Shirley Masuo

Regarding Hydraulic Fracturing in the DRB:

My name is Shirley Masuo and I live in the DRB in Shohola, PA. I also work in the DRB in Narrowsburg, NY. The organization I work with is currently conducting a survey of the people who have been impacted by natural gas activity all over the country. These surveys and the supporting documents to back up what these people are reporting, have been sent to, and officially recorded by the Agency for Toxic Substances & Disease Registry (ATSDR) - a part of the CDC. The ATSDR has in turn, sent this information to the PA Department of Health, which is now also making a registry of them and interviewing the survey-takers to verify what is in the surveys. It think it is very important that the DRBC read these excerpts (below in this comment). There are, of course, many, many more than what you will read here.

For many years the natural gas industry claimed that the experiences of the people who claimed to be affected by gas drilling were "anecdotal stories". They can no longer say that now that the horrific experiences of some of these people have been officially recorded.

Since the part of PA's Act 13 that put a gag order on doctors concerning the health impacts of gas drilling has been overturned, Health professionals are banding together to create an organization like Concerned Health Professionals of New York. It won't be long before these groups of health professionals begin to make a lot of noise concerning the health impacts of gas drilling. The ugly truth is all going to come out and will become general knowledge. When that happens, I sincerely hope the DRBC will be able to say they were on the right side of this issue. I hope the DRBC will BAN natural gas drilling in the DRB.

Below - excerpts from a few of the Damascus Citizens for Sustainability's Natural Gas Exploration and Production Health & Community Impacts Survey http://www.damascuscitizensatsdr.org

Extracts of Impacts Described by DCS Survey-takers - In Their Own Words

Parker County, TX

I've had Pneumonia 3 times. I almost stopped breathing and they couldn't find the cause. I have to wear oxygen at night and they can't find the cause. We try not to go outside on cloudy days because our symptoms get worse. Also early in the morning because the chemical smell gets worse. When we spend time outdoors we get sore throats and burning eyes and sometimes get sick, so we try not to go out too much.

My grandchildren visit, but very little because I don't want them to be exposed. When they did stay over, they had asthma attacks.

Less deer than normal, maybe due to earthquakes since they started. Haven't seen an armadillo in the past two years. In the last two years, ducks return each year, but no babies anymore. They used to lay eggs next door every year. Geese with growths on their necks. I don't fish anymore because of this.

Susquehanna County, PA

We can't drink from our well. It is contaminated because of fracking. We have to go to the neighboring town to fill up a 550 gallon tank and truck it back and put it in the water buffalos - our

own and our neighbors too. (Cabot Oil & Gas sent Guy Parrish of G.L. Parrish, Inc. to disconnect my well. So now I wouldn't be able to list my home for sale because I have no water going to it. It is considered condemned property by the tax office.

Centre County, PA

Showered once in NCL's fracking mud & soup as well as an extremely powerful acid. Lit up my central nervous system & brain. Did not burn skin or eyes. Made my ears ring like a fire siren every second of every day ever since. This was in late October 2013.(2/6/14 severely burned eyes from 10 seconds dishwasher door was open and steam with acid escaped dishwasher that had just been run. Sent me to Mt. Nittany Hospital emergency room.

Fayette County, PA

When it started to get cold, my husband went to bring the tomato plants indoors. Some moisture had collected on the leaves and when a drop of it dripped on his arm, his arm started burning. He ran into the house to rinse it off.

The dog licks her paws after stepping in the moisture on the porch. It must make them feel like they're burning. She first started licking them in 2011. She had never done that before. The vet said the dog has a rash she'd never seen before. The dog knows there's something wrong outside and doesn't want to go out there. She just goes out to do her business and comes right back in. One dog hemorrhaged to death, and one had breathing problems.

In 2010 my grandson was outside playing football and told my husband there were dead birds up in the yard. There were 30 or 40 birds laying dead in the back yard.

Both grandsons still have the rashes on their chests. The doctor treats it and it will go down some, but won't go away. We started noticing it in 2010 when the smells started - when they put the bigger compressors in. I told my grandsons, if you smell that smell, don't go outside.

Something happened in 4th grade to my grandsons neurologically. One of them would go into raging fits - running to the woods. My daughter would go after him and he'd just go further and further into the woods. She'd look for him for hours till he'd come home. Medication keeps him under control.

Young trees fall over for no reason. Plants can't grow flowers outside - they won't even come up out of the ground. The Rose bush bark is completely black and now there are fewer roses than before. We haven't grown crops for five years because they would get holes in the leaves and didn't taste good.

They had a strange taste in them. We stopped in 2007.

The Fire Department will no longer respond here. The smell would be all over the place - like a chlorine smell so bad it took your breath away or burned your throat. By the time they would get here it would have blown away, so they won't respond anymore.

Bradford County, PA

When my husband and I visit our daughter in Tennessee we would feel better within two day and gain back our energy. When we got home, two days later, we were again lethargic. When our daughter and her husband would visit, she would become lethargic after of two days. Her boyfriend would not even stay here. He would stay at his parents' house about 20 miles away. Eventually our daughter started staying there too during her visits, only staying here for Christmas Eve. That area won't allow any gas drilling.

My husband's testicles were enlarged for one month in 2012. Also in 2012 my reproductive system shut down. The cows' did as well. We all had no menstrual periods for five months in a row. When my daughter came here, she would skip a menstrual cycle.

Bedford County, PA

My life has changed. I have watched so many of our animals die, that I wake up wondering which one of us is next. We have Buzzards line up on our fence post and watch our house. Bedford County wants to raise our taxes, but give our land to the gas companies. I'm so tired of being sick, watching our pets die.

Butler County, PA

I had to walk to a hunting cabin in the winter with a 3 yr. old to do laundry and get water to flush my toilet. We got drinking water from the store. We had to go to friends for showers. I could not cook so we wasted time and money and our health eating out. When it comes to the air we lived in a blue haze. The air smelled all the time. We could barely go out to play. When we walked to the cabin we used scarfs on our faces when it was real smelly. Flaring is noisy and there is no outside time when that happens. Our roads were terrible to drive on from the trucks. a lot more pot holes. When drilling comes you become a prisoner in your own home.

Cambria County, PA

In Feb. 2008, after gas well blowout where water spewed through the air and cattle drank from a nearby pond, four calves were stillborn, six calves had birth defects and died within a day. A two year old heifer died, and the bull became infertile within two years, all of this I blame on the contaminated water that the cattle drank. The pond has been blocked off since April 2008. One calf had gigantism, killed calf and mother at birth. Some calves were stillborn after initial loss in 2008. Mother cows (some) act as if they don't know how to take care of calf after birth. Ignore calf, won't let calf drink. Each year we must place some mothers and calves in barn, segregate from herd, until the mother adapts to the baby's needs. We never had to do this prior to drilling.

In Jan. 2008, after our drinking well water became brown, the DEP required Dominion Gas to provide bottled water for drinking and cooking and to restore our water in West Pike Run TWP. 15427. The gas company dug a new water well 300 ft from a gas well, 30 ft. from our manure pile. That water is grey and salty, but the DEP approved it. They said it passes federal guidelines and that it is salty from not using it. We have paid roughly \$800 annually for drinking water since 2009. Dominion was no longer required to supply the bottled water due to the new drinking water well.

Washington County, PA

More often than not, my wife and I experience sore throats and watery eyes. We have had several headaches and stomach aches at times when the odor is overwhelming.

Never have I had any stomach problems but now, I am being treated.

My wife is being treated with anxiety pills. She never had any breathing problems however now, she has frequent coughing attacks. An ambulance showed up at our home to treat my wife. There was a burning plastic odor in the air which caused her to have a violent cough.

Bradford County, PA

I was an employee of Nuvvera, hauling fresh water to multiple gas sites, and hauling the waste water/mud away from the gas sites.

I have been exposed to many of the waste materials while hauling them and fresh water to and from the sites around the area. In November of 2014 I began to feel ill, thought it was the flu. I had had a clean bill of health at my physical in October of 2012, By December of 2014 I was hospitalized. I

have been diagnosed with Partial renal failure from minimal change disease, 2 forms of septicemia, c-diff, an enlarged prostate, hyperthyroidism, my body has trouble regulating salt and potassium levels, I have had a 3 piece kidney biopsy, a muscle biopsy due to muscle weakness and nerve damage. I have been on heart medications to try and stabilize my heart rate. I have had no medical history of problems besides some back problems and high blood pressure. I was diagnosed with strongyloidiasis, and now have nodes on my thyroid that they will be giving me radiation treatments in the fall for, They have to wait until I gain some of the 60 pounds I have lost back.

minimal change disease that caused partial renal failure, muscle weakness, nerve damage, leg tremors, full body rashes, head aches, nausea, trouble eating, strongyloidiasis, impaired heart rate, hair loss, my taste is near gone, hyperthyroidism with nodes on my thyroid, my prostate had become enlarged, 2 forms of septicemia, c-diff, pneumonia, trouble regulating potassium and salt levels, all of the skin on my feet has been peeling off, leaving them red and sore and tender. my whole body hurts to the touch, even my nail beds are sore. i have had multiple sores on my body, dizziness, irritability, difficulty with memory and concentration.

Mesa County, CO

We had about 12 wells within a six minute walk.

Our eyes would burn and my kid's too. He got bloody noses too.(Often when my wife would take a shower, she would be bright red and have blisters all over her body. She went to the doctor quite a few times for things that were bothering her, but was poo poked every time. The doctors didn't want to cross the gas industry. They wouldn't even consider our well water as a grounds for what was going on with her. They wouldn't listen to you or look at you. You could have sores in your mouth like my wife and they wouldn't consider toxins as the cause.

We were drinking the water and then we began to realize that our physical problems started right after the drilling began - headaches - bloody noses - itchy skin(I planted 129 fruit trees. Was watering them with well water. Every single one of them died. We planted 250 christmas trees (blue spruce) and they all died. It was going to be our retirement business. They were fine in the greenhouse - watered with rain water - growing and thriving, but when they got out into the air and were watered with the well water, they all died within a month.

The wind would blow over the wastewater impoundment pit and blow the stench right to my house. I'd be out in my yard and there would be birds flying that would all of a sudden crash land. they were overwhelmed by the fumes. You couldn't breath that stuff.

Washington County, PA

In 2008 it started with stomach problems & headaches. It has affected everything from my teeth to my skin. It affected our soil and water and air.

I stayed away for 4 days in Feb. '15 with my sister. I had no headaches. Felt better all around. Headaches returned when I came back home.

I delivered Meals on Wheels for 13 years. I can not longer deliver because of heart surgery and my legs are weak.

I attend church in Avella within 1 mile of a well while drilling and burn off. We no longer sit on our porch or have kids play in the yard. The air is polluted and the grass destroys the shoes. We used well water 36 years until I had open heart surgery. I had a rash since 2009 from the well water. I did not want to come home from the hospital and use the water since my rash was gone. Our sons had a buffalo and installed it before I came home.

In 2006 I got new teeth. I have posts for my bottom teeth. I've taken care of these posts since 1984 with no problem. In 2008 they got some irritation. I went to Dr. Spatz in 2009. He gave a rinse that

helped. I went every 3 to 6 mo. for cleaning & prescription rinse. I used the well water for brushing (soaking) teeth. It put a coating on the teeth that had to be ground off. In 2013 insurance stopped paying.

We both have muscle weakness. Both still have headaches and eyes burning and watering. It has been going on for seven years. Dr. Wilson recommended an occupational therapist to examine me. There is one in Jefferson hospital. I can't afford another doctor.

Two yrs. ago we had little rain.

I watered my garden from my well twice a day. In two weeks my whole garden died. I planted for 75 years.

Now I can't.

Wetzel County, WV

I have written letters to my state officials and to the president. I don't understand why things aren't being slowed down just to see what's really going on with this oil/gas boom. It's been going on since the 90's that I know of. I've been poisoned twice by oil/gas. The 1st time that it happened there was no warning or talk about anything until you lived in it. That wasn't fair; We should have had a choice to stay or leave. The public had no knowledge of the water, air, noise pollutions that came with the rigs. My youngest son has thyroid problems because of oil/gas business. I have skin cancer and can't afford to move, so I live in and with it. Peoples health should be cared about instead of money.