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8 January 2010

Renai Hill
Environmental Science Specialist
Waste and Underground Tank Management Bureau
Department of Environmental Quality
Box 200901
Helena, MT 59620
Re: Browns Septic Service application

Dear MS. Hill:

Thank you for the opportunity to comment on the revised EA prepared for the proposal by Browns Septic Service to land apply raw sewage and grease-trap waste on the Cummings Ranch near Stevensville. Your cover letter to the public is unclear about the exact deadline is for comments. Your letter to the interested public is dated Dec. 28, the EA is dated Dec. 22. Your letter says comments are due 15 days after release of the EA. But you give no indication when the EA was formally "released." We assume it is the same date as your letter, which means the deadline would be Jan. 11. Several of our members in the Bitterroot Valley say they were told the deadline is today, Jan. 9. It would be helpful in the future if DEQ made the formal deadlines for comment clearer.

As we expressed in our previous comments to DEQ in Nov. 2009, we are concerned that baseline information provided in the analysis is lacking. We appreciate that since then some pits were dug on the site to provide some insight on groundwater levels, but on the whole the EA is still lacking in its disclosure of important information.

1. There is no description anywhere in the document as to what specifically comprises the wastes that are being "land applied." The term "septage" is not in the dictionary (Merriam Webster's Collegiate Dictionary, Tenth Edition.). It does sound like a fairly antiseptic term. From what we can deduce, we are talking about raw sewage, which of course contains numerous pollutants, including nutrients, bacteria, viruses, parasites, metals, chemical compounds and other substances. It will also contain solid waste, which can constitute litter. Grease-trap wastes contain numerous organics, as well as nutrients, metals and chemical compounds. The State of Montana has drinking water and surface water standards for many of these substances. For full disclosure, the State should inform the public about the specific pollutants in the waste that will be applied to the Cummings property.
2. The sample pits to determine depth to groundwater and soil characteristics might very well be characteristic of the whole site, but there is no indication the sites were selected in an

appropriately random fashion. The alluvium on the west side of the Bitterroot Valley is not necessarily homogeneous and some of the soils have been disturbed by land-use activities. A map of the pit locations and an explanation of why they were chosen would be helpful. It also would provide for a more complete determination of seasonal water table movement if pits were also dug at another time of year besides early winter, when water tables and depth to groundwater are generally lowest, and surface waters at base flows.

3. ARM 17.50.89 (12) states that “pumping may not be applied at a rate greater than the agronomic rate of the site for crop nitrogen requirements on an annual basis.” The EA concludes the land application will comply with this. However, we could not find in the EA a description of the vegetation type, except in one place where it mentions “native grass.” The EA should have a more complete description of the vegetation and amount of cover on the land application sites, and their ability to convert or adsorb potential pollutants. Further, there is no description of how much waste will be applied at what rates, where and during which months. It is reasonable to assume that agronomic uptake of nutrients, for instance, will occur only for about 6-7 months, the estimated maximum growing season for the benches on the west side of the valley. There will be practically no vegetative uptake from about October to at least early spring. The EA seems to imply that agronomic uptake will occur year-round at the same amount. It is impossible to determine whether the rate and volumes of the fall, winter and early spring applications will indeed not result in an abundance of some pollutants, such as nutrients, and in turn create polluted runoff. The EA, and permit, should explain and include a month to month application schedule that describes application locations, rates and volumes.
4. The application of lime to control pH is certainly advisable. However, the EA doesn’t explain at what rates it will be applied and what the soil adsorption rates will be, and whether lime precipitate could eventually result in reduced soil porosity. We are not saying this is necessarily a problem. We raise it as an issue because the information on liming is scant.
5. Some local observers indicate that the intermittent stream channel on the north side of the property does have surface flows that reach the Bitterroot River most of the year. Any permit to allow land application on this property should have a wider setback on this channel exceeding the regulatory minimum of 150 feet. Though it is a regulatory metric, no evidence in the EA is provided to show that 150 feet is indeed adequate enough to provide year-round protection to surface flows. We urge caution.
6. The property slated for land application is big-game winter range. Elk use this site most if not all winters. The EA is completely silent on how land-application of raw sewage and grease-trap wastes affects wildlife, both on winter range and year round. The EA does not evaluate whether it could become an attractant, or whether it poses any sort of hazard.
7. If a permit is issued, DEQ should first establish groundwater modeling wells in appropriate down-gradient locations from both sites so that movement of pollutants can be monitored. We also recommend a monitoring site be established at the most appropriate site at the downstream extent of the property along or within the intermittent channel. The permittee should be required to collect monitoring data on a regular basis, and DEQ should do occasional compliance monitoring to ensure the permittee’s monitoring is rigorous. The permittee should also provide regular reports on its applications. This permit should not be approved without some sort of defensible water quality monitoring program.

8. The EA should recognize that the “no action” alternative is actually an action alternative. A number of alternatives are available to the prospective permittee, including other sites, a smaller land application proposal and hauling the waste to an approved wastewater treatment plant. The latter might be more expensive, but the permittee has the option of recouping additional costs by passing them on to their customers. And, if the customers think this is unreasonable, they too have alternatives. They can switch from septic tanks and either create a sewer district or convince their local government to sewer them.

It is reasonable to conclude that growth in the Bitterroot will ultimately require modern wastewater treatment systems and sewers. Part of this solution could include land application on agricultural lands, which we agree can be beneficial and reduce treatment costs. But in that case the wastes receive at least primary treatment. This proposal, on the other hand, appears to utilize the third-world approach of dumping raw sewage on the ground. And thus, we urge DEQ to direct the applicant to seek other alternatives.

Sincerely,

Bruce Farling
Executive Director