

Comment regarding the HDR meeting on 18 April 2016

By Bonner Milltown Council Land use Committee member Bruce Troutwine 3 May 2016

I understand the Engineer budgeted to engineer four alternatives for the County. He stated he was not charging for the do nothing option.

Because of the non-symmetrical boundaries of the communities and neighborhoods, it's probably not feasible to connect every home in the area to a facility. That is why I feel it is important to also include Clustered and Onsite systems in the PER. The knowledge and information in the PER can benefit the owners in the surrounding areas that have similar conditions.

Even in the Bonner/West Riverside area, Clustered and Onsite systems may actual be more economical and better for the environment then a mechanical facility.

For standardization can we use the definitions on page A1 of the attached document that Congress paid the EPA to create for our benefit?

- a. **Centralized:** Install a new collection system and connect to the existing Missoula Wastewater Sewer Treatment Plant (mechanical treatment)
- b. **Decentralized System:** A new treatment facility to possibly service the communities of Piltzville, Bonner, West Riverside, Pinegrove or even Juniper Drive. (mechanical treatment) This probably does not address the needs for areas like Turah, Marshall Canyon, Sunny Meadows
- c. **Clustered Systems:** Several new treatment systems to service the denser areas of the community (mechanical or natural treatment). The New Castle Trailer Court on Juniper Drive is a good example of this.
- d. **Onsite:** (one or more dwelling or business)
 - a. **Dispersion Type:** A conventional onsite system includes a septic tank for primary treatment and a leach field (drainfield) that disperses sewage via perforated pipe and stone into the earth either by gravity or by pressure pumps. This uses the earth and oxidation as the natural treatment. If overloaded or abused, the earth will become saturated and a replacement area is required. Many of these systems currently exist in this area. Many of them meet the modern regulations and many do not.
 - b. **Treatment Type:** These do not use the earth for treatment and require less space than conventional onsite systems. A PATS system manufactured by Presby Environmental is an example.
- e. Status quo (do nothing). Allow existing systems to continue and issue permits as needed for maintenance/replacement

PATS (Passive Aerobic Treatment System) is a natural treatment system that could be used for Clustered and Onsite Systems. Unlike conventional systems, they can be rejuvenated or replaced within the same footprint if abused. They treat the liquids and replenish the water table. Piltzville, Bonner and Milltown could each be served by a PATS for example.

Primary treatment can be performed by an individual septic tank or a larger cluster septic tanks with an optional pretreatment system (bar screen). This will remove solids and non- biodegradable items. Pumping of tanks may be required. With Onsite septic tanks, it's easy to locate user that is abusing the system.

“Satellite Level II System”: This term does not make sense to me. It is not a TYPE or CATEGORY of treatment system like the ones listed above. It is a CRITERIA. This criteria may apply to several types of systems above or may not be required at all. The Administrative Rules of Montana (ARM 17.30.718) defines requirements of level 1a, level 1b and level 2. I am unable to see were the rules state which SWTS (Subsurface

Wastewater Treatment System) is required to meet level 1a, 1b or 2. It appears an un-elected bureaucrat gets to decide.

The Montana Code Annotated Statutes (MCA 75-5) prevents SWTS near open waterways and high ground water tables. Are system that are separated from open waters, have low water tables and have high groundwater flowrates required to meet level 2 or any other level?

I am unaware of any ground water under the direct influence of surface water in this area.

Classifying open waters and high water tables is required before determining if any of these criteria shall apply to a treatment system. This should be done before a proper PER can be complete.

Additional comments:

Water Table: Water is taken from the water table when using a collection system like in a Centralized System. It is then discharged in the river below the facility. This could affect the level of the Missoula Aquifer. This is not a problem with Clustered and Onsite systems because they replenish the water table locally, thus not effecting the Missoula Aquifer level. The EPA seems to be encouraging this.

Even with the existing non-conforming conventional dispersion systems in West Riverside, water samples show total nitrates and nitrite to be less than 0.3 mg/L which is far less than the limit of 10.

Collection System: Connecting to the Centralized Facility would require up to 30 miles of new and existing pipes, tees, manholes, lift stations, etc. The probability of 99.9% of the raw sewage making it all the way to the Centralized Facility is very low giving the history of the existing collections systems.

If one tenth of one percent of the raw sewage fails to make it to the facility, it would be an environmental problem, especially if the leak is near the Clark Fork River. Onsite treatment is a safer solution when the soils in this area are so well suited for treatment of sewage before it gets close to the **low** water table.

In the remote possibility that any nitrates do make it to the water table, they would be diluted by the extremely **high** groundwater flows.

Installing outhouses would probably be less risk to the environment then a long collection system pumping raw sewage for 10 miles, even without considering major problem if the treatment plant has a failure.

Large Centralized Systems: The EPA and Congress are trying to inform State and Local governments that Centralized solutions were a mistake. The economics of scale do not apply to treating sewage.

In the **Missoula Wastewater Facilities Plan Update**, dispersed treatment was considered as Alternative D, but was ultimately rejected. It appears the Plan failed to review the advantages of cluster and onsite treatment systems that don't disperse into the earth or river.

Summary:

- Please consider Centralized, Decentralized, Clustered, and Onsite terminology.
- Please consider Clustered and Onsite systems as a primary alternative instead of a facility
- Please consider Clustered and Onsite systems as an alternative for neighborhoods not served by a facility.
- Open waterways and high groundwater must be identified for these area before any before any MCA 75-5 limitations can be applied.