Richard A. Winters
7283 S Mount Holy Cross
Littleton, Colorado 80127
303-435-8049 / rwinters@rawsrcs.com

April 2, 2024

Colorado Division of Reclamation, Mining and Safety, Permitting Action Comment Submission

RE: Support of permit amendment to Permit Number M1990057 allowing use of cyanide extraction

I appreciate the opportunity to provide comment on the proposed amendment to Permit Number M1990057. It represents one of the final steps in a long term, quality process by the State and County authorities as well as proponent, CJK. That process has resulted in Permit M1990057, which would achieve reclamation and restoration goals through removal of hundreds of thousands of tons of legacy mine wastes from the environment for storage, processing, and waste emplacement in a modern, monitored waste facility. The amendment would allow CJK to optimize recovery to maximize the benefits of this reclamation strategy.

I have connection to this effort. I grew up in Gilman, now a ghost town, and my youngest sister was born in Leadville having been the closest hospital. It is a part of Colorado I know as well as any other, if not better. My graduate and post graduate education were at the Colorado School of Mines in mineral economics with a minor field of study in environmental policy. My special interest was the regulatory issues distracting from the redevelopment and proper reclamation of abandoned mine sites by the private sector. The very waste dumps M1990057 contemplates reclaiming and processing, as well as others in the district, were considered in an evaluation of cases in Colorado, Nevada, and Montana where regulatory issues tended to promote or preclude economic legacy wastes from being redeveloped.[1] Leadville waste dumps and the McLaren tailings in Montana were examples of where issues precluded reclamation while the Getchell Mine in Nevada was an example of where federal and state regulators worked with Getchell to see legacy wastes reclaimed as part of mine development. Later in my career as a mine financier, I was involved in two attempts by a junior mining company to purchase and reopen the Black Cloud mine outside Leadville, which could not be concluded due to competing issues related CERCLA liabilities for Newmont and ASARCO as PRPs.

Much has changed in 30 years. I was pleased with M1990057 as a foundation and means to implement reclamation and processing, all the benefits of which were considered when M1990057 was approved. The proposed amendment would ensure the economic viability and therefore the sustainability of the reclamation effort by optimizing precious metals recovery using a cyanidation circuit. As much has changed and been learned over the past 30 years in Leadville, the same is true for the use of cyanide in modern mineral processing.

I am very confident that serious evaluation of CJK's proposal will inform that while cyanide is a known toxigenic and in the popular mind, a modern cyanidation circuit such as that proposed by CJK, can result in an overall reduction in environmental risk while providing for sustainability of the reclamation effort

[1] Winters, R., Marshall, L., 1991 Where's the Recovery in RCRA: the re-mining of non-coal abandoned mine sites. Proceedings, 12th Annual Meeting of National Association of Abandoned Mine Land Programs, 9-10 Sept.

through the enhanced economics such a circuit allows. CJK will be removing waste currently impacting the environment and reclaiming while recovering precious metals from processing, including cyanidation, that concentrate remaining deleterious constituents, including trace cyanide, in a waste facility designed for the purpose.

Since a thorough process resulted in M1990057 the real question is one of risk to the community and environment of using cyanidation. To begin, cyanide is a less robust toxigenic than many other chemicals that might be used in mineral processing. It breaks down in sunlight and in the presence of iron, bonds and becomes insoluble. Cyanidation, cyanide destruction and cyanide waste disposal are well developed and widely used in precious metals mineral processing and incorporate best practices management. I believe an unbiased evaluation of the technology and the process will result in no issues per se.

I have visited CJK's site and been presented their plans. The site itself is favorable, away from residential development for the most part and with no direct connection with the Arkansas River. Diligent thought has been put into the whole of the operation from ore storage to processing to tailings storage in a double lined facility. Again, CDRMS has/will evaluate the proposed flowsheet and circuit through to tailings storage. I am confident CJK's proposal will be found sound.

Implementation and operations become the focus once the technology, including waste disposal, is understood and accepted. The key individuals behind the effort are experienced mining professionals who understand modern mining, processing, waste management and reclamation. They are responsible professionals well known in the industry. At this point in the effort, the two keys to a sustainable, continuing effort in the Leadville district are these human resources and being able to ensure economic viability through enhanced recovery of precious metals using cyanidation.

CJK can move forward with its plans under M1990057 with approval of the amendment and would result in completion of a regulated facility that can be monitored and has plans for reclamation itself. The proponent represents a group of mining professionals that well understand their responsibilities and can be worked with. The costs and benefits of the reclamation strategy were considered and evaluated in approving M1990057. Approval of the amendment will allow for sustainable reclamation in exchange for introducing some risk associated with a cyanidation circuit. Unlike the environmental risks associated with the existing waste dumps, however, the risks will be managed to best practices, regulated and monitored. Given the specific site, planning, management ability and exchanging unmanaged environmental risk for managed, regulated risk, approving, and then regulating and monitoring CJK's facilities under the amendment, seems a win-win.

The CDRMS will have much to consider in considering the proposed amendment to M11990057. For me, this effort is over 30 years in the making. I am sure the amount of information available on modern cyanidation circuits as well as CJK's specific proposal will allow for a much timelier decision on the amendment. Let us address the risk in the woods and put them where they belong, in a regulated, monitored facility designed for the purpose. The key now to achieving sustainable reclamation/restoration is approval of the amendment. Thank you for your consideration. I appreciate the opportunity to comment on sustainable reclamation.

Sincerely yours,

Richard A. Winters