

## 2013 — 03 Minnesota Frac Sand Mining

Minnesota has several operating frac sand mines where silica sand is extracted, stockpiled, processed, coated, and hauled off to a sand transfer facility. Corporate interests are pushing for more and larger new industrial-scale mines in Southern Minnesota with little regard to the impact on people and the environment. The large environmental, health, economic, and livability factors these mines represent has stirred up residents in rural areas and caused local governments to ask for regulatory help from state government since they don't have the resources or mandates to deal with the issues.

### Issues

The unresolved issues that the mines and transfer facilities represent to people (mine workers, truckers, mine neighbors, and the livability impact to communities), to roads and infrastructure, and to the environment includes;

**Water** - Very large amounts of water are used for cleaning the sand often resulting in pollution, unwanted spills, contaminated or dry wells, and soil percolation issues to workers, mine neighbors, and the surrounding environment. Any mine can raise concern about possible groundwater and aquifer contamination, because digging away the topsoil removes a natural filter. In parts of southeastern Minnesota, the frac sand comes in layers alternating with limestone. This process in limestone configurations can create sinkholes and cavities. The result is that surface contamination can pass through those cavities very rapidly and impact peoples' wells in a very large area, because the water can travel so fast and so far without any real filtering.

**Chemicals** - The sand is often coated such as with a polymer. The coatings, or their breakdown products (such as acrylamide, which causes damage to peripheral nerves and the brain), are often toxic to workers and mine neighbors. Spills can pollute the water.

**Silicosis** - Silica is classified as a class-one carcinogen, known to cause cancer. Very fine airborne silica sand particles when ingested during mining operations, or during transit, (silica dust kicked up from gravel roads, open trucks, and open train transit) can cause silicosis, a terminal lung disease. Once the dust becomes smaller in size than 10 microns, it becomes difficult for the body to remove the dust particles. A maximum exposure level of 50 micrograms per meter cubed may be appropriate.

The difficulties in detecting silicosis is that it can take up to 40 years for symptoms to present themselves, making it hard to hold a mine liable, as most do not stay in business that long. Residents have seen white dust lining their window sills, and they fear for their lungs.

**Spills** - Sand, water, chemicals, etc. can spill. In Wisconsin, six sand leaks occurred in one year from frac sand sites and some were not reported for several days. Ponds holding silica sand slurry have burst, contaminating surface water and neighboring property. Communities worry about stream, groundwater and wellhead contamination.

**Livability** - Residents of some small communities have seen the landscapes they love being bulldozed and hauled away. Often the peacefulness of communities is considerably destroyed by mining.

As many as 450 truck round-trips can be made in a day. Truck traffic from mine sites affects livability and tourism in a negative way. The promotion of tourism and mining is not compatible. The daily and high truck traffic on gravel roads and through a community to a nearby rail facility occurs with the associated diesel emission smell and noise. Residents have watched truck traffic levels on narrow roads grow dangerous and destructive.

All mines will eventually shut down. If you look at Wisconsin communities before and after the commencement of mining operations, those communities are generally worse off after the mine has shut down. Usually, community growth begins to shrink as few people choose to move near mines and property value decreases, especially for mine neighbors.

**Economic** - Sand mines pay good wages but they are susceptible to a flickering effect. Depending on the price of the commodity being excavated, mines will shut down or restart. When gas prices are down, the need for sand drops, which slows down production of mines and delays the opening of other mines. Workers are then furloughed.

Who should pay for the torn-up roads, the drop in property values, the drop in town populations, and the drop in livability (the land scars, the smell, the noise, the accidents, and the drop in peaceful living)?

Wisconsin has seen 36 deaths due to sand mining. Who is going to pay for the deaths that occur in Minnesota due to sand mining?

Therefore be it resolved: The Minnesota Division, Izaak Walton League of America in convention, April, 28, 2013 takes the following positions:

- a. **Strong state-level permitting requirements that work with local control.** These state-level requirements would serve as a floor. Local authorities can add standards that address local situations of concern.
- b. **A state moratorium in the impacted communities** on any new frac sand mine or sand transfer facilities to allow time for creating state requirements and to complete an in-depth study.
- c. **An in-depth state study**, such as a Generic Environmental Impact Statement. This study would help set state permitting standards, site emissions monitoring requirements, and analyze the potential impact of the industry.
- d. **Permitting and operating fees on the industry** that cover the costs of state regulation, facility emissions monitoring, and damage to the environment, as well as roads and bridges.

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