IMPACTING OUR LIVES FOREVER
WHAT ARE THE HEALTH, SAFETY, AND WELFARE CONCERNS?
PATRICIA J. POPPLE, CHIPPEWA FALLS
FRAC SAND MINING: THE NEW RUSH AFFECTING TOWNS, COUNTIES, CITIES, STATES AND REGIONS OF THE UNITED STATES AND THE WORLD BEYOND: THE FOSSIL FUEL EXPLOSION.
FRAC SAND FACILITIES IN WISCONSIN

- MAY 23, 2016 Statistics from DNR WEBSITE

- *128 FRAC SAND FACILITIES IN WI
  * 92 ACTIVE FRAC SAND FACILITIES IN WI
  * 32 INACTIVE FRAC SAND FACILITIES IN WI
  * 4 RECLAIMED OR IN THE PROCESS OF BEING RECLAIMED
  * MORE EXPANSION, MORE PERMITS BEING ISSUED

- HOW MANY FRAC SAND FACILITIES CAN BE TOLERATED IN WISCONSIN’S FRAGILE ENVIRONMENT?
TRUCKS—SOME UNCOVERED AND MANY TRANSVERSING HIGHWAYS AND BYWAYS IN OUR COUNTY
100-140 UNIT CARS TRANSPORT SAND AT ONE TIME
Dust discharged from a unit car which came from a mine in WI—located in PA at an early childhood center.
WASTE WATER PONDS
BLASTING OF THE MINES
FRESHLY FRACTURED CRYSTALLINE SILICA DUST???
WHAT ARE THE RESPONSES OF ANIMALS AND PEOPLE TO THE BLASTING PROCESS?
HOW WILL THIS MINE BE RECLAIMED?
What Chemicals Are in the Ponds?
FRAC SAND MINES EXPAND QUICKLY
13 APPROVED MINES IN CHIPPEWA COUNTY

MORE ARE IN THE APPLICATION AND PERMITTING STAGES
HIDDEN BEHIND BERMS
TONS OF SAND ARE REMOVED FROM MINES YEARLY
CLEAR CUTTING OF TREES OFF ALL THE HILLS
QUARRYING-S AND S MINE
BARRON COUNTY PROCESSING AND TRANS-LOAD PLANT-GREAT NORTHERN SAND
CHIPPEWA COUNTY PROCESSING PLANT AND TRANS-LOAD STATION-CHIPPEWA SANDS IN THE VILLAGE OF NEW AUBURN
BARRON COUNTY PROCESSING PLANT AND TRANS-LOAD STATION-GREAT NORTHERN SAND
2.6 million tons of frac sand can be processed and trans-loaded at the EOG Resources Plant in Chippewa Falls each year.
SOMETIMES CONVEYORS ARE USED TO MOVE THE FRAC SAND
Fugitive Dust Produced as Rail Cars Leak Frac Sand
EMERGING PROBLEMS

1. USE OF HUGE VOLUMES OF WATER-SOME RECYCLED FROM STORM WATER PONDS
2. RESPIRABLE CRYSTALLINE SILICA BLOWING IN THE AIR
   - HOW FAR DOES IT TRAVEL?
   - AT WHAT LEVELS IS IT DANGEROUS TO HUMANS AND ANIMALS?
   - IS IT APPROPRIATE FOR USE AS ANIMAL BEDDING?
   - WHY IS IT THAT INDUSTRY PROTECTS WORKERS BUT THERE IS NO PROTECTION FOR PEOPLE LIVING AROUND MINING FACILITIES?
3. IS RECLAMATION OF MINING SITES GOING TO WORK?
Blasting adds dangerous particulates to the air
RESPIRABLE CRYSTALLINE SILICA IS CARCINOGENIC

Blasting near Augusta near families and their homes and animals
Respirable crystalline silica is dangerous and gets into the deep lung causing silicosis and other disease!
During windy days, particulates become wind blown.
1. MORE THAN 20 COUNTIES AFFECTED DIRECTLY
2. MANY OTHER COUNTIES AFFECTED ALSO
3. THIS INDUSTRY KNOWS NO BOUNDARIES AS FAR AS POLLUTION IS CONCERNED----IT DOESN’T STOP AT THE PERIMETER OF THE OPERATION
4. TRANSPORTATION INCLUDES:
   - TRUCKS
   - BARGES
   - TANKER “BOMBS” TO AND FROM FROM THE BAKKEN
   - TRANSPORT OF SPENT WASTEWATER ACROSS THE COUNTRY
   - PIPELINES AND MORE
BARGES CARRY FRAC SAND ON THE MISSISSIPPI RIVER
HYDRAULIC FRACTURING

1. FRACKING IS BEING DONE IN AT LEAST 34 STATES
2. FRACKING IS DESTROYING PA. AND OTHER STATES, PIPELINES AND OTHER LOCATIONS ARE BEING BUILT. OTHER METHODS OF TRANSPORTATION OF THE CRUDE ARE BEING EXPANDED
3. WELLS ARE BEING FRACKED SEVERAL TIMES AND THE DEMAND FOR FRAC SAND INCREASES; THERE IS A NEED FOR FINER SAND AS IT PRODUCES AN IMPROVED FRAC WELL
4. SAND IS BEING SENT DOWN THE MISSISSIPPI AND OTHER RIVERS AND OUT OF OTHER PORTS
5. “NATURAL GAS” IS BEING SHIPPED OUT IN THE FORM OF LIQUIFIED NATURAL GAS OR COMPRESSED NATURAL GAS TO OTHER COUNTRIES
6. EXPANSION OF THE INDUSTRY IS EXPECTED IN ALL PHASES INCLUDING THOSE RELATED TO MINING, PROCESSING, AND TRANS-LOAD OF THE FRAC SAND
7. SOME FRAC SAND MINES, PROCESSING PLANTS AND TRANS-LOAD STATIONS ARE BEING LOCATED CLOSER TO THE HYDRAULIC FRACTURING SITES
NEW AND EMERGING TRENDS

1. EPA INVOLVEMENT IN WISCONSIN-will it still be in operation?
2. CITIZEN SCIENCE
3. FUND RAISING-TO PROVIDE FOR EQUIPMENT AND TESTING - CROWD SOURCING
4. THE CONNECTIONS BETWEEN SCIENTISTS AND CITIZENS
5. THE CONNECTIONS BETWEEN SCIENTISTS AND SCIENTISTS
6. THE HARMED AND PEOPLE AND GROUPS FIGHTING AN INDUSTRY THAT IS A VERY POORLY CONCEIVED IDEA
NEW AND EMERGING TRENDS

1. MORE INFORMED PUBLIC AND GOVERNMENTAL AUTHORITIES
2. LOCAL VS. STATE CONTROL
3. ORDINANCES: MORE RESTRICTIVE IN SOME RESPECTS

OR

ORDINANCES THAT EQUATE SAND AND GRAVEL OPERATIONS WITH FRAC SAND MINING OPERATIONS—IT’S APPLES AND ORANGES ON THAT ONE!
WHERE DO WE GO FROM HERE?

- 1. MAKE CONNECTIONS WITH OTHERS AFFECTED BY THE OIL/GAS/MINING INDUSTRIES: NETWORK!
- 2. BEGIN LOOKING AT ALTERNATIVE ENERGIES: SOLAR, WIND, OTHER
- 3. REDUCE, REUSE, RECYCLE
- 4. EDUCATE, EDUCATE, EDUCATE

- CLIMATE CHANGE, PRICE INCREASES, THE CONTINUING PUSH TO EXPAND THE INDUSTRY INTERNATIONALLY
WHAT CAN YOU DO?

1. VOTE/WRITE LETTERS TO THE EDITOR
2. CONNECT WITH A LOCAL OR STATE GROUP
3. DONATE FUNDS TO GROUPS TO ASSIST
4. CALL YOUR LEGISLATORS AND LOCAL OFFICIALS
5. DISTRIBUTE INFORMATION
6. GO BEYOND THE MAINSTREAM MEDIA TO LEARN MORE
7. DON’T ACCEPT THE RHETORIC OF MORE JOBS! JOBS! JOBS! AND ECONOMIC DEVELOPMENT
8. RAISE QUESTIONS AND EXPECT ANSWERS
9. CREATE AS MUCH TRANSPARENCY AS POSSIBLE ON ISSUES
SUGGEST TO YOUR GOVERNMENTAL OFFICIALS THAT THEY TAKE A TOUR OF MINES TO THE NORTH!
Our hills, ridges and bluffs are rapidly leaving our state along with the resources designed to keep our water supplies clean and safe.

MOVING TO SUSTAINABLE ENERGY WILL HELP IN MANY WAYS TO ALLOW US TO LEAD HEALTHY LIFESTYLES
HEAVY METALS IN WATER

AN EMERGING FINDING
NEW WELLS, SULFIDES, LOW PH LEVELS, LEACH OUT TOXIC METALS INTO AQUIFERS, GROUNDWATER AND WELLS
A FEW RESOURCES

- *Research by Power and Power: Economics of Frac Sand Mining*
- *Toolboxes on Websites: Wisconsin Towns Association and Wisconsin Farmer’s Union*
- *Films, Videos*
- *Communities at Risk: A Study by Civil Society Institute*
- *EQB Study on Resources for Governmental Officials-MN*
- *Iowa Study*
- *Pierce Studies with Univ. of Iowa*
- *Farmers Union Studies*
- *Bamberger and Oswald Studies on Humans and Animals (Hydraulic Fracturing)
QUESTIONS?

COMMENTS?
WWW.CCC-WIS.COM
PHOTOS BY TED AUCH

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OTHERS TOO NUMEROUS TO MENTION