

Frac Sand Sentinel

...keeping watch on the industry

Issue: #37

DATE: August

14, 2014



Testimony: Patricia J. Popple- EPA Hearing, Denver, CO-July 30, 2014

As a life-long resident of Chippewa Falls, Wisconsin, I am presenting testimony regarding the immense impact the fossil fuel industry is having in Wisconsin. I am Patricia Popple, retired educator/ administrator turned citizen activist 6 years ago because of my great concern regarding the health and safety of the people I have been working with as a volunteer in WI and elsewhere on the extraction of frac sand. At the grassroots level, I helped form Concerned Chippewa Citizens and Save the Hills Alliance, Inc. The **Frac Sand Sentinel**, distributed to over 2000 people, has facilitated networking and has had the impact of educating and mobilizing individuals and groups about issues related to non-metallic mining.

Wisconsinites are frantic and frankly angry about what is happening to them locally and statewide. They are fearful about the state's appearances as thousands of acres of 500 million year old sandstone and millions of tons of silica sand from our beloved hills are being knifed out of the landscape for the sole purpose of fracking natural gas and oil; gigantic scabs useless for productive farming remain in their place. Most of all, health is being overlooked for the big money promises of the fossil fuel industry. I am speaking about frac sand mining today because the EPA's proposed carbon pollution standards address only a small segment of the pollution issues faced in the fossil fuel industry.

The Precautionary Principle states that when an activity raises threats of harm to human health on the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. Corporations, government agencies and others should bear the burden of proof. Instead, it is left to the grassroots groups and individuals to fight for their own existence and that of children and future generations. Environmental impact studies are not conducted in WI for this industry despite the fact that statements have been requested statewide and federally. Why aren't the EPA and the DNR acting on behalf of the citizenry? Instead the industry is encouraged and permitted to grow and expand by the very officials

entrusted to protect the population.

The heavy industrial footprint of frac sand mining continues to grow exponentially. There are about 135 active frac sand facilities and 94 inactive facilities, but permitted, as of May 1. Pollution knows no boundaries in this industry and there are few limits in WI. Large driers fueled by natural gas run continuously to prepare the sand for transport after it is washed. Trucks and railcars (some uncovered) criss-cross the state in huge numbers day and night often leaving remnants of their cargo behind or dumped. I witnessed a street sweeper this past week attempting to clean up the road in front of a mine spewing forth vast clouds of dust. I have personally witnessed industrial sludge containing bag house wastes, clay cakes and other waste dribbling from trucks onto highways and left to dry there to become fugitive dust as the remainder of the load is carried back to the mines for reclamation purposes. An abandoned mine has huge piles of sand with winds creating dust storms in a residential area. Although reported to air quality specialists, no one shows up. They say, "When wind speeds are up again we 'may' make a visit." Meanwhile the people living nearby are "guinea pigs" in the storm because of the lack of standards in our state. In some locations, waste sand is being sold to farmers for cattle bedding. Who is appointed to oversee the health of the farmer or for that matter, the health of the cattle? While plumes of visible sand blowing from mines and processing plants are reported by tourists and others, layers of sand are visible in the heavy snows and on rooftops and cars. Blasting of the sandstone creates huge volumes of dust and there is no restriction as to where facilities are constructed. Processing plants are often located near schools, hospitals and other sensitive facilities. The mining operations run continuously and the companies try to assure us there is nothing to be concerned about because there are no studies! Canadians are studying the impacts of silica and recently a small town in Alberta issued hazardous warnings after there was a spill in their local town. None of that is happening in Wisconsin. It is an industry gone wild.

Respirable crystalline silica dust is a proven carcinogen eventually causing silicosis and other disease. No studies show that life is safe for those residing near or distant from the facilities. Despite our pleas to the EPA and the DNR, we are not heard. I ask that the EPA visit Wisconsin to see conditions first hand. I ask that frac sand mining be regulated under the Clean Air and Clean Water Act. The EPA and the DNR have to get it right and be held accountable for their actions.

The few examples offered beg for the need to move away from fossil fuel usage to a self-sustaining energy plan that will engage our country's people in productive work designing new and efficient actions that will lead us into a healthier life for now and for future generations.

Patricia J. Popple-Chippewa Falls, WI
sunnyday5@charter.net
715-723-6398
July 30, 2014



Testimony of Ken Schmitt: EPA Hearing, Denver, CO. “Clean Power Plan Rule” July 30, 2014

I am Ken Schmitt. My wife Laura and I both come from a long line of farmers dating back to the 1800's. Along with our 4 children ages 3 to 9, we raise grass-fed beef in Western Chippewa County, Wisconsin. We now live on the Southern edge of an industrial frac-sand mining district which extends North across the county line into Barron County. Prior to 2008 none of us dreamed that our agricultural area would ever be degraded so much in 6 short years. Frac sand is needed to extract hard to reach natural gas and oil deposits, and it is mined from the sandstone that underlies much of Wisconsin. We now have more industrial sand mines in these 2 counties than existed in the entire state 10 years ago.

The Village of New Auburn straddles the county line. Within 7 miles of the village there are more than 11 frac-sand mines with over 3000 acres permitted since mid 2011. Most of these are expected to expand in the next few years. There are also 4 frac-sand drying plants within about 4 miles of the village with talk of possibly 2 more. All of these industrial frac-sand facilities - totaling about 150 in

Wisconsin - have received air permits from DNR, which acts as the enforcement agency for the EPA under the Clean Air Act.

DNR has permitted all of these facilities without considering the fugitive dust sources of each facility in the permits, using the same 2.5 micron ambient air rating without counting cumulative air impacts of multiple facilities or emissions from the transporting of the sand. No regulating agency in Wisconsin requires any monitoring for 2.5 particulate or crystalline silica, so no one knows what hazards citizens around these facilities face in Wisconsin. Is waiting for people to get sick from toxic air pollutants fulfilling either the EPA or DNR's responsibility to protect citizens, as required by the Clean Air Act?

Many of these facilities also use well water for washing of the sand, degrading our freshwater resources, and permanently ruin many acres of very productive farmland. I believe this rule will simply trade the environmental issues of coal for the environmental issues of natural gas and further drive the destruction of farmland and degradation of freshwater in Wisconsin. The same degradation is occurring in the areas where gas and oil is actually extracted. We as a nation need to dedicate substantial resources to the research and development of technology to store energy generated from wind and solar on a large scale. If we can accomplish that then we will be well on our way to moving past the fossil fuel age. Sooner or later we need to move beyond fossil fuels because they are a finite resource. Wouldn't it be better to do it on our time table than on the resource's time table? We are wrecking far too much of our productive arable farmland & clean fresh drinking water in this country to get the last bit of fossil fuels. Humans have gotten along without oil and gas for thousands of years, but we can't survive without food and drinkable water. How short-sighted can we be? What kind of legacy are we leaving our children and grandchildren?

(the following paragraphs I wrote at the hearing just before I testified)

I know much of what I said did not directly relate to carbon, however to just look at carbon is much too narrow of a view. EPA must consider all the negative impacts of each avenue - such as the frac-sand mines in my state, serious issues at the frac sites, etc. If you do you will realize how important it is to move beyond fossil fuels, they are finite.

As a farmer, one of few I have heard at these hearings, I cannot stress enough the importance of preserving good arable farmland and good water resources. The human race cannot survive without both of these. I heard the following quote yesterday in testimony. I have heard it before, but had forgotten it, I feel it deserves repeating: "THE STONE AGE DID NOT END BECAUSE WE RAN OUT OF STONES!"



Testimony: Heather Andersen - EPA Hearing, Denver, Colorado July 30, 2014

My name is Heather Andersen. I live in West Central Wisconsin where there are approximately 135 active and 94 inactive silica sand mines, processing plants and trans-loading facilities. I live within a radius of less than 50 miles of 40 of these facilities. Silica sand also known as frac sand is used in the hydrofracking industry. This sand, mixed with chemicals, keeps open the fissures deep underground in the extraction of shale oil. Without our frac sand there could be little production of oil and natural gas.

With this proposed ruling the EPA has expressed interest in protecting citizens' health, safety and welfare; however emissions from coal power plants are only a small part of what needs to be addressed. In my area of Wisconsin, the citizens have been fighting to protect their health, safety and welfare from the frac sand industry. In the testimony presented, there has been discussion of the pollution from industrial complexes using fossil fuels; the science of numbers and grafts. However, what is lacking in these testimonies are voices and faces. There are no faces and voices presented in the science.

My focus will be giving a face and a voice to the citizens living near these sand industries, specifically those living in the small village of New Auburn, WI: population 545. I am relating stories told by them in hopes that you do not forget ordinary citizens who are now, and will be forever, affected by the frac sand industry.

More than 900 diesel trucks go through this village daily. In addition to having to hear, smell, and see these trucks, there is the sand coating un-swept streets; sand coating all aspects of their lives. A woman of the village stopped the man in charge of one plant showing him the white rag, now blackened from diesel fumes that she had just used to clean her clotheslines. His response? "Get a clothes dryer like everyone else and stop complaining."

A family has had to move their master bedroom into the basement because of the sounds of the 100 plus railroad cars coupling and uncoupling; the whistles of the engines interrupting sleep. Gone are open windows catching summer breezes, smelling fresh air, the soft sounds of night. Now odors from diesel engines, sounds from moving trains and heavy equipment interrupt and cloud their sleep...and the dust...always the dust; covering homes, dirtying clothes hanging on lines, clogging screens, moving a child's outdoor birthday party inside because of dust covering the picnic party plates.

A teacher and his wife pulled their children out of the local school because of their concern for the carcinogenic silica dust from a complex just blocks away. The filtration system at the school had to be upgraded. The upgrade of these filters may protect students inside classrooms but not children on the playground and athletic field. The school board was offered monitoring at no cost, but the offer was turned down. The information about the filtration system, once given freely by the school administrator, is no longer easily obtainable. This school has a prominent sign in the parking lot asking parents not to idle their vehicles because of the dangerous pollution it causes! When the family complained of the sand situation they were harassed by threatening phone calls. They eventually walked away from their home of 10 years, uprooting their children from friends and familiarity, moving to another town.

Another family cannot find renters for their property located next to the rail line; it has been standing empty for three years causing them a lack of valuable income.

Lastly is the story of two brothers, one a mining engineer the other a mathematician, who grew up on a farm near a wetland refuge... playing, fishing, exploring, dreaming ... as boys will do. Growing to love these acres of wetland and the biodiversity it presented. This once beautiful wetland is now being destroyed by mine structures and pollution to the streams that flow through it. Much of the wildlife has left. A place of dreaming for future young boys is now destroyed.

I must remind you. There are faces with voices out there, not shown in scientific charts and graphs, children's faces that need to see a world of renewable energy ... from the sun and wind. Continuing our dependence on fossil fuels as energy sources not only destroys land, air water, health and a rural way

of life. It destroys dreams. Converting from fossil fuels to renewable energy will be a long journey. This proposed rule of cutting carbon emissions by 2030 is a start but it doesn't go far enough. Other sources of pollution must also be considered.



EPA CO2 Coal Plant Reduction Hearing Comments 30 July 2014

Good morning and thank you for this opportunity. I'm Dr. Crispin Pierce, toxicologist, Associate Professor and Program Director of the Environmental Public Health Program at the University of Wisconsin-Eau Claire. My credentials include 15 peer-reviewed publications, 44 scientific presentations and the Fulbright Scholar Award.

I've traveled 1,000 miles from Wisconsin to make two points:

1. All fossil fuel use causes risks to human health, from carbon pollution to frac sand mining; and
2. I support the proposed CO2 reductions, as the first step in a strategy that should include carbon fees and dividends and a shift to renewable energy, in order to protect public health and private property.

Greenhouse gas emissions are warming the planet, providing longer seasons for Lyme Disease and more breeding habitat for mosquitoes carrying West Nile Virus in Wisconsin. We've seen the costly breach of Lake Delton due to heavy rains and flooding, and we're worried about the Emerald Ash Borer and warming trout streams. All of these are associated with burning coal, which accounts for 70% of electricity in Wisconsin. Mercury from this coal has now led to fish advisories to limit consumption for pregnant women for every lake in the state.

A more recent energy source has been oil and gas extraction from hydraulic fracturing. Frac sand mining will remove 26 million tons of sand from Wisconsin this year, and with mining fine particulates including silica are released into the air. Our state regulator, the Wisconsin Department of Natural Resources, is requiring less than ten percent of the 135 active frac sand operations to monitor their emissions, and they are not measuring the most dangerous fine particulates, PM2.5, which can cause cardiovascular disease, lung cancer, and premature death.

To address this important concern, our research group has done independent testing of the air around frac sand plants over the last five years. We've found elevated levels of PM2.5 including silica in neighboring communities.

In order to buy EPA-certified instruments to confirm our findings and provide needed comparison with the EPA PM2.5 standards, we have now turned to public crowd-sourced funding.

I've brought with me today one of our instruments, to emphasize the need for air monitoring. This is the DustTrak II which will now measure the PM2.5 fine particulates associated with frac sand mining. These two tubes contain the natural sandstone that contains all size particles, and the final frac sand containing just the

large particles used in hydraulic fracturing.

Starting the instrument, we see that the PM2.5 level in the room is below the 12 micrograms per cubic meter EPA average standard. When I invert the tube with the frac sand and measure emissions, we see no or a slight elevation in the PM2.5 level. In contrast, when I invert and measure the sandstone, the PM2.5 level increases hundreds of times above the EPA standard. These are the dangerous fine particles emitted or left behind after mining. And this is why air monitoring must be required during frac sand mining and hydraulic fracturing operations.

Even knowing that less reliance on coal will lead to more frac sand mining in Wisconsin, I want to express my support for the EPA initiative because of the important health, cost and property benefits this regulation will provide for our country.

All uses of fossil fuels for energy – coal, oil, tar sands, methane – carry health risks. The proposed CO2 reductions are an important first step to protect public health, control costs, and protect private property.

Crispin Pierce, PhD

Associate Professor and Program Director

Environmental Public Health Program

University of Wisconsin-Eau Claire

105 Garfield Ave.

Eau Claire, WI 54702

(715) 836-5589, piercech@uwec.edu



Welcome to the Frac Sand Sentinel, a newsletter highlighting resource links, news media accounts, blog posts, correspondence, observations and opinions gathered regarding local actions on, and impacts of, the developing frac sand mining and processing industries.

The content of this newsletter is for informational purposes only. The editor of the Frac Sand Sentinel does not accept any responsibility or liability for the use or misuse of the content of this newsletter or reliance by any persons on the newsletters contents.

You are receiving this newsletter because you have expressed an interest in this information. We don't sell or loan your e-mail address to anyone. You can subscribe for, or unsubscribe from, the newsletter at any time by emailing the sender at sunnyday5@charter.net, noting your request.

CHECK OUT THE WEBSITE: WWW.CCC-WIS.COM for additional information.