

MEMO

From: Mikey O'Connor (mike@haven2.com, 651-647-6109)

To: Buffalo County Board of Adjustments

RE: General issues with industrial frac sand mines in the Gilmanton basin

Date: February 2, 2012

- **Threatened or Endangered Species concerns**

Buffalo County is home to a number of threatened or endangered species – both plant and animal. The impact on these species could be quite substantial through habitat loss, stress, dust, traffic, groundwater and surface water pollution and other results of industrial frac sand mining in inland areas of the County.

- **Cultural, Scenic, Habitat, Archeological or Historical Resources concerns**

Buffalo County has a wide variety of scenic, habitat and historical resources that comprise the basis for much of the reason why people visit and live in the area. Industrial frac sand mining (and the largely truck-based transportation of that sand from mines, to processing plants, to railheads) may have a significant negative impact on these resources. This in turn may cause significant disruption to the County economy, area property values, and quality of life of County residents.

- **Groundwater, Wetland, Floodplain and Surface water concerns**

Much of the character of Buffalo County comes from the wetlands and river ways throughout the region. Industrial frac sand mining threatens those resources in a number of ways and once depleted those resources may never return.

Insufficient holding ponds may introduce pollutants into water supplies.

Dust from mine operations and transportation may pollute surface water.

High volume wells may deplete the water table.

“Recycled” water from mining operations may introduce pollutants into the water supply.

- **Public Health concerns, including toxic waste, potable wells and air quality**

Industrial frac sand mines and their associated processing plants may comprise a significant risk to local and regional ground water supplies. Processing plants may deplete the water table and ground water supply. They may also damage those underground waters when they “recycle” the water they use back into the aquifer, with the addition of toxic chemicals left over from processing activities.

The very high air quality of the region may be damaged by dust and particulates introduced into the air through blasting, trucking, sand-mine operations, and processing-plant operations.

- **Public safety concerns, including any ponds and roads**

Buffalo County’s industrial frac sand mines are unusual in that they are located quite far from railheads, necessitating extraordinarily long truck haul routes to move the sand from mines to railheads. Most industrial frac sand mines are located within a mile or two of railheads and thus don’t generate nearly the same level of truck-transport that the mines currently under review will.

In addition to the impact on the sub-standard Praag Valley Dugway portion of Highway 88 (see separate comments of the same date), high volume industrial frac sand mining may cause

significant public safety concerns on other and local roads throughout the region.

Of especial concern is the impact of a large volume of truck traffic on river towns such as Nelson, Alma and Fountain City. State Highway 35 becomes the main central street of each of these towns. There are generally few crosswalks in the central business districts of these towns because of the press for parking spaces for local businesses. The addition of high volume sand-truck traffic to this mix may cause significant risks of accidents and fatalities in those areas.

Buffalo County is a “hot spot” for White Tail Deer and all three state highways become hazardous (year round) as darkness falls and the deer venture out. Recent mine applications have granted “24x7” trucking schedules, which may cause increased risk of accidents as trucks or cars attempt to avoid deer strikes only to collide with each other or are forced off sub-standard state highways.

Sand trucks will share state highways with school busses, farm equipment, farm animals, recreational vehicles and all manner of pedestrians. The increased volume of traffic, coupled with aggressive driving driven by tight schedules, may produce higher risk of collisions and fatalities.

Sand trucks routed to processing plants in Winona, MN will be using a river-crossing bridge that was closed for several weeks due to structural integrity and safety concerns. The additional load may shorten the lifespan of that bridge or cause failure of the structure.

Buffalo county roads are a favorite of tourists, birdwatchers, motorcyclists, bicyclists and others who enjoy the scenic beauty of the region and congregate at the many local businesses. Sand trucks operating at or above the speed limit may cause safety issues as they encounter unwary or erratic drivers who may make frequent stops, park on narrow shoulders and are in general not driving well.

This is farm country. Local farmers move livestock across sub-standard town, county and state roads, which may cause a safety issue if the volume of traffic from heavy sand trucks increases dramatically.

- **Local negative Tax, Fiscal and Economic Municipal and resident concerns, including financial assurances to allow proper and timely closure/reclamation.**

Much of the property value of rural lands in the county derives from the quiet beauty of the area. The transformation of area roads into transport corridors for industrial sand mine trucks may dramatically reduce the value of those properties.

Many businesses in the county are here to serve the needs of tourists and occasional residents who come here to enjoy the recreational opportunities of the region. The value of those businesses – both property value and ongoing revenue – may be dramatically reduced by the addition of frac sand trucks, perhaps to the point where the business is no longer viable.

As property values decline, so does the tax base for the county. Since sand mines will not appreciably add to the tax base, this may result in higher taxes for local property owners to make up the shortfall. Informal reviews of comparable situations indicate that property values could fall as much as 30 to 50% as the trickle of “for sale” signs turns into a torrent. One only needs to look as far as Maiden Rock, WI to see an example of this. And the Maiden Rock situation is the result of a much less disruptive underground sand mine that ports the sand directly to rail cars. The impact of open pit mines, located at least 25 miles from railheads, may be much larger.

Industrial frac sand mining may temporarily bring new jobs to the county, but the arrival of these mines may destroy more jobs than it creates. The wages paid to frac sand mine employees may be more than offset by the loss of wages paid by other employers as they go out of business, move elsewhere, or decide not to come here at all.

Economic development in the county may be harmed if prospective businesses find the area unsuitable due to sand mines. A recent news story tells of a high-tech business that abandoned its plan to locate in Chippewa county due to dust produced by a newly-opened sand mine close to the location they were planning to invest in.

- **Potential Public Nuisance concerns including dust, noise, traffic congestion, odor, blasting, drilling, light pollution and erosion.**

The noise of blasting, sand loading, truck transport or mine operations may cause emotional distress and psychological issues for nearby residents and those along proposed transportation routes.

Increased truck traffic may cause traffic congestion, noise, dust and odor in the old river towns through which sand trucks pass.

Permits for 24-hour mine operation may cause light pollution for nearby residents.

Open-pit extraction of frac sand may cause erosion and runoff that damages local streams and waterways.

- **Closure/Reclamation concerns**

Mining companies may not have sufficient assets at the time of closure to complete promised closure or reclamation activities.

The mine may leave toxic or industrial waste behind if ongoing containment, mine-closure and restoration are not conducted properly.

- **Work place and local resident safety health and financial concerns**

The dust produced by open-pit mining operations may cause short and long-term health issues.

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PROPOSALS:

- **Do not issue permits for frac sand mines that are located more than 2 miles from railheads.**
- **Cancel any existing permits that are located more than 2 miles from railheads.**
- **Conduct studies to address these issues before entering into agreements with mine operators**
- **Ask mine applicants to pay for the studies, but put the selection of experts in the hands of the County.**
- **Establish formal mine agreements with mine operators**
- **Specifically address all of these issues in the mine agreements.**