

I live within 1.5 miles of the Zephyr Gold USA Ltd. proposed Dawson Gold Mine in Fremont County, CO. I strongly oppose the Designated Mining Regular Operation Reclamation Permit Application (permit no. M2021046).

Water pollution and depletion

Water in Grape Creek and the Arkansas River provides the Cañon City water supply, sustains fish and other wildlife, allows for a healthy recreation industry which provides vital and sustainable dollars to Fremont County, and also provides ditchwater to Cañon City citizens.

Comments submitted to the DRMS by others present strong objections regarding water risks. Following are two which have not received much press.

The application states "the stormwater detention pond should be sized to temporarily store a minimum of 10% of the 100-year flood flow to achieve a reduction of 10% of the 100-year flood flow through the structure." Their 100-year precipitation event for the property area is estimated to be 4.75 inches over a 24-hour period. (2.7.5.1) In today's world, this is grossly underestimated. 100-year events are now taking place with much greater frequency.

- On July 23, 2018, only 1.5 miles east of the proposed gold mine, Dawson Ranch received 5" of rain in an hour with 90+ mph winds (at which point the equipment failed), resulting in much damage to homes and major erosion. Most of the 600 homes required new roofs. Had that event occurred 1.5 miles farther west, it would have easily exceeded the 100-year event stated in the application.
- On August 8, 2021, Omaha, NE and surrounding communities received 4-6" of rain/hour.
- On August 22, 2021, Waverly, TN received 17" of rain in less than 24 hours.
- On June 26 and 27, 2021, with repeat events in July, Grizzly Creek east of Glenwood Springs, CO received 0.5-1.0 inches of rain/hour, resulting in an extended closure of I-70.

Clearly 1+ inches of rain/hour is becoming a more and more common event. That amount results in far more catastrophic results than 4.75 inches/24 hours. A extended rain event of 1+ inches/hour over the proposed gold mine would cause drainage directly into Grape Creek and the Arkansas River resulting in water pollution, causing contamination for future generations and extensive, expensive cleanup. A gold mine 1,000 feet above important an water source requires planning and structures in place to withstand a 500-year event, at a minimum.

Prince Charles quotes from the United Nations Intergovernmental Panel on Climate Change report: "Unless we take immediate and urgent action, its scientists estimate there is an 89 per cent chance of extreme events that used to happen once a century happening every year."
(<https://royalcentral.co.uk/uk/prince-charles-warns-our-planet-is-in-crisis-164557/>)

Most of the water in Grape Creek is owned by the ditch companies and serves hundreds of parcels on the south side of Cañon City. Water flowing from the DeWeese Reservoir near Westcliffe is drawn out of Grape Creek a mile above the confluence with the Arkansas River, well downstream of the planned gold mine, where the water flows about 7 miles into the ditch water system through open ditch, pipes, tunnels and siphons, providing water for the 3 small reservoirs located in Lincoln Park. This water source is vital to the shareholders who have small farms, livestock, gardens, hay meadows, orchards, and lawns throughout the Lincoln Park and South Cañon areas. Polluted water, more concentrated than once it reaches the Arkansas River, will directly affect these citizens.

Mining activities and mine waste poses a serious threat to the quality of our water and the water rights for our citizens, and for our wildlife, which have no alternate source and which rely on nature to provide healthy life-sustaining water.

Wildfire risk

Old dead juniper and pinyon trees lie everywhere in the landscape in our area, and according to the Pacific Northwest Extension, "Junipers are among the least fire-resistant plants....[their] foliage burns quickly because of its texture. They also contain flammable volatile oils." "In a fire, these plants provide ample fuel for fast-spreading flames. Junipers frequently have dry or dead wood and leaves. All these elements create a virtual tinder box for a potential fire."

(<https://homeguides.sfgate.com/juniper-bushes-fire-dangers-69732.html>)

Two fires within the past 7 years (the Royal Gorge fire in 2013 and the YMCA fire in 2020) within 1-2 miles of Cañon City are reminders that we live adjacent to a precarious, remote and rugged landscape. Mining operations inherently require heavy equipment, chemicals and explosives. Factor in the potential for human error, and we have another very real and extremely dangerous risk, with a community of 800+ homes within 1.5-3 miles of the proposed mine, and a city of 16,000 within 4 miles.

Zephyr falls short in its application when it dismissingly says it plans for a "sufficient volume of water for firefighting." (2.4.3.4.2) And Zephyr's fire prevention plan is missing from the application.

Traffic safety

Increased traffic (haul trucks, contractor and supply vehicles, water trucks, employee vehicles) will create a safety hazard. Mining traffic has no choice but to use Temple Canyon Road and First Street. Temple Canyon Road is a narrow dirt road with tight and blind switchbacks, drop-offs, and water-board surfaces. Many cyclists and the occasional mother with a child in a stroller use Temple Canyon Road to complete to reach bike trails, complete a loop, or enjoy the quiet. Temple Canyon Road (via Mariposa) leads to First Street in Cañon City, a quiet residential 2-lane street, via a dangerous and steep hill leading down to First Street. This hill angles to the east at the crest of the hill, continues down a few hundred feet, and then angles sharply north, where it levels out. Any vehicle not making the turn at the bottom of the hill ends up in our friend's living room. To add to the danger, a spring that refuses to be contained emerges about 1/4 of the way down the hill, in the shade, which makes for interesting driving when freezing happens. I've come down sideways more than once. This hill has claimed lives. Our community will pay a price when heavy vehicles fail to navigate Temple Canyon Road, the hill, and First Street safely.

Recreation and our tourism industry

Recreation is a perpetual source of clean, sustainable income. Fremont County, after years of local efforts, boasts world-class rafting, fishing, biking, hiking and climbing opportunities which support local businesses and provide healthy alternatives to the bustle of modern-day life. Mining activities a few hundred feet from hiking/biking trails, 1.3 miles from Grape Creek, and 3 miles from the Arkansas River unequivocally and directly risk our recreation and tourism industry through water pollution, water depletion, wildfire risk, traffic safety, and noise and air pollution.

HP 19-1113

The Zephyr application doesn't mention HP 19-1113, signed into law by Governor Polis in April of 2019 requiring an end date for water quality treatment. Given the concept of gravity and the permanent underground mine, we know without a fraction of a doubt that contaminated water will reach aquifers. This will unlikely happen in our lifetime, but it will happen. Zephyr must be held accountable to this law and must be required to define their plan to ensure that no contamination of our aquifers can happen. That is their responsibility.

Conclusions

I am passionate about my community. I thrive on our pin-drop quiet lifestyle (a fact, literally, even though we are surrounded by 600 homes), the beauty of the Wet Mountains, the natural trails where we co-exist with nature.

With a gold mine so close to our doors, with an inadequate permit that doesn't provide all the guarantees possible nor indicate that Zephyr takes its responsibilities seriously, our community faces the very real risk of a disaster on several fronts should something go wrong. Our community faces the possibility of being saddled with the heartache and financial responsibility for the downside of the risks detailed above, simply so a Canadian company can make some money. A very few will benefit; the rest will have little or no benefit and might well be hurt. Any money that does manage to flow back into our community could easily be offset by anything on the spectrum from road maintenance/improvements to water contamination cleanup and wildfire devastation.

I am weary of what man willingly does to our landscape, our water, and wildlife. I want integrity, responsibility and accountability for company decisions. These must be legislated. It becomes, now, the responsibility of the Department of Reclamation, Mining and Safety, you, to use your intelligence, expertise, and sense of honor to do what is right.

This potential gold mine carries very real risks to our community. What are the benefits?

Respectfully submitted,

Cindy Smith
Cañon City, CO