human health, nature, and the climate are likewise growing. The research findings described below, from the United States and Canada, are illustrative of the impacts of fracking experienced elsewhere.

i. Air and Water Quality, and Human Health

⁶ “In Canada, a Direct Link Between Fracking and Earthquakes,” Henry Fountain, New York Times, November 17, 2016.

⁷ See United States Geologic Survey, <https://earthquake.usgs.gov/research/induced/overview.php>, accessed March 13, 2018; Academy of Engineering, Medicine and Science of Texas, <http://tamest.org/shale-task-force/>, accessed March 13, 2018.

Today, in the United States alone, there are more than one million frack wells.⁸ It is estimated that between three and six million gallons of fresh water are used at each frack well.⁹

From the fracking process, water becomes contaminated producing millions of gallons of frack wastewater at each well. Corporations dispose of frack wastewater in underground injection wells, which are often drilled through aquifers, and other methods.

In 2016, the United States Environmental Protection Agency released a study on the impacts on water from fracking. The agency's Deputy Administrator, Tom Burke, described the study's findings, stating, "We found scientific evidence of impacts to drinking water resources at each stage of the hydraulic fracturing water cycle."¹⁰

A 2017 study in the journal *Reviews on Environmental Health*, determined that "every stage" of the fracking process, "from well construction to extraction, operations, transportation and distribution can lead to air and water contamination."¹¹

A study in the State of Pennsylvania, in the United States, where fracking is a growing industry, found that mothers living near frack wells have a higher risk of giving birth to low-weight babies.¹²

Evidence on fracking impacts on young children are growing. The *Reviews on Environmental Health* study found that with unconventional oil and gas development:

Heavy metals (arsenic and manganese), particulate matter (PM), benzene, toluene, ethylbenzene, xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs) and endocrine disrupting chemicals (EDCs) have been linked to significant neurodevelopmental health problems in infants, children and young adults. These substances are widely used in, or become byproducts of unconventional oil and natural gas (UOG) development and operations. *Residents near UOG operations can suffer from increased exposure to elevated concentrations of air and water pollutants...* Given the profound sensitivity of the developing brain and central nervous system, *it is reasonable to conclude that young children who experience frequent exposure to these pollutants are at particularly high risk for chronic neurological diseases.*¹³ (emphasis added)

⁸ Frackracker Alliance, <https://www.frackracker.org/2015/08/1-7-million-wells/>, accessed March 13, 2018.

⁹ "How Much Water Does U.S. Fracking Really Use?," Duke Today, Duke University, September 15, 2015.

¹⁰ "EPA reverses course, highlights fracking contamination of drinking water," Tom Scheck and Scott Tong, American Public Media Reports, December 13, 2016.

¹¹ "Neurodevelopmental and neurological effects of chemicals associated with unconventional oil and natural gas operations and their potential effects on infants and children," Ellen Webb, Julie Moon, Larysa Dyrszka, Brian Rodriguez, Caroline Cox, Heather Patisaul, Sheila Bushkin, Eric London, *Reviews on Environmental Health*, October 25, 2017.

¹² "Hydraulic Fracturing And Infant Health: New Evidence From Pennsylvania," Janet Currie, Michael Greenstone, and Katherine Meckel, *Science Advances Journal*, December 13, 2017.

¹³ *Ibid.*

ii. Climate Change

The gas extraction industry, and for years many in the environmental advocacy field as well, have claimed that natural shale gas is a “cleaner” fuel than coal or oil. It is often touted it as a “bridge”¹⁴ to renewable energy. Yet, research has found that gas fracking is a major contributor to human-caused climate change from emissions of greenhouse gases such as methane and ethane.

A 2015 study determined that “the greenhouse gas footprint of shale gas is significantly larger than that of conventional natural gas, coal, and oil.”¹⁵

The study concluded that greenhouse gas emissions are going to increase as fracking expands, finding:

*Because of the increase in shale gas development over recent years, the total greenhouse gas emissions from fossil fuel use in the USA rose between 2009 and 2013, despite the decrease in carbon dioxide emissions. Given the projections for continued expansion of shale gas production, this trend of increasing greenhouse gas emissions from fossil fuels is predicted to continue through 2040.*¹⁶ (emphasis added)

In addition, ethane gas, which along with carbon dioxide and methane is a leading cause of climate change, is increasing in the atmosphere as a result of fracking.¹⁷

iii. Wildlife

Studies show that wildlife species are impacted by the siting of frack wells and fracking infrastructure, as well as from impacts on water quality from fracking.¹⁸ This includes direct impacts on fish species which are being affected by contaminated fluids released by oil and gas frack wells.¹⁹

As stated above, fracking is major and growing contributor to climate change. A 2018 study released in the journal *Climatic Change*, determined that climate change will have significant impacts on species.²⁰

¹⁴ “Answering for Taking a Driller’s Cash,” Felicity Barringer, New York Times, February 13, 2012.

¹⁵ “Methane emissions and climatic warming risk from hydraulic fracturing and shale gas development: implications for policy,” Robert W. Howarth, Energy and Emission Control Technologies, October 8, 2015.

¹⁶ Ibid.

¹⁷ “Fracking in the US causing global surge in dangerous gas, study finds,” Ian Johnston, The Independent, April 29, 2016.

¹⁸ Center for Biological Diversity, http://www.biologicaldiversity.org/campaigns/california_fracking/wildlife.html, accessed March 13, 2018.

¹⁹ “Alberta research shows fracking fluids cause 'significant' harm to fish,” Bob Weber, Canadian Press, January 24, 2017.

²⁰ “The implications of the United Nations Paris Agreement on Climate Change for Globally Significant Biodiversity Areas, Warren, R., Price, J., VanDerWal, J., Cornelius, S., and Sohl, H., *Climatic Change*, 2018.

The World Wildlife Fund, which participated in the study, concluded, “Up to half of plant and animal species in the world’s most naturally rich areas, such as the Amazon and the Galapagos, could face local extinction by the turn of the century due to climate change if carbon emissions continue to rise unchecked.”²¹ A separate study found that “large numbers of threatened species are likely to be already affected by climate change...”²²

Around the world, coral reefs, which are home to millions of species, are experiencing bleaching and die-off as the result of climate change. This includes the Great Barrier Reef, which since 2016, has suffered bleaching over more than half the reef.²³ The U.S. National Oceanic and Atmospheric Administration has determined that, “Climate change is the greatest global threat to coral reef ecosystems.”²⁴

III. The Human Right to a Healthy Environment and the Rights of Nature

Environmental rights are a growing body of law, found in local, state, national, and international instruments. This expansion of the body of legal rights to include a *human right to a healthy environment* is increasingly understood as a fundamental right, central to human dignity and well-being. Today, more than ninety countries have recognized the human right to a healthy environment in their national constitutions.²⁵

For example, Ecuador’s Constitution recognizes a human right to a healthy environment, stating:

The right of the population to live in a healthy and ecologically balanced environment that guarantees sustainability and the good way of living (*sumak kawsay*), is recognized.²⁶

With the expansion of the body of legal rights to include the right to a healthy environment, there is a growing recognition that fulfilling that right is dependent on the health of the environment.

Countries which have secured such rights, thus, are finding that *it is impossible to attain a human right to a healthy environment without protecting the rights of the environment itself.*

²¹ “Wildlife in a Warming World: The Effects of Climate Change on Biodiversity,” World Wildlife Fund, March 13, 2018, <https://www.worldwildlife.org/publications/wildlife-in-a-warming-world-the-effects-of-climate-change-on-biodiversity>, accessed on March 14, 2018.

²² “Species’ traits influenced their response to recent climate change,” Michela Pacifici, Piero Visconti, Stuart H. M. Butchart, James E. M. Watson, Francesca M. Cassola, and Carlo Rondinini, *Nature Climate Change*, Volume 7, 2017.

²³ “Reef health,” Great Barrier Reef Marine Park Authority, Government of Australia, June 29, 2017, <http://www.gbrmpa.gov.au/about-the-reef/reef-health>, accessed March 14, 2018.

²⁴ “How does climate change affect coral reefs?,” National Oceanic and Atmospheric Administration, <https://oceanservice.noaa.gov/facts/coralreef-climate.html>, accessed March 14, 2018.

²⁵ “The Environmental Rights Revolution, A Global Study of Constitutions, Human Rights, and the Environment,” David R. Boyd, page 59, UBC Press, 2012.

²⁶ Article 14, Constitution of 2008, Republic of Ecuador.

Thus, with this expansion of rights to include certain environmental rights, we are now witnessing *the expansion of the body of legal rights to include nature*.

Ecuador and Bolivia are the first countries to establish national laws recognizing the *rights of nature*.

Ecuador's Constitution specifies:

Nature or Pacha Mama, where life is reproduced and carried out, has the right to be fully respected its existence and the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes... Nature has the right to be restored.²⁷

In New Zealand, the national parliament has passed several laws recognizing rights of river and other ecosystems. In Colombia and India, courts have ruled that certain river and other ecosystems possess rights. Further, more than three dozen municipalities across the United States have established laws codifying the rights of nature.

Rights of nature laws secure certain rights of ecosystems and natural communities, which can include rights to exist, flourish, regenerate, evolve, and be restored. These laws institute mechanisms for people and governments to enforce and defend these rights on behalf of and in the name of nature.

Courts in Ecuador, for example, have concluded that certain public and private activities have violated the rights of nature. This includes construction of a road which interfered with the natural flow of a river.²⁸ Further, the national government is now taking into account the rights of nature in protecting nature. For instance, a new criminal code considers the rights of nature in defining crimes against flora and fauna.²⁹

With this, there is also a growing understanding of the *integral relationship between the human right to a healthy environment and the rights of nature*. The Interamerican Court of Human Rights recently issued an Advisory Opinion, in which it wrote:

This Court considers it important to stress that the right to a healthy environment as an autonomous right, unlike other rights, protects the components of the environment, such as forests, rivers, seas and others, as legal interests in themselves, even in lack of certainty or evidence about the risk to individual persons. It is about protecting nature and the environment not only because of its connection with a utility for the human being or for the effects that its degradation could cause on other people's rights, such as health, life

²⁷ Article 71 and 72, Constitution of 2008, Republic of Ecuador.

²⁸ *Richard Fredrick Wheeler and Eleanor Geer Huddle v. the General Director of Prosecutions of the State of Loja, Dr. Paulo Carrion, Plaintiff Eng. Rubén Bustamante, Prefect of the Province, Eng. Carlos Espinosa González, Regional Director of the Loja Del Oro, and Zamora Chinchipe, Ministry of Environment*, Trial Number: 11121-2011-0010, Provincial Justice Court Of Loja, Criminal Chamber, March 30, 2011.

²⁹ *Organic Law Reform in the COIP in Order to Define Crimes and Offenses Against the Flora and Fauna*, Draft, National Assembly, Ecuador, October 31, 2017.

or personal integrity, but because of its importance for the other living organisms with whom the planet is shared, also deserving of protection in themselves. In this sense, the Court notes a tendency to recognize legal status and, therefore, rights to nature not only in court decisions but even in constitutional orders.³⁰

The High Court of Uttarakhand, in the State of Uttarakhand in northern India, drew from this perspective as well in making its 2017 ruling in which it declared that certain ecosystems possess rights. It cited an article on the rights of nature, which states:

Whereas human rights occupy centre stage and deal with human conflict, loss of natural resources threatens human survival itself. We must understand that the fundamental human rights on which human survival depends are Nature's rights.³¹

A. Advancing Human Rights to a Healthy Environment and the Rights of Nature in Response to the Growth of Unconventional Oil and Gas Extraction

In response to the environmental and climate harm caused by unconventional oil and gas extraction, and the resulting violations of the rights of humankind and nature, there is a growing effort to resist this extraction not only through traditional forms of activism involving protests, lobbying, and lawsuits, but increasingly, through the recognition of legal rights.

Since 2010, municipal governments, tribal nations, and communities in the United States have been enacting laws which prohibit unconventional oil and gas extraction and its infrastructure as a violation of the human right to a healthy environment and the rights of nature.

i. Pittsburgh, Pennsylvania

The City Council of Pittsburgh, Pennsylvania, a city of 300,000 once known as the center of the steel industry in the United States, enacted its fracking prohibition in 2010. In the law's preamble, it states that the prohibition on extraction is necessary to "to protect the health, safety, and welfare..." The law establishes the human right to water and the rights of nature "to exist and flourish within the City of Pittsburgh." To protect and secure these rights, the law prohibits extraction of natural gas within the city limits.³²

ii. Ho-Chunk Nation

³⁰ Interamerican Court of Human Rights, Opinión Consultiva Oc-23/17, Section 62, November 15, 2017.

³¹ "Nature has rights too," Sanjay Parikh and Vikram Soni, as cited in *Lalit Miglani v. State of Uttarakhand & others*, High Court of Uttarakhand at Nainital, Writ Petition (PIL) No. 140 of 2015, March 30, 2017, p. 8.

³² City of Pittsburgh, Pennsylvania, Code of Ordinances, Article VI, Chapter 618, Marcellus Shale Natural Gas Drilling.

In 2016, the Ho-Chunk Nation, a tribal nation based in the State of Wisconsin, took an initial vote on a tribal constitutional amendment to enshrine the rights of nature and address the growing threat of unconventional extraction. The amendment states:

(a) Rights of Nature. Ecosystems and natural communities within the Ho-Chunk territory possess an inherent, fundamental, and inalienable right to exist and thrive. This right includes, but is not limited to, the right of ecosystems and natural communities to maintain and regenerate their life cycles, structure, functions, and evolutionary processes; the right to be restored; and the right to the defense, protection, and enforcement of their rights...

(c) Prohibitions. It shall be unlawful within the Ho-Chunk territory for any corporation or government to engage in activities that would violate, or infringe upon, the rights recognized and secured by this Article, including...fossil fuel extraction, frac sand mining...³³

Frac sand mining is the mining of industrial sand used in the fracking process.

iii. Grant Township, Pennsylvania

Facing a proposed frack wastewater disposal injection well, which studies have shown contaminate water and cause earthquakes, the rural community of Grant Township has been engaged in multi-year fight to stop the well and advance environmental rights. The community determined that it needed to fundamentally alter its form of government to protect against the wastewater disposal, becoming what's known as a "home rule" community under state law. Through this process, the community developed and enacted a home rule charter which enshrines rights and prohibits fracking activities.

The Grant charter codifies the human right to a healthy environment and the rights of nature, and prohibits the disposal of frack wastewater in the community. The charter states:

Section 104. All residents of Grant Township, along with natural communities and ecosystems within the Township, possess the right to clean air, water, and soil, which shall include the right to be free from activities which may pose potential risks to clean air, water, and soil within the Township, including the depositing of waste from oil and gas extraction...

Section 106. Natural communities and ecosystems within Grant Township, including, but not limited to, rivers, streams, and aquifers, possess the right to exist, flourish, and naturally evolve...

³³ Proposed Rights of Nature Constitutional Amendment, Ho-Chunk Nation, General Assembly, September 2016.

Section 301. Depositing of Waste from Oil and Gas Extraction. It shall be unlawful within Grant Township for any corporation or government to engage in the depositing of waste from oil and gas extraction.³⁴

iv. Lafayette, Colorado

In recent years, as studies show that unconventional extraction is a major contributor to climate change, the resistance to this form of extraction has grown. In 2017, the City of Lafayette, in the State of Colorado, passed a law that specifically addresses the impacts of this extraction on climate change and the rights of humankind and nature to a healthy environment and a healthy climate.

Known as the *Climate Bill of Rights and Protections*, the law states:

Section 1(a). Right to a Healthy Climate. All residents and ecosystems of the City of Lafayette possess a right to a healthy climate and life sustaining resources, which shall include the right to be free from all activities within the City of Lafayette that interfere with that right, including the extraction of coal, oil, or gas, disposal of drilling waste contaminated drinking water, lethal carcinogens, toxic gases and other byproducts of industrial activity which threaten human physical and neurological systems.³⁵

B. Changing how Humankind Governs its Behavior Toward Nature

We have entered what many have described as a new geologic age, the *Anthropocene*, such that humanity is now the dominant force on earth, impacting nature and the climate.³⁶ This is occurring at our own hands and is bringing about what is increasingly recognized as the sixth mass extinction.³⁷

This is building the urgency to fundamentally change humankind’s relationship with nature, and as part of that, driving the need to stop unconventional oil and gas extraction.

Increasingly, this is understood as requiring fundamental change in how we *govern* human behavior toward nature. And with that, an understanding that existing environmental laws – based on the subordination of nature, which treat nature as property and without rights – aren’t enough to stop the acceleration of species extinction and climate change. That *existing environmental legal frameworks, in fact, cannot stop human-caused environmental and climate harm because they were simply not designed to do.*

³⁴ Home Rule Charter of Grant Township, Pennsylvania, 2015.

³⁵ City of Lafayette, Colorado, Ordinance No. 02, Series 2017.

³⁶ “Where in the World Is the Anthropocene?,” Hannah Waters, Smithsonian Magazine, August 30, 2016.

³⁷ “Earth’s sixth mass extinction event under way, scientists warn,” Damian Carrington, The Guardian, July 10, 2017.

There is a growing recognition, thus, that it is time to use our human legal systems to place the highest protections on nature, and our own need for a healthy environment, through the recognition of legal rights.

Colombia's Constitutional Court, in a 2016 decision declaring that the Atrato River possesses certain legal rights, explained this need for change, writing:

It's about understanding this new socio-political reality with the aim of achieving a respectful transformation with the natural world and its environment, just as has happened before with civil and political rights (first generation); economic, social and cultural rights (second generation); and environmental rights (third generation). Now is the time to start taking the first steps towards effectively *protecting the planet and its resources before it is too late* or the damage is irreversible, not only for future generations but for the entire human species.³⁸ (emphasis added)

IV. Questions 3 and 4 before the Permanent Peoples' Tribunal: The Responsibility and Liability of State and Non-State Actors for Violations of the Human Right to a Healthy Environment and the Rights of Nature

Questions 3 and 4 under consideration by the Permanent Peoples' Tribunal are:

- Third, what is the extent of responsibility and liability of States and non-state actors for violations of human rights and for environmental and climate harm caused by these oil and gas extraction techniques?
- Fourth, what is the extent of responsibility and liability of States and non-state actors, both legal and moral, for violations of the rights of nature related to environmental and climate harm caused by these unconventional oil and gas extraction techniques?

Questions 3 and 4 focus on the responsibility and liability of State and non-state actors for violations of the human right to a healthy environment and the rights of nature stemming from unconventional oil and gas extraction. Specifically, the Tribunal is concerned with environmental and climate harm caused by this extraction.

The growth of unconventional oil and gas extraction is increasingly understood as a significant threat to ecosystems and species, and further, that it is a major contributor to climate change. Thus, *unconventional oil and gas extraction causes environmental harm and climate harm.*

³⁸ *Center of Studies for Social Justice "Tierra Digna", on behalf of the Greater Community Council of the Popular Peasant Organization of the Alto Atrato (Cocomopoca), the Greater Community Council of the Peasant Association Integral del Atrato (Cocomacia), the Association of Community Councils of Bajo Atrato (Asocoba), the Inter-ethnic Forum Solidaridad Chocó (FISCH) and others v. the Presidency of the Republic and others*, Sections 9.27-9.30, Judgment T-622 DE 2016, File T-5-016-242, Constitutional Court of Colombia, November 10, 2016.

The leading actors responsible for unconventional oil and gas extraction are *States* – as governments legally authorize unconventional oil and gas extraction – and *non-state actors* – that is, oil and gas corporations which are working to have laws authorizing the extraction established so that they are able to legally carry out extraction.

A. Question 3: In Violation of the Human Right to Healthy Environment

The Permanent Peoples’ Tribunal asks in Question 3: What is the extent of responsibility and liability of States and non-state actors for violations of human rights and for environmental and climate harm caused by these oil and gas extraction techniques?

Answer: State and non-state actors are responsible and liable for violating the human right to a healthy environment from unconventional oil and gas extraction.

A *violation* of the human right to a healthy environment includes denying people the basic ability to live in a clean environment. A clean environment, in its most basic form, is an environment in which the air is safe to breath and the water safe to drink.

The U.N. Committee on Economic, Social, and Cultural Rights has described the right to a healthy environment as including “the requirement to ensure an adequate supply of safe and potable water and basic sanitation; and the prevention and reduction of the population’s exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health.”³⁹

As the above describes, unconventional oil and gas extraction is contaminating air and water, accelerating climate change which has significant impacts on human health and nature, and is otherwise exposing the population to toxic substances and chemicals, as well as environmental conditions, that are harmful to human health. This is making the human right to a healthy environment unattainable.

Unconventional oil and gas extraction, therefore, is a clear violation of the human right to a healthy environment by State and non-state actors.

B. Question 4: In Violation of the Rights of Nature

The Permanent Peoples’ Tribunal asks in Question 4: What is the extent of responsibility and liability of States and non-state actors, both legal and moral, for violations of the rights of nature related to environmental and climate harm caused by these unconventional oil and gas extraction techniques?

³⁹ General Comment 14, Committee on Economic, Social, and Cultural Rights, United Nations, August 11, 2000.

Answer: *State and non-state actors are responsible and liable for violating the rights of nature from unconventional oil and gas extraction.*

Violations of the rights of nature are understood to be activities which interfere with the ability of nature to fulfill its rights. Those rights include the right to exist, regenerate, evolve, and be restored.

Unconventional oil and gas extraction causes significant harm to nature, including ecosystems and species, through air and water contamination, exposure to toxic substances and chemicals, habitat destruction, and the acceleration of climate change which is destroying coral reefs, acidifying the oceans, causing species extinction on a massive scale, and upending the delicate ecological balance that ecosystems and species need to survive. This is making the rights of nature unattainable.

Unconventional oil and gas extraction, therefore, is a clear violation of the rights of nature by State and non-state actors.

V. Conclusion: Scientific, Legal, Moral, and Spiritual Perspectives

Contaminating water makes clean water unattainable. Contaminating the air makes clean air unattainable. Accelerating climate change puts humankind, ecosystems, and species in jeopardy. Each of these alone makes the fulfillment of the human right to a healthy environment and the rights of nature unattainable.

Those responsible for this are the State and non-state actors who are engaged in promoting and protecting the continued expansion of unconventional oil and gas extraction.

There are many perspectives that can lead to the conclusion that unconventional oil and gas extraction causes such significant harm to humans and nature, that the actors responsible for it are violating the human right to a healthy environment and the rights of nature.

These perspectives include:

- From a *scientific* perspective, unconventional extraction is significantly harmful to human health and nature, is a major contributor to climate change, and is tearing holes in the very fabric of life on earth. This makes the human right to a healthy environment and the rights of nature unattainable.
- From a *legal* perspective, creating conditions which make the fulfillment of rights unattainable violates those rights. In this case, significant harm to human health and nature make the right to a healthy environment and the rights of nature unattainable, and, therefore, State and non-state actors are responsible and liable for violating those rights.

Considering the moral perspective, or for that matter the spiritual foundation, of the questions posed by the Permanent Peoples' Tribunal, can prove tricky in what is otherwise thought of solely the realm of science or the law.

But can we reach the same conclusions if our perspective is based in morality or even spirituality?

- From a *moral* perspective, causing significant harm to people and nature is immoral. Moral theorists consider human rights “as moral entitlements that all human beings possess by virtue of our common humanity.”⁴⁰ The rights of nature stem from the same foundation, that nature has rights by virtue of being nature. Morally, the actors responsible for unconventional oil and gas extraction are violating the rights of humankind and nature.
- From a *spiritual* perspective, many argue that harming Creation is a violation of religious doctrine and belief.

Pope Francis said as much in a speech before the United Nations, stating:

First, it must be stated that a true "right of the environment" does exist, for two reasons. First, because we human beings are part of the environment. We live in communion with it, since the environment itself entails ethical limits which human activity must acknowledge and respect. Man, for all his remarkable gifts, which "are signs of a uniqueness which transcends the spheres of physics and biology" (Laudato Si', 81), is at the same time a part of these spheres. He possesses a body shaped by physical, chemical and biological elements, and can only survive and develop if the ecological environment is favourable. Any harm done to the environment, therefore, is harm done to humanity. Second, because every creature, particularly a living creature, has an intrinsic value, in its existence, its life, its beauty and its interdependence with other creatures. We Christians, together with the other monotheistic religions, believe that the universe is the fruit of a loving decision by the Creator, who permits man respectfully to use creation for the good of his fellow men and for the glory of the Creator; he is not authorized to abuse it, much less to destroy it. In all religions, the environment is a fundamental good (cf. *ibid.*)⁴¹

From a spiritual perspective, therefore, the harm caused by unconventional oil and gas extraction surely violates the human right to a healthy environment and the rights of nature.

But for those in need of firmer legal footing, consider the Colombia Constitutional Court's perspective:

⁴⁰ "What are human rights," Patrick Meklam, Oxford University Press, December 10, 2015, <https://blog.oup.com/2015/12/what-are-human-rights-moral-political-legal-theory/>, accessed March 29, 2018.

⁴¹ Pope Francis, September 25, 2015, as cited in "Pope Francis in America: Full text of his UN speech on the 'right of the environment' – Sept 2015," Gianluca Mezzofiore, International Business Times, September 25, 2015.

...respect for nature must stem from the reflection about the meaning of existence, the evolutionary process, the universe and the cosmos. That is from a system of thought based on a conception of the Human being as an integral part and not simply as a ruler of nature which would allow a process of self-regulation of the human species and its impact on the environment, recognizing its role within the circle of life...⁴²

State and non-state actors are actively, knowingly, and intentionally accelerating unconventional oil and gas extraction.

Unconventional extraction is causing significant and growing environmental and climate harm, which is bringing about the collapse of the fragile ecological balance of the natural world – including the basic functioning of ecosystems and the very existence of species – making the fulfillment of the human right to a healthy environment and the rights of nature unattainable.

Therefore, from a scientific, legal, moral, and spiritual perspective, State and non-state actors are responsible and liable for these violations.

⁴² Center of Studies for Social Justice "Tierra Digna", on behalf of the Greater Community Council of the Popular Peasant Organization of the Alto Atrato (Cocomopoca), the Greater Community Council of the Peasant Association Integral del Atrato (Cocomacia), the Association of Community Councils of Bajo Atrato (Asocoba), the Inter-ethnic Forum Solidaridad Chocó (FISCH) and others v. the Presidency of the Republic and others, Section 9.30, Judgment T-622 DE 2016, File T-5-016-242, Constitutional Court of Colombia, November 10, 2016.