

History of Siskon Mine

Summary of a presentation by Liese Greensfelder and Kurt Lorenz

*On January 24, 2006, Wolf Creek Community Alliance hosted a talk by Liese Greensfelder and Kurt Lorenz on **the history of the Siskon Mine on the San Juan Ridge**. The audience came to learn from the experience of the San Juan Ridge community—experience that might be useful as the Grass Valley community responds to a proposed re-opening of the Idaho-Maryland Mine. This summary of the presentation was written by Connie Sturm.*

In April 1992, the CEO of Siskon Gold Corporation, Tim Callaway, approached the San Juan Ridge Taxpayers' Association about his company's plan to re-open a mine in the North Columbia Diggings. Siskon's proposal was not the first; our community had been struggling with mining proposals for the previous 15 years. Times have changed since the 1800s when mining was going full-bore here. People have less tolerance for the kinds of social and environmental disruptions that mines cause.

The 2000-acre diggings is situated between the South and Middle Yuba rivers and had been hydraulically mined during the 1800s. The Sawyer Decision of 1884 put an end to hydraulic mining before all the gravels at the site were washed away by water cannons; some 300 to 500 feet of gravels and the gold they contained were left in place. In 1977, Placer Service Corporation applied to do exploratory mining in those gravels. A conditional use permit (CUP) for exploration was granted in 1981. The company then obtained a CUP for an open-pit mine in 1984, but at that point the price of gold was low, there was a mild recession, and Placer was sold by its parent company in its efforts to unload all unprofitable ventures. Placer packed up and left town.

In 1985, Coastal Mining Company of Nevada received a CUP for surface drilling at the site. The site changed hands again and in 1989, San Juan Joint Venture obtained a use permit for surface drilling. At some point, San Juan Joint Venture sold the property to Siskon Gold Corporation.

During many changes of ownership and lengthy application processes for use permits, the San Juan Ridge Taxpayers' Association was working hard to protect local homeowners from major disruptions of sound, water, dust, traffic and light in the middle of a very quiet, rural community. In 1991 we introduced Measure Q, a county-wide proposition to require buffer zones around any mine, but it lost.

When Tim Callaway called the Taxpayers' Association in 1992, Siskon's proposal was for an underground mine, a project that would take seven and a half years, plus some time for reclamation. As outlined by Callaway, the project would start with a 14-foot by 14-foot decline tunnel that would extend down through the bedrock to the area to be mined, 300 to 500 feet below the surface. The main tunnel would be about three miles long, with many side excavations. Initial processing—screening out the larger material—would take place underground. Finer material would be hauled to the surface, where the rest of the

gold-extraction process would be conducted. No toxic chemicals would be used; gold would be extracted from the ore by mechanical methods. The mine would be dewatered and lots of settling ponds and infiltration ponds would be required to deal with the water.

By the time Tim Callaway approached us, our community had been dealing with the possibility of an open-pit mine for 15 years. An underground mine sounded far less disruptive. So we had to carefully evaluate the situation and our options. One part of the equation was that the county Board of Supervisors was lined up four to one in favor of the project. Another factor was the hope that if Siskon were to go ahead with the project and mine out the bottom of the diggings—the part that is richest in gold—the land would no longer be attractive to any future gold mining efforts. So after eight or nine years of an underground mine, we could all get on with our lives without the threat of an open-pit mine hanging over us. But of course we needed safeguards. Our thought was that if we worked with Siskon and the county on crafting the conditions of a use permit that we might get stronger safeguards than if we were to go before the planning commissioners and supervisors in blanket opposition to the project.

In January 1993, a draft Environmental Impact Report (EIR) by Welsh Engineering Science and Technology, Inc. (Westec) of Reno was published and circulated. A community effort was required to comment on the EIR. Our mining committee broke the task into its components, and assigned responsibilities in each area of concern. For example, Jerry Tecklin dealt with water issues; Ginny Hilsman took biology; Liese took reclamation and bonding; Kurt was the sound guy; Lee Hudson dealt with air quality; Bob Greensfelder took on seismic history and fault lines and followed what the Securities and Exchange Commission had to say about Siskon; and Carole Koda was the liaison with county planners. Many others became experts and advocates as well. We met every week; we studied every document that came out; we hired experts—including hydrologists and acoustic engineers—to evaluate the documents. We scrutinized every sentence and commented on every item that we felt was inaccurate in our efforts to ensure that the EIR was as accurate as possible.

Water was our biggest concern. Our idea was to spell out, in a way that both the company and the community could live with, what the course of action would be if any water problems should arise. Property owners on the Ridge rely on their domestic wells. If our water source disappears, we could not live here and our property would be worthless. For us, this was the critical thing. The EIR used a basin theory to claim that the gravels in the diggings—the geologic strata through which the mine would be excavated—and the bedrock underlying and surrounding the gravels were two unconnected aquifers. This implied that all the domestic wells in the area were totally disconnected from the gravels in the diggings. We disputed this assumption and we had good hydrologists who backed us. There could be fractures and other connections between the bedrock and gravels which could very likely tie our water supply to the mine. Nevertheless, Westec's EIR stated: Numerous studies have been conducted on the surface and groundwater hydrology at the project site, and the data are voluminous. . . . Two separate groundwater systems

occur under the project site in the Tertiary fluvial gravel deposits and the underlying bedrock. The bedrock is a confined groundwater system. Monitoring of water levels in wells ... indicate that the two groundwater systems operate independently of one another. ... Groundwater levels would not drop in 17 of 20 offsite wells and would drop an estimated maximum of 0.9 feet in one well over the life of the mine due to mine dewatering.

Bonding was another major concern. We wanted to ensure that the company had enough money to cover anything that could go wrong, and that bond money would be held in escrow by the county. The original bond proposal in the Remedial Water Supply Plan was a joke: it called for Siskon depositing only \$12,800 into an account that would be used to remediate any problems that might arise with the water supply. Siskon's basis for proposing such a paltry sum was their hydrology report saying that wells would be virtually unaffected. We knew we'd need much greater protection than this. We negotiated long and hard with Siskon on this point. What we finally obtained in the use permit was an initial bond of \$40,500, with an additional amount of \$13,500 to be added to the pot at the end of each year that the mine was in operation. In addition, if any wells were affected by the operations, not only did Siskon have to pay for their replacement, but an amount equal to the cost of the remediation had to be added to the bond. As a result of both of these provisions, by December 1996, the "financial assurance" posted by Siskon for water issues had grown to \$215,000.

We were also very concerned about noise. The neighborhood had very low ambient noise, much lower than anyplace in Nevada City or Grass Valley. The county noise ordinance permitted levels much higher than our existing ambient. In this arena, we got virtually no cooperation from the planning commissioners. Some of them virtually accused us of being whiners when we explained that our noise would be raised from something like an average of 20 decibels to 50, because 50 is lower than the ambient is in Grass Valley. Fran Grattan, a planning commissioner at the time, said, "You have jets flying over from Beale Air Force Base, so why should the noise of the mine bother you?" (A Beale jet flew over a few times a month, or so.) One item put into the use permit, however, was that Siskon should take whatever measures were "practically and economically feasible" to conduct their operations as quietly as possible. Even though that left a lot of wiggle room, it did help us in the long run. Nevertheless, during the years the mine was running, many of its operations could be heard at various times of day and night by dozens of surrounding residents, sometimes sporadically, sometimes continually.

Finally, there are three creeks, Grizzly, Spring, and Shady, that flow through the property. We were concerned that the mine would decrease flows in all of them. The EIR showed that there would be large decreases in creek flows which could have dramatic effects on the biology of the creeks. As you will see, that turned out to be the reverse of what actually happened.

By May 1993, the final EIR was circulating. At this point, Siskon's CEO, Tim Callaway, and its project geologist, Bob Pease, along with the mining committee began a month of

intense, hard-nosed negotiations to work out the final use permit conditions regulating water, noise, bonding, and other safeguards.

Then in June the mining committee and Siskon made a joint presentation of the hammered-out plan at a hearing before the Nevada County Planning Commission. (County staff had input into the plan, as well, but the final document was principally drafted by our committee and the company.) The EIR was certified and the use permit was granted in a single hearing.

We went into the hearing supporting the permit because it contained a lot of safeguards and provided many triggers for action, covering a number of worst-case scenarios. And it called for lots of monitoring. We knew that if there wasn't adequate monitoring with trigger points mandating specific remedial actions, we would never be able to spot a problem until it got out of hand. The teeth needed to be written into the permit.

The permit specified that there would be extensive independent monitoring by an outside firm. (Cranmer Engineering, a local engineering firm, provided much of the monitoring work.) These use permit conditions gave the people who were responsible for paying attention to well levels the tools to do their jobs. Sometimes we had to build a little fire under them, but the data were there—reliable pre-project data as well as ongoing data gathered as the mining went along.

Another critical element in the agreement was a provision for what we called the Water Review Team. This consisted of three people: a community liaison, Kurt Lorenz; a representative of Siskon Gold, geologist Bob Pease; and a county planner, Tod Herman of the Planning Department. This group had real power to determine—based on all the data—whether in fact somebody's well had been damaged by the mining operation, and then to pursue a remedy.

It worked well, Kurt reported. “The three of us could be in touch with each other without having to work through a dozen other people or agencies. It gave us a working relationship so that when there were problems, we had personal relationships and an established track record of working together. Without this review team we would have had to go to the county, wait for hearings, and try to force the company to take responsibility. That works eventually, but it could take months or years. We dealt with issues on a weekly basis.”

Siskon started digging its decline tunnel in 1994. Two months later, a nearby domestic well failed. You could hear a sucking noise coming from that well, caused by air rushing in to replace water rapidly draining out. The mine's tunnel had intercepted a bedrock fracture that emptied the well. Siskon replaced the well. In July 1994, Siskon's stock price was \$5.38 per share. In November the company poured its first gold bar. In September 1995, the operation intercepted a huge underground fracture, breaking into a water source that initially discharged something like 2,000 gallons per minute, flooding the mine and endangering the crew that was down there. Siskon didn't have

adequate pumping capacity to deal with this at first. The settling ponds and infiltration ponds could not handle this volume of water, and Siskon ended up blowing it into Spring Creek (which feeds into the Yuba), scouring the creek bed down to bare bedrock. This discharge continued for months, much of the time during the season when creek flows are otherwise low. This was disastrous for the creeks and a huge setback for the mine. Siskon incurred huge expenses to remedy the situation. They did eventually succeed in plugging the leak with massive amounts of concrete. But after that for as long as the mine continued, the company had to pump far more water than the EIR anticipated. Down in the tunnels the water would drip from everywhere, run from everywhere, accumulate everywhere. It turned out to be a very wet area.

By January 1996, the drained fracture had caused approximately 12 wells to fail, including one at the North Columbia Schoolhouse Cultural Center and Grizzly Hill School's first and second wells. Siskon replaced all those wells. Some of the replacement wells failed and Siskon drilled replacements to replace the replacements. When the mine hit the fracture 17 months into its seven-and-a-half-year operation, everything was turned on its head. At that point, according to the EIR, the mine was expected to be pumping something like 216,000 gallons of water per day. Instead, discharges were in the range of one to three million gallons per day. Siskon went to the Central Valley Regional Water Quality Control Board to amend its water discharge permit to allow discharges up to nine million gallons of water per day, an increase of eight million gallons above the existing permit. The company also asked for relaxation of some water quality standards. At that point, the yellow-legged frog became an issue. California Department of Parks and Recreation had discovered that "one of the largest known populations" of the frog had been found on Spring Creek. In November 1996, the CVRWQB granted a new water discharge permit that allowed a 30-day average discharge not to exceed four million gallons per day. Also, sediments and some water chemistry requirements were amended to increase allowable levels.

By July 1996, Siskon was in financial trouble. The company sold the timber rights on its 2,000 acres of land for \$450,000. Its stock price dropped to \$2.50 per share. In March 1997, Siskon miners hit unstable ground in their tunnel. The gravel was not as consolidated as the company's geology consultants had figured it would be and the downward pressure of the surrounding tunnel walls squeezed the floor of the mine upwards, endangering the workers and the stability of the entire mine. Siskon closed that section of the mine and did only a little mining after that, working a couple of lateral tunnels as crews backed their operations out of the mine. In May 1997 the mine folded. Siskon's share price was 2.3 cents and dropped even further in the following months. The company had failed at mining gold, but had successfully "mined" its investors.

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At the end of Kurt and Liese's presentation, Kurt shared his perspective on the lessons learned by the community during this history. A summary follows. —Editor

The way to make the EIR and use permit process more honest is by studying the facts intensely, asking intelligent questions in writing, demanding intelligent answers, and insisting on truly reliable safeguards. And you have to keep vigilant after the project gets under way. Whoever is in charge of monitoring something, whoever is in charge of keeping files organized so you can find information when you need it, they're all just people, and people get overwhelmed. All along the way, there is slippage and you will not get what you've been promised unless you insist on it. The good news in our case was that when we insisted on it and did our homework, the system grudgingly came along. But it took a lot of work and organization. One or two people can't play watchdog alone; it takes a lot of people. The bad news is that our experience was the exception to the rule. Most poorly designed and environmentally suspect projects become a reality without adequate redesign or appropriate safeguards, despite the efforts of organized citizen opposition.

This is a very complex process, to be a citizen-watchdog, to get into the depths of government. The best outcome for everybody is likely to come out of some kind of cooperation process. In our situation, once we had an operator that we could work with, we were able to get a seat at the table. We became a part of the process. About two or three years into working on the Siskon project it dawned on me that if this were Bolivia, Peru, or New Guinea, those of us who had historically been opposed to mining would probably all be dead. I came away from this experience feeling encouraged that there is a social contract in this country that makes it possible to sit down and talk about an issue and find a solution. But reality reminds me that this is less likely as the size and scope of a project becomes much larger and the money that is churned out locally becomes a larger part of "gross local product." Since 2000, the general political climate in the U.S. has deteriorated seriously in ways that make this type of cooperation much less likely.

We were lucky in a number of ways with the Siskon mining venture. In other proposed projects there is no alternative to vigorous legal action and an expensive, protracted struggle, which may or may not produce a less damaging outcome.