

Jeanne Bucher's testimony before the Commission, April 17, 2007

Good afternoon ladies and gentlemen of the Commission. My name is Jeanne Bucher, and my address is 7581 Jackson Creek Road. I am a resident of the Bridger Canyon Zoning District and a Jackson Creek representative of the Bridger Canyon Property Owners' Associations board of directors.

One of my many objections to the planned unit development application before you today is the proposed Waste Water Treatment Facility.

First among my many concerns is that the environmental assessment, the study assessing the environmental impacts of the community sewer and water systems, was conducted by the same firm engaged to design the systems. According to the "**Community Water System**" report prepared for BCP by Morrison-Maierle, Inc., the average daily water demand for the system at build out is estimated at 197,640 gallons per day with maximum usage at 470,380 gallons per day. (Note: these values are projected to take place during the irrigation season. See page 5 of BCP's report.) Even if this is a conservative estimate, the project will require unprecedented levels of water consumption (for Bridger Canyon) with unknown long-term implications for residents of the area.

At peak operation BCP's proposed **Waste Water Treatment Facility** (WWTF) will manage an average of 142,690 gallons of wastewater per day (Bridger Mountain Village Planned Unit Development Community Wastewater System—p. 3). Given the magnitude of the facility, its proximity to Bridger Creek, and the potential for lasting impact, a system failure could affect the health and well being of the residents, recreational activities, and agricultural concerns throughout Bridger Canyon.

Morrison-Maierle, Inc. conducted the development's Environmental Assessment and will also be designing both the community water and sewer systems. While it is not **uncommon** for the firm determining the feasibility and environmental impact of a system to also be the designer of the system, it is not the **recommended** practice. According to the Environmental Assessment Association's Code of

Professional Ethics (see attached, item 6), “members should never be involved in an Environmental Assessment where any direct or indirect conflict of interest may be cause for concern about the objectivity of the final report.” Although to my knowledge the Morrison and Maierle staff who conducted the Environmental Assessment are not members of the Environmental Assessment Association, and while I do not question the integrity of the engineers involved, given each system’s potential for long-term damage to the environment and to the residents of the district, I find it prudent to take the **recommended** course of action rather than the common one.

To that end, BCPOA hired Allied Engineering, an impartial party, to peer review the studies conducted by Morrison and Maierle on the waste water treatment facility. Items of interest in their report include the following:

Allied Engineering reviewers noted several times that BCP’s information to the Montana Department of Environmental Quality (MDEQ) was incomplete, lacked specificity, or presented an unclear picture of the application’s status “due to the unknown schedule and subsequent information.” Allied stated that “many items still need to be addressed, including water supply, water rights, non-degradation, acceptance of the proposed wastewater treatment system, disposal of sludge, groundwater discharge permit, etc.” Reviewers also reported “the MDEQ indicated they cannot approve the general wastewater treatment report as submitted by the Engineer, without detailed plans and specification for the entire system.”

Allied’s review reported that although Morrison and Maierle conducted and submitted subsequent field work and calculations, their initial report to the MDEQ was found to have numerous deficiencies regarding the initial “non-significance determination.”

Reviewers stated that they were also concerned about two apparently conflicting reports regarding the “geologic conditions at the proposed location of the drain field on the bench above Bridger Creek.” The 1999 report referenced by BCP’s engineers stated that the “site is located on...bedrock overlain by ... alluvial deposits comprised of silt, sand, and gravel.” Such soil types are deposited by streams, rivers, or retreating glaciers. Reports of soil type from test pit logs, however,

indicated “a mixture of **clay, sandy clay, and sandy clay loam** with small percentages of gravel and cobbles were encountered” in the drain field area. Reviewers commented that the “descriptions were not detailed enough to determine if the deposits were alluvial in nature, **although high percentages of clay normally are not indicative of alluvial deposits.**”

Allied Engineering noted that another study conducted through MSU in 1993 found that “the surface geology in the vicinity of the proposed drain field was a mass wasting or debris area. Mass wasting areas are typically soils deposited by **earth flows, debris flows, or landslides.**” Reviewers believe it would be prudent to conduct a closer detailed study of the bench upon which the proposed drain field will be located to resolve the conflicting geologic interpretations. If the site is determined to be a mass wasting area, reviewers recommend that a geotechnical analysis be conducted “to determine the stability of the bench and drain field area both under static and seismic conditions with the addition of wastewater.”

Finally, reviewers reminded us that the MDEQ will review Phase 1 of the project without considering the other phases in its approval process—that they will **not** be considering the overall PUD with its full build out scenario.

To put Allied’s report in lay terms, reviewers stated that the information provided to MDEQ was insufficient, that there is a possibility of slope instability in the drain field area (located on a bench above Bridger Creek), and that BCP could get approval for Phase 1 of the project before it is determined whether or not phases two or three would be approved.

Before this project moves any further in the evaluation process, I strongly suggest that the Commission require the developers to, conduct “a complete geological study to resolve conflicting geologic interpretations” of the drain field area, and require the developer to obtain MDEQ approval for all three phases of development before beginning construction of any kind.

Other issues of concern include 1) how BCP intends to lay out transport lines to different areas given the constraints of slope,

wetlands, and stream corridors in the meadow area; 2) how they intend to augment their water usage given that the base area is within the Missouri River Basin Closure and that developers will no longer be able to apply for municipality status with respect to water use issues; 3) how low the “low odor” system actually is? Is there not a no odor system available? 4) what consequences will be imposed on the waste water treatment facility if it does not meet discharge standards; and 5) what potential impacts lie in store for Bridger Creek in the best case scenario, most likely scenario, and worst-case scenario.

I adamantly oppose the PUD application submitted by Bridger Canyon Partners. Their lack of specificity on almost every aspect of the project concerns me. To approve this project without requiring full explanations to the issues raised in my testimony would be irresponsible. The consequences for approving a project with substandard waste water treatment and insufficient water would certainly lead to the environmental degradation of the base area and negatively impact the entire district.

Please join BCPOA and myself in opposing the PUD and CUP applications before you.