

My initial Involvement

In my initial activist involvement I became involved with the rising water in the Travonia and Emma Mines in Butte known as the West Camp System. In 1984, water in these mines began to rise as a result of the Berkeley Pit and Butte Mine Flooding rising water that was initiated when the underground mine pumps were shut off at the Kelley Mine on April 22, 1982. **Water rose to the point where the contaminated water became a danger of discharging to Silver Bow Creek and flooding of Basements in the Central Butte Area as happened in 1964 when these mines were shut off by the Anaconda Company from the other active mine workings in Butte.**

Throughout this process in dealing with the rising mine water and trying to address the problem with a responsible solution, the community and its leaders were informed {lied to} by Environmental Agency Representatives {John Wardell and Russ Forba} that they had “on the shelf technology” to adequately address the issue if and when a problem arose. As the contaminated water rose to the point where discharge to Silver Bow Creek was inevitable there was in fact no “on shelf technology” available as promised by the agencies to address the issue. I will address this issue in further detail in this report.

To address this issue, I need to step back in time and into the history of Butte Mining to explain my initial involvement:

In 1959 a nine month long Butte Miners Strike took place in Butte by the various Butte Unions against the Anaconda Company. Upon the settlement of the strike, the Anaconda Company made the decision to no longer mine at the Travonia and Emma Mines in Butte.

These two mines were bulk headed {mine tunnels filled with concrete} to prevent them from being connected to the other active mines. Water was no longer pumped from these two mines and they were allowed to flood and fill with contaminated mine water. Water began to rise in these two mines to the point where in 1964 water began to discharge from the mines and began to flood basements in the area in Butte known as the Central Butte Area. The area is located just above Front Street and north to Mercury Street where the uptown Pork Chop Johns is located. This is the point in time that established that there are two basic mining areas in Butte known as the East Camp and West Camp Mine Workings. The West Camp consists of the Emma and Travonia Mines and the East Camp is all of the other mines and the Berkeley Pit.

Joe Roberts a local Butte businessperson, and owner of Robert's Rocky Mountain Equipment, located in the area, also relayed to me a story of a Mack Truck, he was demonstrating to a potential buyer, breaking through the surface. A crane was used to raise the truck and he could see a stream of copper water with mine timbers flowing west toward Silver Bow Creek

To alleviate the contaminated water from discharging into the alluvium in the area and to stop the flooding of basements a relief well known as Well 21 was drilled to lower the water table in the area. Water flowed from this well as an artesian well and water dropped in the Travonia and Emma Mines over 400+feet. The water remained at that level until 1983.

It is believed the Bulkheads in the Travonia Mine were in fact leaking and the water was actually being pumped from the Kelley Mine in the East Camp System and thus the water in the West Camp system no longer rose. Water remained at this level until January 1983 when water in the Berkeley Pit rose to a level where water reached the elevation where the Bulkhead were located in the Travonia Mine and once again water began to rise in the West Camp System. **I would estimate using Bureau of Mines data that the bulkheads were located at the 5350' United States Geological Elevation in the Travonia Mine.** In documentation provided to me by the Montana Bureau of Mines, which I have included in this report, water rose to within a few feet of reaching the Silver Bow Creek Alluvium in the area.

Camp Dresser McKee also documented the potential discharge of West Camp Mine Water Camp Dresser McKee an Environmental Protection Agency contractor also conducted research on the West Camp system. This is how they described the seriousness of the situation.

Available data indicate that discharge of contaminated mine water from the West Camp area of Butte may release unnaturally high concentrations of metals into the alluvial aquifer and into Silver Bow Creek. Ground water from the West Camp underground workings will either discharge to the ground surface and flow to the creek or will discharge to alluvium, and eventually discharge to the creek. The quality of the direct discharge from the mine workings is not definitively known at this time but is expected to be intermediate between Travona Shaft water quality and the quality values found at deeper levels in the Kelley Shaft (Tables 1-2 and 1-3). Even if the discharge were to exhibit relatively good quality, the potential still exists for enhanced leaching of old mining and mill tailings along the creek as alluvial water levels rise and tailings are resaturated. Resulting ground water enriched in trace metals would eventually discharge to the creek.

To address the issue of the rising Travonia and Emma Mine water, I contacted Don Peoples the Butte Silver Bow Chief Executive. With his leadership and assistance we made this information available to the community and the State through the Butte media. Working with Montana Governor Ted Schwinden and United States Senator Conrad Burns and with the assistance of the Montana Bureau of Mines, we were able to begin a process of pumping water from the Travonia Mine and treating it at the Butte Metro Sewer Treatment Plant. Pumping began on December 18, 1987. As a result of the pumping, water has remained below the Critical Water Level {5335'} in the area and thus prevented the flow of groundwater from discharging to Silver Bow Creek or into the alluvium and prevented the flooding of basements in the Central Butte Area as occurred in 1959.

The most important point that needs to be made concerning the West Camp Mine Water issue was the fact that the Environmental Protection Agency continually informed the community that they were on top of things and we had nothing to worry about because they had "technology on the shelf" to handle the problem. The reality was they did not! If it were not for

the Community of Butte and Chief Executive Don Peoples making the decision to allow the water to be piped and treated at the Butte Metro Plant, the water in all probability would have discharged to Silver Bow Creek.

**Montana Standard Article indicating technology not "on the Shelf" as assured
by the
Environmental Protection Agency to the leaders and residents of Butte.**

Mine pumping test to be closely monitored

By Eric Williams
Standard Staff Writer

A short "pre-test" may be done next week on efforts to pump mine water from the Travona shaft, Chief Executive Don Peoples told the council of commissioners Wednesday night.

The test, done for the Environmental Protection Agency by the Montana Bureau of Mines and Geology, would be "closely monitored" to ensure that any buildup of hazardous substances would be immediately found and the tests stopped, Peoples said.

Last week, the pump testing at the Travona was halted after Butte-Silver Bow Public Works employees and residents noticed a foul smell; it was learned hydrogen sulfide gas had built up in a sewer line which was being used to funnel the underground water to Metro Sewer's plant for treatment.

"We immediately informed EPA that the testing would be shut down," Peoples said.

In an earlier interview, Rep. Fritz Daily said he was bothered by the fact that the county, and not EPA, was the one to notice the problem.

Peoples said Wednesday the highest concentration found was 48 parts per million (ppm), well below the hazardous level of 200 ppm.

However, to be safe, he said he will only consent to the pre-test if it will be stopped if hydrogen sulfide levels reach 4 ppm.

If that work is done next week, the Travona water would be routed through a larger pipe than was used initially. Officials said they believe

at least part of the hydrogen sulfide buildup was caused by a 90-degree corner in the sewer line.

If that proves safe, EPA would probably ask for a longer testing period. However, Peoples told the council he wants the county to be able to say whether more testing would be done.

EPA has wanted to do the work for some time, to find out the quality of the water in the West Butte mines and to find out how fast the water table recharges. The concern is that the water is only a few months from reaching the point where it would flow into Silver Bow Creek and, presumably, pollute it. There is also worry the water may seep into home basements.

EPA has said if things work out, it would like to divert the underground water to the Montana Resources Inc. concentrator for industrial use.

MRI's Ray Tilman, however, said late Wednesday MRI won't make a decision until the water quality and amount are known.

"It's hard to say you will or you won't," he said, "until you know how much of what is there."

Peoples and Daily met with EPA, Bureau of Mines and state health officials earlier this week, and some things from that gathering disturbed the Butte leaders.

Daily was angered that, apparently, EPA does not have a treatment plant which could be brought in on short notice to cleanse the mine water and discharge it into Silver Bow Creek.

EPA officials have said at several previous meetings such a plant

is available on short notice.

Peoples said he understands that EPA does have the technology to treat such water to meet drinking standards; however, to dump into Silver Bow Creek, it must be cleaner than that for some contaminants, specifically arsenic.

"They said they don't have the off-the-shelf technology" to treat it sufficiently, Peoples said.

Peoples and Daily are also opposed to an alternative plan of sending the West Butte underground mine water to the Berkeley Pit, via the Anselmo Mine area. Hydraulically, the pit and the west mines are virtually separate.

Peoples termed that alternative "absurd," in large part because no one is certain what is going to happen with the pit's rising water.

EPA estimates show the pit water could reach a point where it starts to seep away in 1996. "In three short days, it's 1989," Peoples noted, or seven years away.

Daily said, "You delay one problem but accelerate the other." He said a rough estimate is that diverting the west mine water to the pit would reduce the fill-up time by about a year.

-The Montana Standard, Butte, Thursday, December 29, 1988