ATTACHMENT D

CREEKSIDE SCIENCE
P.O. BOX 1553, LOS GATOS, CA 95031

Ms. Carmen Borg
Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, CA 94102-4421

3 November 2022

Dear Ms. Borg:

I am writing you to regarding the Draft Environmental Impact Statement for the Sargent Ranch Quarry Project. I am a practicing conservation ecologist with a deep interest in the ecological integrity of the region. My comments are based on review of the DEIR, familiarity with the local area, and a deep background in population biology, conservation ecology, and environmental policy. I have the following comments on a few key issues regarding the impacts of the project on protected species.

Significant and unavoidable impacts on wildlife movements, including mountain lion and American badger

The DEIR correctly states in Table 4.3.1 that impacts on wildlife connectivity are significant and unavaoidable; even that conclusion is a vast underestatement of the impacts. Building a large industrial complex like a quarry and associated processing facilities in the heart of a critical and already tenuous wildlife linkage is utterly incompatible with conserving and enhancing vital connectivity. Any statement of overriding considerations will have to negate state policies (i.e., CDFW and WCB) and local policies (i.e Valley Habitat Plan) regarding wildlife connectivity that have developed in the last decade.

The two species most affected by further degraded connectivity are mountain lion (California Endangered Species Act candidate for Threatened, currently protected as if listed) and American badger (State Species of Special Concern, SSC). Both of these species absolutely require connnectivity between the Santa Cruz Mountains and the rest of California through the Gabilan Range and across the Pajaro Valley to maintain genetic diversity, without which the entire populations of these species in the Santa Cruz Mountains are at high risk of extinction from inbreeding and genetic drift (C. Wilmers letter, Gustafsen et al. 2018, Diamond et al. 2022). Therefore, the impacts extend far beyond the project site, across the entire range of these species in the Santa Cruz Mountains. The shallow and cursory treatment of these species in the DEIR is a major failing.

Specifically, the Tar Creek/railroad undercrossing is one of the most heavily used passages across Highway 101, with the highest species richness (Diamond et al. 2022). Species detected

using the undercrossing include American badger. bobcat, coyote, deer, long-tailed weasel, raccoon, and skunks In addition, that study documented three American badger roadkills in the vicinity, indicating a high level of use of the Tar Creek area and the adjacent Sargent Ranch grasslands. Other documented roadkill on Highway 101 the area should have been notedin the DEIR (California Roadkill Observation System).

In Alternative 1, the use of Tar Creek/railroad undercrossing as the quarry access road is completely incompatible with wildlife passage, with hundreds of truck trips through the day interfering with access and posing great roadkill risk. Reducing the suitability of Tar Creek underpass, and permanently preempting improvements there, will further put American badgers and other species at risk of roadkill on Highway 101.

The placement of the processing facility next to the undercrossing further discourages passage. The noise, traffic, lighting, and other human activities associated with the processing facilities are a deterrent to any use of the area by mountain lion and badger, as well as other wildlife species (Wilmers ert al. 2013). The documented value of Tar Creek as wildlife passage will be destroyed.

Alternative 3 has been floated as an environmentally superior alternative. While Alternative 3 avoids putting the access road under Highway 101 at Tar Creek, and moves the processing facility north, the conveyer belt and roads from the quarry to the processing facility straddle the approaches to Tar Creek undercrossing, creating yet another barrier to wildlife movement (Wilmers et al. 2013). The DEIR lacks a detailed assessment of wildlife interactions with the roads and conveyer belts proposed in Alternative 3.

Cumulative Impacts on Wildlife Connectivity

The Highway 101 corridor south of Gilroy extending into San Benito County is a wildlife linkage of statewide importance, especially critical to the survival of mountain lion and American badger populations in the Santa Cruz Mountains (Spencer et al 2010, Gustafson et al. 2017, Penrod et al. 2011, Bay Area Open Space Council 2019). The stated geographic scale of cumulative Biological Resources is the Valley Habitat Plan Study Area and Permit Area. But the cumulative impacts extend into San Benito County. Numerous projects are proposed along the Highway 101 corridor that, if built, will degrade the already tenuous connectivity. These include Betabel, Traveler's Station and adjacent developments, Strada Verde, the widening of Highway 101 and Highway 25, and SR 152 New Trade Corridor through the Upper Pajaro Valley. The cumulative impacts of these projects requires a much deeper analysis than is currently in the DEIR.

A particularly glaring omission for cumulative impacts analysis is Strada Verde, which essentially is proposing a new city at the northern end of San Benito County. There is a whole section of the DEIR (3.1.6.2) explaining why Strada Verde was not considered; as such the cumulative impacts analysis is woefully incomplete.

A realistic cumulative impacts analysis will further reinforce the "significant and unavoidable" impacts of the project (including all alternatives except "No Project") on wildlife movements and connectivity, threatening the continued existence of protected species (mountain lion and American badger) in the Santa Cruz Mountains.

California red-legged frog in Sargent Creek: Significant and unavoidable impacts for Alternative 1.

The DEIR states that Alternative 1 impacts on the state and federal threatened California red-legged frog (CRLF) are less than significant with mitigation. This conclusion ignores the massive disruption of hydrology in Sargent Creek by quarry pits and infrastructure in Alternative 1. The loss of perched aquifers, changes in channel morphology, road construction, increased mortality from ongoing operations traffic cannot be effectively mitigated. The coexistence of CRLF with the quarry pits and associated infrastructure is unlikely.

Importantly, the breeding status of CRLF in Sargent Creek is unclear, and with the lack of protocol surveys the conclusion that Sargent Creek serves only as movement habitat is weak. The six reported sightings in the Sargent Creek watershed (map in 10747 Sargent Ranch Report Biotic Updated) suggest breeding habitat is present; CRLF are known to breed in intermittent creeks that are reduced to disconnected pools by the end of the dry season (i.e., Alcala et al. 2019). The surveys reported are not sufficient to establish or rule out breeding status. Even if they are not breeding in the creek, the disruption of movement will be substantial.

The importance of the Sargent Creek CRLF in a regional context is not addressed in the DEIR. Given its location at the edge of the Santa Cruz Mountains, it likely serves as a link to the Gabilan Range populations, and loss of Sargent Creek as movement/dispersal habitat or breeding habitat will serve to further isolate the overall population in the Santa Cruz Mountains.

The H.T Harvey peer review in Appendix E.2. further describes the inadequacy of the impact analysis for CRLF and raises questions about inadequacy of the various mitigation measures proposed.

For these reasons, impacts on CRLF should be classified as "significant and unavoidable" even with the proposed mitigation measures.

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California red-legged frog in Sargent Creek: Significant and unavoidable impacts for Alternative 3.

Although Alternative 3 eliminates Pits 3 and 4 in Sargent Creek watershed, the remaining Pits 1 and 2 still impinge on the upper slopes of the creek. The loss of groundwater storage and slow release so high in the watershed will decrease summer flow in the creek and have potential impacts on CLRF in the watershed that should be evaluated.

Thank you for the opportunity to comment on this important issue,

Stuart B. Weiss, Ph.D.
Chief Scientist
Creekside Science

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Stuart Bryan Weiss, Ph.D.
Chief Scientist
Creekside Center for Earth Observation
51 Willow Rd. Menlo Park, CA 94025
(650) 269-2876
stu@creeksidescience.com
www.creeksidescience.com

EDUCATION

Stanford University Department of Biological Sciences
Ph.D. in Biological Sciences. 1996
B.S. with Honors Biological Sciences 1984

Current positions: Chief Scientist, Creekside Center for Earth Observation: 1999-present

Past Positions:
Founder and Chief Scientist Viticision 2008-2012
Postdoctoral Fellow, Center for Conservation Biology, Stanford University**:** 1996-1999
Staff Biologist, Center for Conservation Biology, Stanford University: 1984-1992
Field Biologist, Thomas Reid Associates 1981-1985

Research and Professional Experience

Areas of Expertise: Conservation ecology, population biology, restoration ecology, atmospheric nitrogen deposition, climate change, GIS, statistical modeling, survey and experimental design, microclimatology/environmental biophysics.

Creekside Center for Earth Observation
Provided scientific advising on numerous topics in conservation and ecology including:
Climate and hydrologic analysis for San Francisco Bay Area, California, and Western United States
Topoclimatic modeling for bristlecone pine dendrochronology
Restoration of habitat for listed species and general biodiversity
Reintroduction of listed species of butterflies and plants
Analysis of microclimates for overwintering monarch butterflies
Conservation planning for San Francisco Bay Area
Investigations of nitrogen deposition impacts on biodiversity in California
GIS and statistical analyses for numerous projects listed above and others
Reviews of various conservation projects
Metapopulation modeling of endangered butterflies

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