STATE OF IOWA
DEPARTMENT OF COMMERCE
BEFORE THE IOWA UTILITIES BOARD

IN RE: )
   ) Docket No. HLP-2014-0001
DAKOTA ACCESS LLC )

DIRECT TESTIMONY OF

BOB WATSON

ON BEHALF OF

SIERRA CLUB IOWA CHAPTER

OCTOBER 12, 2015

EXHIBIT SIERRA CLUB–BW–1
Q. Please state your name and address.
A. My name is Bob Watson and I live at 2736 Lannon Hill Rd, Decorah, Iowa, 52101.

Q. Are you familiar with the mining of sand for use in hydraulic fracturing, also known as fracking?
A. Yes. Three counties in northeast Iowa, Winneshiek (where I live), Allamakee, and Clayton, have large deposits of fine silica sand. This is not the type of sand that is found in your child's sandbox. Because it is special, it is found in only a few places. In the United States, that currently means in the Midwest near the Great Lakes, including the three counties in Iowa that I mentioned.

Fracking uses high pressure water to break open underground geologic formations, such as shale, containing oil or gas. Once the shale is fractured, if the fractures are not propped open, they will close again. So frackers use frac sand to prop open the fractures to allow the oil and gas to be extracted.
The frac sand mining process requires the mining operator to remove "overburden," that is topsoil, subsoil, or limestone rock that is over the sand. That soil is mainly composed of clay, silt, loam, or combinations of all three. Removing the overburden is done with heavy excavation equipment. Exhibits Sierra Club-BW-2, Sierra Club-BW-3, and Sierra Club-BW-4 are photos of frac sand excavation in Wisconsin.

Q. How did you become familiar with frac sand mining?

A. When we heard that a mining company was considering Winneshiek County as a site for frac sand mining, we formed an organization called Winneshiek County Protectors. The organization's goal was to educate the citizens of Winneshiek County about the impacts of frac sand mining and to persuade our county supervisors to adopt an ordinance regulating mining operations.

One of the first things we did, and this was my responsibility, was to look at the supposed regulatory scheme that would be in place to regulate this frac sand mining if it came to our county. Having contacted local, state, and federal agencies that were said to be involved in this type of regulation, and/or looked at all the proffered regulations, my research came up with 7 words and phrases which showed the lack of meaningful regulations in this area.
Finding out that people and the environment wouldn't be protected by the regulatory scheme that was in place, we fashioned land use ordinances for this land use extraction enterprise that would protect people and our county's existing environment.

Q. What were the 7 words and phrases defining the lack of effective regulation?

A. 1. Patchwork: meaning there are different regulations in different areas none of which overlap, or cover, the entire industrial endeavor. Agencies are separate, regulate different aspects, and don’t talk with each other.

2. No one overall agency: meaning there is no agency that is in charge to make sure that all agencies that should be involved are involved in regulating an industry. And, that those separate agencies are coordinating with each other.

3. Complaint basis: meaning that ordinary citizens must know all about the industrial processes, chemicals used, etc., and know the regulations that should be being followed in order to report pollution events and to protect themselves from chronic long term pollution. This also means that any pollution event the public becomes aware of has already happened.
4. Self-regulation: enabling type language in regulations means an industry decides and implements its own ways to meet some regulations. And, no agency regulates actual frac sand mining; the mining company decides how to mine.

5. Local officials lack expertise: meaning local officials are not experts in the regulated industry and have the same problems that are mentioned in #3.

6. Budgetary constraints – authority but no resources: meaning agencies have authority to regulate but no budget for enforcement.

7. Externalities: the human health, infrastructure, and environmental costs of areas considered externalities by industry are borne by the public: neighbor’s health and quality of life including noise, lights, views, constant truck travel, ease of travel, safety of travel on roads, children’s and adult’s ability to enjoy the outdoors, ability to enjoy your property; dust and diesel exhaust; hill and bluff removal; forest removal; the filling of adjacent valleys; roads, bridges and traffic; ability to enjoy the environment through tourism and outdoor activities; employment in tourism, farming, and outdoor activities; etc.
Q. So, how do we know that our regulatory analysis is correct?

A. One way is to look at other analysis of similar regulatory situations.

   It is interesting that a few days after I completed my regulatory investigation into the frac sand industry, the West, TX, fertilizer coop exploded killing many people. The investigative journalists who looked at the regulatory scheme that was supposed to be in place to protect people in West, found and used the same words and phrases to describe the inadequacies in that regulatory scheme that I had found in the frac sand industry. It is not an industry specific lack of regulations, but rather a problem with our regulatory schemes overall in the US.

   Shortly after these discoveries, I read Jillian Fry's 2014 Johns Hopkins study on the gap between "known public health threats" coming from industrial CAFO's, livestock confinements and feedlots, and what was being done to protect the public from those health threats. That study used many of the same 7 words and phrases to describe the lack of regulation protecting people that I found, and the journalists in Texas found. The Fry study is seminal in that it shows that what is most lacking in any regulatory scheme are any departments of health or human services. The industry specific practices are supposedly regulated, but it seems
human health and quality of life are considered left out of any meaningful regulations. And, we are seemingly assigned the designation of an "externality" by these industries and by the regulatory scheme that is in place.

I have not looked specifically at this pipeline industry, but I would imagine that the same lack of any meaningful regulatory scheme that includes departments of health - and health and human services (quality of life) - are not part of the regulatory scheme. If that is the case, I would urge this board to hold off on allowing this pipeline to be built until government entities that protect human health and quality of life are put into the regulatory scheme. Humans, and the environment that humans exist in, are not externalities no matter what the extractive industries would like you to believe.

Q. Are there impacts from frac sand mining that are specific to Northeast Iowa?

A. Because Winneshiek County is in the driftless area, untouched by the last glacier, our topography is very hilly and our rock is very porous. Mining for frac sand in NE Iowa is not like mining for frac sand in central Wisconsin. Mining these deposits in Winneshiek County would be like mini-mountaintop mining. You would have to destroy the topography, our bluffs and steep hills, to get at the sand. And you could
never put it back together again. Our environment, so much suited to agriculture and tourism, would no longer exist in a form that would allow those uses to happen. All studies show that when an extractive industry moves into a tourism economy, the tourist industry ceases to exist. And, as is seen in the Appalachian mountaintop mining, a moonscape like topography is left. No thank you.

As a country, we need to transition to the next energy era so that we don't destroy what is left of our environment.

Q. Does this conclude your prepared testimony?

A. It does.