

SHUTE, MIHALY
& WEINBERGER LLP

396 HAYES STREET, SAN FRANCISCO, CA 94102
T: (415) 552-7272 F: (415) 552-5816
www.smwlaw.com

ELLISON FOLK
Attorney
Folk@smwlaw.com

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Via E-Mail

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-8617
matt.kelley@co.nevada.ca.us

Re: Idaho-Maryland Mine Project Draft Environmental Impact Report

Dear Mr. Kelley:

On behalf of Community Environmental Advocates Foundation (CEA), we respectfully submit these comments in connection with the Draft Environmental Impact Report (DEIR) for the Idaho-Maryland Mine Project (Project). CEA seeks to ensure any development and operations at the Project site protects the site's unique environmental resources and addresses the community's needs and concerns. To that end, the DEIR plays a critical role in informing the public and decisionmakers about the environmental impacts of the Project and how best to avoid these impacts through mitigation and alternatives to the Project. After carefully reviewing the DEIR, we have concluded that it fails to comply with the requirements of the California Environmental Quality Act (CEQA), Public Resources Code section 2100 et seq.

The EIR is "the heart of CEQA." *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392 ("Laurel Heights I"; citations omitted). It is "intended to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action. Because the EIR must be certified or rejected by public officials, it is a document of accountability." *Id.* (internal quotations and citations omitted).

This DEIR's flaws prevent it from achieving its required informational purpose. An overarching defect is the DEIR's failure to accurately describe the Project. The DEIR's project description is legally inadequate because, among other things, it improperly excludes the required cleanup of existing contamination on part of the Project site (the Centennial Site) from the scope of the Project. In addition, the DEIR improperly uses post-cleanup conditions on the Centennial Site as the baseline for impact analysis instead of the existing conditions on the site.

The DEIR further violates CEQA because it fails to properly analyze or mitigate the Project's numerous significant environmental impacts. The Applicant is requesting a conditional

use permit (CUP) to operate the mine for 80 years. Yet, according to geophysicist and mineral exploration expert David M. Chambers, Ph.D., the design details of the Project, including its “engineered fill” have yet to be determined, so it is not possible to determine if the proposed design of the Project is geotechnically sound.¹ See Report from David Chambers, Ph.D., submitted under separate cover. Nor does the DEIR provide the necessary information on the geochemistry of the waste rock and tailings to evaluate the environmental impacts of the proposed mine’s operations. *Id.*

In addition, the DEIR fails to adequately evaluate how the Project would affect hydrology and groundwater levels in the Project vicinity. The need for an accurate analysis cannot be overstated since even a slight drawdown in groundwater levels could severely affect those in the community that rely exclusively on well water. Among its many shortcomings, the DEIR fails to accurately describe the existing hydrologic conditions in the area, lacks thresholds of significance for evaluating the Project’s impacts on groundwater supplies, relies on a flawed groundwater model, lacks *any* modeling of the Project’s water quality impacts, and fails to identify effective mitigation capable of mitigating the few groundwater impacts the DEIR does disclose.

The DEIR fares no better in its analysis of noise and vibration impacts from on-going mining operations because it substantially underestimates the severity and extent of these impacts. The document largely relies on compliance with County standards to conclude that the Project’s noise impacts would be less than significant, downplaying entirely that noise from the Project’s operations could increase substantially in this quiet rural residential community. It fails to disclose the geographic extent of where noise and vibration impacts could occur and omits any analysis of noise impacts resulting from remediation of the Centennial Site. It also fails to provide an adequate analysis of noise and vibration impacts from the Project’s ongoing blasting operations and disregards entirely the potential for these operations to cause sleep disturbance.

The DEIR’s analysis of hazards and hazardous materials is equally deficient. Although there is no evidence that clean-up of the Centennial Site will occur prior to implementation of the Project, the DEIR simply assumes that such clean-up will occur. The document also fails to analyze or mitigate hazardous impacts relating to waste rock and mine tailings, opting instead to take a “trust us” approach when it promises to comply with environmental regulations. And

¹ The DEIR repeatedly refers to “engineered fill” but it never defines this term. The document appears to be trying to “rebrand” the prior mine’s waste rock and mine tailings as “engineered fill,” apparently in the hopes that the waste material can be transported off-site for use at various unspecified construction sites throughout the region as fill material, which would almost certainly result in numerous new contaminated waste sites that pose a threat to the public and the environment. Exhibit A (Baseline Environmental Report) at 3, 4.

despite the fact that the Project could cause a super-saturated plume cloud that could affect operations at the Nevada County Air Park, the DEIR fails to provide any analysis of this impact.

The DEIR's analysis of air quality, greenhouse gas (GHG) emissions, and energy use also contains numerous flaws. First, the DEIR fails to analyze the effect that the cleanup of the Centennial Site would have on air quality, GHG emissions, or energy use, or the air quality impacts, GHG impacts, or energy impacts that may result from the proposed Project if the Centennial cleanup does not occur. Second, the DEIR's analysis of air quality impacts, GHGs, and energy use from Project construction assumes a construction timeline that contradicts the DEIR's description of the Project. Third, the DEIR improperly relies on assumed mitigation measures for air quality impacts, GHGs, and energy use, failing to acknowledge those measures as mitigation. Fourth, the DEIR fails to mitigate significant air quality impacts from operational emissions of criteria air pollutants. Fifth, the DEIR's Health Risk Assessment fails to disclose essential information and lacks substantial evidence to support its conclusions. Sixth, the DEIR's significance threshold for operational GHG emissions is unsupported. Finally, the DEIR relies on third-party GHG mitigation offsets which lack adequate performance standards and are improperly deferred.

The DEIR also fails to meet CEQA's clear mandates because it does not provide a reasonable range of alternatives. The DEIR identifies the Project's significant and unavoidable impacts as those on aesthetics, noise, and transportation. Yet, except for the "no project" alternative, which would not meet any of the Project objectives, none of the examined alternatives would reduce the Project's impacts on aesthetics, noise, and transportation to a less than significant level. Moreover, given the Project's significant impacts in a range of areas, including GHG emissions, air quality, water supply and water quality, the DEIR must be revised to include alternatives that would reduce these impacts.

Where, as here, the environmental review document fails to fully and accurately inform decisionmakers and the public of the environmental consequences of proposed actions, it does not satisfy the basic goals of CEQA. See Pub. Res. Code § 21061. As a result of the DEIR's numerous and serious inadequacies, there can be no meaningful public review of the Project. The magnitude of the revisions required to create a legally adequate EIR will require recirculation of a revised DEIR, not just publication of a Final EIR, to give decision-makers and the public an accurate understanding of the environmental issues at stake. See CEQA Guidelines² § 15088.5(a)(4).

This letter, along with the February 15, 2022 report prepared by Baseline Environmental Consulting addressing air quality, GHG emissions, energy, hydrology, water quality, and hazards (attached as Exhibit A), and the March 9, 2022 prepared by Salter addressing noise and vibration (attached as Exhibit B) constitute our comments on the DEIR. Please refer to these reports for

² The "CEQA Guidelines" are found at Cal. Code Regs., tit. 14, § 15000 et seq.

further detail and discussion of the DEIR's inadequacies. We request that the County respond to both the comments in this letter and to each of the comments in the attached reports.

In addition, CEA will be submitting its own letter on the DEIR. We have reviewed this letter and concur with its findings. The CEA letter is hereby incorporated by reference into this letter.

I. The DEIR's Flawed Project Description and Inaccurate Baseline Do Not Permit Meaningful Public Review of the Project.

The DEIR's project description is flawed for several reasons. First, it improperly excludes the cleanup of the Centennial Site from the scope of the Project. Second, the DEIR lacks a legally adequate baseline because it improperly uses post-cleanup conditions on the Centennial Site as the baseline for impact analysis instead of the existing conditions on the site. Third, the Project description is incomplete and unstable because it fails to adequately describe the duration of required permits and does not consistently describe the duration of Project construction or the phasing of mining and exploration activities over the entire permit period.

A. Project Background

The proposed Project would reopen the abandoned Idaho-Maryland Mine in unincorporated western Nevada County near the City of Grass Valley. DEIR at 3-1, 3-12. The Project would involve underground gold mining within a 2,585-acre mineral rights boundary owned by the Applicant, Rise Grass Valley. *Id.* at 3-1. The Project's surface components would be spread across 175.64 acres, consisting of two sites, the 119-acre Brunswick Industrial Site and the 56.41-acre Centennial Industrial Site, as well as a potable water pipeline easement connecting the sites. *Id.* at 3-1, 3-12.

The Centennial Site is located immediately adjacent to the city limits of the City of Grass Valley, and is surrounded by light industrial and commercial uses. *Id.* at 3-11. The Brunswick Site is surrounded by rural residential neighborhoods of single-family homes and undeveloped open space. *Id.* Both sites are zoned for light industrial use. *Id.* at 3-1. The South Fork of Wolf Creek runs through the Brunswick Site, and the main stem of Wolf Creek runs through the Centennial site. *Id.* at 3-13, 3-16. Wetlands and riparian habitat are located along the main stem and South Fork of Wolf Creek. *Id.* at 3-10, 3-33, 4.4-2.

Both the Brunswick and Centennial sites were part of previous mining operations prior to the closure of the Idaho-Maryland Mine in 1956. *Id.* at 3-9. The Brunswick Site contains mine shafts which provided access to the mine, while the Centennial Site was historically used for dumping mine waste. *Id.* at 3-9 to 3-10. The Centennial Site contains mine waste contaminated with arsenic, lead, thallium, mercury, and nickel. *Id.* at 4.7-3. Because of this existing pollution and unstable soil conditions, the Centennial Site cannot be redeveloped until the contamination is

remediated. *Id.* at 3-10, 3-33. The Applicant has entered into a Voluntary Cleanup Agreement with the California Department of Toxic Substances Control (DTSC) for the voluntary cleanup of soil contamination on the Centennial Site. *Id.* at 3-10. DTSC is reviewing a proposed Remedial Action Plan (RAP) under which the Applicant would excavate contaminated soils, and consolidate and stabilize contaminated materials within a 5.6-acre area where they would be mixed with cement and capped with four feet of soil. *Id.*; *see* RAP, attached as Exhibit C.

The Project would require pumping approximately 2,500 acre-feet of groundwater (“dewatering”) out of the abandoned underground mine over a six-month period before mining operations could begin. *Id.* at 3-11 to 3-12, 3-15. Gold mining and mineralization would then occur over an 80-year permit period, with a planned production of 1,000 tons of gold mineralization per day (365,000 tons per year). *Id.* at 3-19. Mining would occur 24 hours per day, 7 days per week. *Id.* at 3-18. Mining would require the daily underground detonation of ammonia nitrate fuel oil and packaged or bulk emulsion explosives. *Id.* at 3-19. The mine would generate approximately 500 tons of waste rock per day, which would be transported to the surface. *Id.* In addition, approximately 850 gallons of groundwater per minute would be pumped out of the mine on a continuous basis during operations. *Id.* at 3-18. Pumped groundwater would be discharged into the South Fork of Wolf Creek after treatment. *Id.* at 3-29.

The Project proposes to construct new aboveground processing facilities for gold and mine waste as well as water treatment facilities and a wastewater pond at the Brunswick Site. *Id.* at 3-11 to 3-12. Waste rock or tailings excavated from the mine would be dumped on the Centennial and Brunswick sites, where they would be graded into “engineered fill” pads intended to support future industrial development on both sites. *Id.* The fill pad at the Centennial Site would cover an area of 44 acres and contain 1.6 million tons of mine waste, while the fill pad at the Brunswick Site would cover 31 acres and contain 2.2 million tons of mine waste. *Id.* at 3-32 to 3-33. However, remediation of the Centennial Site under a DTSC-approved RAP would need to be completed before that site could be used for dumping waste from the mine. *Id.* at 3-10.

Once dumping begins, the DEIR estimates that the Centennial Site would be completely filled with mine waste in five years, and the Brunswick Site would be filled in six years. *Id.* at 3-26, 3-28. After the dumping areas at the Centennial and Brunswick sites have reached their maximum capacity, mine waste from the Project would be trucked offsite and disposed of elsewhere for the remainder of the 80-year proposed lease term. *Id.* Mine waste would be trucked offsite along Brunswick Road to SR 20/49. *Id.* at 3-29. Following completion of mining and processing activities, the Project proposes to restore the Centennial and Brunswick sites for future industrial use as outlined in a Reclamation Plan. *Id.* at 3-12.

B. The DEIR Does Not Use the Correct Baseline of Existing Conditions at the Centennial Site.

CEQA requires that an EIR include an accurate description of a project's environmental setting, which provides "the baseline physical conditions by which a lead agency determines whether an impact is significant." CEQA Guidelines § 15125(a). This baseline "should describe physical environmental conditions as they exist at the time the notice of preparation is published." *Id.* The purpose of this requirement is "to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts." *Id.* "Without a determination and description of the existing physical conditions on the property at the start of the environmental review process, the EIR cannot provide a meaningful assessment of the environmental impacts of the proposed project." *Save Our Peninsula Com. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 119.

Here, the DEIR lacks a legally adequate baseline because it improperly uses hypothetical future post-cleanup conditions on the Centennial Site as the baseline for impact analysis instead of the existing conditions on the site. *See* Exhibit A (Baseline Report) at 2. As the DEIR acknowledges, the Centennial Site is currently contaminated with toxic mine waste, and cannot be used for the Project until the contamination has been remediated in a DTSC-approved cleanup. DEIR at 3-10, 3-33. The correct baseline for the site therefore must reflect the current contaminated state of the property. However, the DEIR does not use these existing conditions at the Centennial Site as the baseline for impact analysis. Instead, the DEIR simply assumes that cleanup of the site will be completed, and uses expected future post-remediation conditions at the site as the baseline. *Id.* at 1-4, 1-6, 3-10. The DEIR uses this assumed post-remediation baseline for the Centennial Site in its analysis of aesthetic impacts, agriculture and forestry resources, biological resources, hazards and hazardous materials, and wildfire risk. *Id.* at 1-6 to 1-7.

Elsewhere, however, the DEIR acknowledges the possibility that the cleanup of the Centennial Site might never be approved by DTSC and might never be completed during the 80-year term of the Project permit. *Id.* at 1-3, 3-26. The DEIR asserts that in that case, the mine waste that would otherwise be dumped on the Centennial Site would be trucked offsite and disposed of elsewhere in "local and regional construction markets" after the fill area at the Brunswick Site is full. *Id.* at 1-3, 3-26.

DTSC has not yet approved the Centennial Site cleanup, which is currently undergoing a separate CEQA review. *See id.* at 1-5. Because DTSC might not approve the cleanup, and Rise Gold might not complete it, the DEIR's use of a hypothetical post-remediation baseline in its analysis of Project impacts on the Centennial Site is inappropriate. The DEIR's baseline for the site ignores this uncertainty, simply assuming the future cleanup will occur. The CEQA Guidelines clearly state that "[a]n existing conditions baseline shall not include hypothetical conditions, such as those that might be allowed, but have never actually occurred, under existing permits or plans, as the baseline." CEQA Guidelines § 15125(a)(3). An EIR's failure to accurately determine existing baseline conditions "renders the identification of environmental impacts legally inadequate and precludes a determination that substantial evidence supports" the

EIR's conclusions about the significance of project impacts or the effectiveness of mitigation. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729. Without "an adequate baseline description . . . analysis of impacts [and] mitigation measures . . . becomes impossible." *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 953. Because the DEIR's analysis of aesthetic impacts, agriculture and forestry, biological resources, hazardous materials, and wildfire risk is based on this flawed and uncertain baseline, that analysis is legally inadequate and cannot be supported by substantial evidence.

Anticipating criticism of this glaring flaw, the DEIR preemptively seeks to defend its use of the post-remediation baseline for the Centennial Site. DEIR at 1-3 to 1-7. The DEIR cites the CEQA Guidelines, which provide that "where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or *conditions expected when the project becomes operational*, or both, that are supported with substantial evidence" CEQA Guidelines Section 15125(a)(1) (emphasis added); DEIR at 1-3 to 1-4. The DEIR also cites *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority*, where the court noted that "in appropriate circumstances an existing conditions analysis may take account of *environmental conditions that will exist when the project begins operations*; the agency is not strictly limited to those prevailing during the period of EIR preparation. An agency may, where appropriate, adjust its existing conditions baseline to account for a major change in environmental conditions that is expected to occur *before project implementation*." *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 452 (emphasis added); DEIR at 1-4.

The DEIR's attempted defense is unavailing. As the italicized language makes clear, the quoted portions of CEQA Guidelines Section 15125(a)(1) and *Neighbors for Smart Rail* allow an EIR to use a baseline that consists of conditions that "will exist when the project begins operations." But here there is no guarantee that the Centennial Site cleanup will have even started—let alone been completed—before the Project begins operations. As discussed above, the DEIR expressly acknowledges that the Centennial Site cleanup may not be approved by DTSC and may *never* be completed within the entire 80-year term of the mine permit. DEIR at 1-3, 3-26. The DEIR asserts that "the Idaho-Maryland Mine Project can proceed independently from the Centennial Clean-Up Project, *even if the Centennial Clean-Up Project is not completed within the term of the mining permit*, in which case, material from the Idaho-Maryland Mine Project would not be placed on the Centennial Industrial Site." DEIR at 1-7 (emphasis added). This statement is flatly inconsistent with its assumption for baseline purposes that the Centennial cleanup would be completed before the mine begins operations.

The DEIR incorrectly asserts that it is *not* using a "future baseline" for the Centennial Site, noting that "[a] future baseline is understood to be a point in time beyond the date of project operations." DEIR at 1-4. This assertion misrepresents the relevant legal standard. A future

baseline is one that does not currently exist, but is assumed to exist in the future when the Project becomes operational. But again, the DEIR acknowledges that its chosen post-remediation baseline for the Centennial Site may not occur until after Project operations have begun. *Id.* at 1-3, 3-26 (noting possibility that “the remediation of the Centennial Industrial Site, currently under DTSC oversight, is not complete upon commencement of mining”). Therefore, in order to use post-remediation conditions as the sole baseline, the DEIR would need to satisfy CEQA’s requirements for “future baselines.” The Guidelines provide that “[a] lead agency may use projected future conditions (beyond the date of project operations) baseline as the sole baseline for analysis only if it demonstrates with substantial evidence that use of existing conditions would be either misleading or without informative value to decision-makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record.” CEQA Guidelines § 15125(a)(2). The DEIR fails to meet that standard here: it does not demonstrate with substantial evidence that the Centennial cleanup can be reliably projected to occur, nor does it show that using existing conditions as the Centennial baseline would be either misleading or without informative value to decision-makers or the public. The DEIR’s attempted use of a future baseline therefore violates CEQA.

The DEIR must be revised to consistently use existing conditions as the baseline for the Centennial Site, and cannot merely assume that the proposed Centennial cleanup will be approved or completed. The document’s analysis of aesthetic impacts, agriculture and forestry resources, biological resources, hazards and hazardous materials, and wildfire risk (which all use the assumed post-remediation baseline) must be revised to evaluate those impacts with reference to existing contaminated conditions on the Centennial Site, and must consider the possibility that the cleanup may not occur before mine operations begin, or at all.

Moreover, the DEIR must analyze other additional environmental impacts that might result from the Project if the Centennial cleanup does *not* occur. If the Centennial Site is never remediated during the term of the mine permit, the site will never become available for dumping of mine waste, and an additional 1.6 million tons of mine waste from the Project will need to be trucked offsite once the dumping area at the Brunswick Site is full. DEIR at 1-3, 3-32 to 3-33, 3-26. The DEIR must evaluate the potential impacts of the offsite trucking of those additional 1.6 million tons of mine waste on air quality, GHG emissions, energy use, and noise. It currently fails to do so. *See* DEIR at 4.3-50, 4.3-53 to 4.3-54, 4.3-67 to 4.3-68 (air quality and GHG analysis assumes dumping of fill at Centennial site); *id.* at 4.10-33, 4.10-35 (noise analysis). Furthermore, the DEIR must explain how the Applicant will meet its commitment to reclaim the Centennial Site for future industrial use (DEIR at 3-12, 3-42, 3-46) if the Centennial cleanup is not completed. The DEIR must be revised to correct these flaws and then recirculated.

C. The DEIR’s Project Description Improperly Excludes the Cleanup of the Centennial Site from the Project Scope.

The DEIR also lacks an adequate project description because it wrongly excludes the Centennial cleanup from the scope of the Project. CEQA requires that an EIR contain an accurate and comprehensive project description which contains enough detail to allow informed analysis of environmental effects. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193; CEQA Guidelines § 1512. “[A] correct determination of the nature and scope of the project is a critical step in complying with the mandates of CEQA.” *Nelson v. County of Kern* (2010) 190 Cal.App.4th 252, 267 (citing *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1222. “The entirety of the project must be described, and not some smaller portion of it.” *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 654 (“*County of Merced*”).

Under CEQA, a “project” is an activity that may cause either a direct or reasonably foreseeable indirect change in the environment, and that involves the issuance of a permit or other entitlement for use by one or more public agencies. Pub. Resources Code § 21065. The project includes the “whole of an action,” and “does not mean each separate governmental approval.” CEQA Guidelines § 15378(a), (c). Where two actions are integrally related or where one action is conditioned on another action, they must both be considered together as one project in a single EIR. *Nelson*, 190 Cal.App.4th at 271; *Tuolumne County Citizens*, 155 Cal.App.4th at 1222. When “an individual project is a necessary precedent for action on a larger project, or commits the lead agency to a larger project, with significant environmental effect, an EIR must address itself to the scope of the larger project.” CEQA Guidelines § 15165.

Segmenting a portion of a project from the whole is forbidden under CEQA. *Assn. for Sensible Development of Bishop Area v. County of Inyo* (“*County of Inyo*”) (1985) 172 Cal.App.3d 151, 165-66 (*County of Inyo*). A project applicant cannot “file separate environmental reports for the same project to different agencies thereby preventing ‘consideration of the cumulative impact on the environment.’” *Nelson*, 190 Cal.App.4th at 271 (internal citation omitted). “CEQA’s conception of a project is broad,” and it “prevents a proponent or a public agency from avoiding CEQA requirements by dividing a project into smaller components which, when considered separately, may not have a significant environmental effect.” *Id.* (citations omitted). Such piecemeal environmental review that breaks up projects into smaller pieces to evade a complete impact analysis therefore violates CEQA. *See Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180, 193; *Bozung v. LAFCO* (1975) 13 Cal.3d 263, 283.

Here, the DEIR’s project description violates CEQA because it improperly excludes the cleanup of the Centennial Site from the scope of the Project, wrongly contending that this cleanup is separate from the Project. DEIR at 3-10; *see* Exhibit A (Baseline Report) at 3. The project description states that the Project would involve dumping 1.6 million tons of mine waste on a 44-acre area of the 56-acre Centennial Site over a period of five years. *Id.* at 3-32 to 3-33. However, as discussed above, the Centennial Site is currently contaminated with arsenic, lead, thallium, mercury, and nickel. *Id.* at 4.7-3. Because of this existing pollution and unstable soil

conditions, the DEIR acknowledges that the Centennial Site cannot be redeveloped until the contamination is remediated by Rise Gold in accordance with an RAP approved by DTSC. *Id.* at 3-10, 3-33. Despite this, the DEIR asserts that “[t]he environmental cleanup work at the Centennial Industrial Site [carried out by the Applicant] under the DTSC voluntary cleanup program . . . is not a component of the proposed project.” *Id.* This is incorrect.

The Applicant’s cleanup of the Centennial Site proposed in the RAP is a necessary first step toward using the site as a dumping ground for “engineered fill” from the Project. The DEIR acknowledges that the Project includes dumping waste rock excavated from the mine onto the Centennial Site. *Id.* at 1-3, 3-26, 3-28, 3-32 to 3-33. It states that after “environmental cleanup work is completed [at the Centennial Site] and a No Further Action letter is issued by DTSC, engineered fill from the Brunswick Industrial Site would be placed, graded, and compacted on the Centennial Industrial Site” as part of the Project. *Id.* at 3-33. The DEIR also states that one of the Project objectives is to “[i]ncrease the usable land area at the Centennial Industrial Site to allow its future use as industrial land.” *Id.* at 3-12. The DEIR therefore calls for a “Reclamation Plan” in which the engineered fill at the Centennial Site would be graded into a “pad” for future industrial development after dumping is complete, and the remainder of the site would be revegetated. *Id.* at 3-42, 3-46. Since the DEIR acknowledges that the Applicant’s remediation of the Centennial Site is a necessary prerequisite to the Project’s proposed dumping on the site and the site’s eventual reclamation for industrial use (*id.* at 3-10, 3-33), the DEIR’s claim that this remediation is not part of the Project is incorrect. The Centennial Site remediation will be carried out by the Applicant to facilitate the use of the site for the proposed Project.

The Centennial RAP itself demonstrates that the RAP should be considered part of the Project. The RAP repeatedly refers to work to be done on the Centennial Site that goes beyond remediation, but rather is intended to prepare for the future stages of the IMM Project. The RAP acknowledges that “[p]ost-remediation use of the property” includes “the placement of additional mine waste . . . resulting from future mining operations.” Exhibit C (RAP) at 19. It states that contaminated materials on the site “are to be reworked in place as engineered fill and covered with clean engineered fill *to prepare the site for future commercial/industrial site development.*” *Id.* at XVIII (emphasis added); *see also id.* at 39, 45. Because the RAP is not solely focused on remediating the Centennial Site, but rather is intended to prepare the site for future use in the IMM Project, the RAP is a part of the IMM Project. Recognizing that the two actions are integrally related, DTSC acknowledges that it is considering “combining the [environmental review for the Centennial RAP] project with the IMM EIR.” *See* Email from Dean Wright, Project Manager, DTSC, to Ralph Silberstein, February 4, 2022, attached as Exhibit D. Moreover, the Central Valley Regional Water Quality Control Board (RWQCB) has called for exactly that approach, commenting that “the cumulative impacts to water quality incurred by the project described in the [Centennial] RAP and potential future discharge of mine waste generated by the proposed Idaho-Maryland Mine-Rise Grass Valley project should be considered in a single environmental document.” *See* Central Valley RWQCB, Review of Draft Final Remedial

Action Plan Centennial M-1 Property, Nevada County, September 24, 2021, attached as Exhibit E, at 5.

In determining whether a particular action should be considered part of a CEQA project, courts “examine how closely related” the action is “to the overall objective of the project.” *Tuolumne County*, 155 Cal.App.4th at 1226. “The relationship between the particular act and the remainder of the project is sufficiently close when the proposed physical act is among the ‘various steps which taken together obtain an objective.’” *Id.* In *Tuolumne County*, because the objective of the project was to open and operate a home improvement center, and that objective was “conditioned upon the completion of the realignment of a road,” the road realignment was deemed part of “a single CEQA project” with the proposed home improvement center. *Id.* at 1227. In *Nelson*, the court invalidated a mitigated negative declaration that reviewed only a mining reclamation plan for a proposed mining project while excluding the associated surface mining operations from the review. 190 Cal.App.4th at 269, 272. The court held that “the entire CEQA project that had to be reviewed by the County included *both* the mining operations and the reclamation plan,” because “both aspects were integrally related and constituted the whole of the action” for which approvals were sought. *Id.* at 272. The reclamation plan “was simply the final phase of the overall usage of the land.” *Id.*

Here, as in *Tuolumne County* and *Nelson*, the remediation of the Centennial Site is an essential step which the Applicant must take in order to accomplish the objectives of the IMM Project. The DEIR acknowledges that the IMM Project’s proposed dumping of engineered fill on the Centennial Site cannot occur until the site is remediated under the RAP. DEIR at 3-10, 3-33. The Centennial cleanup is also necessary to achieve the stated IMM Project objective to “[i]ncrease the usable land area at the Centennial Industrial Site to allow its future use as industrial land.” *Id.* at 3-12. Accordingly, the Centennial RAP is an integral part of the IMM Project, and the RAP’s exclusion from the Project description (*id.* at 3-10) violates CEQA.

The DEIR argues that the Centennial RAP should not be considered a part of the IMM Project for several reasons, all of which are meritless. *Id.* at 1-7 to 1-8. First, the DEIR asserts that “the Idaho-Maryland Mine Project can proceed independently from the Centennial Clean-Up Project, even if the Centennial Clean-Up Project is not completed within the term of the mining permit, in which case, material from the Idaho-Maryland Mine Project would not be placed on the Centennial Industrial Site.” *Id.* at 1-7. The DEIR thus denies that the RAP is an essential prerequisite to the IMM Project. *Id.* at 1-8. But while it may be true that the IMM Project does not need the Centennial Site for disposal of waste rock from the mine, since that material can be dumped on the Brunswick Site or disposed of elsewhere, the same is not true for the Project’s other goals. The IMM Project commits to reclamation of the Centennial Site for future industrial use. *Id.* at 3-42, 3-46. As noted above, the Centennial RAP is a necessary prerequisite to achieving the IMM Project objective to “[i]ncrease the usable land area at the Centennial Industrial Site to allow its future use as industrial land.” *Id.* at 3-12. Even if the Applicant never

dumps any mine waste on the Centennial Site, the Applicant cannot abandon its commitment to reclaim the Centennial Site without altering the basic nature of the IMM Project.

Second, the DEIR argues that “[t]he utility and purpose of the Centennial Clean-Up Project is to ensure timely and efficient cleanup of the Centennial Industrial Site due to existing site conditions, and is required under both California and federal environmental regulations—not because it would benefit the Idaho- Maryland Mine Project. . . the Centennial Clean-Up Project would happen whether or not an underground mine is approved by Nevada County for the Brunswick Industrial Site.” DEIR at 1-7. But as discussed above, the Centennial RAP itself clearly indicates that it is intended to prepare the site for future placement of engineered fill as part of the IMM Project, and eventual reclamation for industrial use. Exhibit C (RAP) at 19, 39, 45. One of the purposes of the RAP *is* to benefit the IMM Project. Moreover, the DEIR notes that the Applicant, Rise Gold, has entered a “Voluntary Cleanup Agreement” with DTSC “for the voluntary cleanup of soil contamination on the Centennial Industrial Site,” and that the RAP has been prepared pursuant to that agreement. DEIR at 1-4, 3-10; *see* Exhibit C (RAP) at xii. The Voluntary Cleanup Agreement states that the Applicant “reserves the right to unilaterally terminate this Agreement for any reason” after 30 days’ notice. Voluntary Cleanup Agreement at 5, Section 18.1, attached as Exhibit F. Rise Gold would not have entered the Voluntary Agreement to undertake the Centennial cleanup and its associated costs if it did not serve the Applicant’s ultimate goal of dumping fill on the site as part of the IMM Project. If the IMM Project does not go forward, the Applicant could withdraw from its commitment to the Centennial cleanup.

The DEIR argues that the Centennial RAP should be analyzed separately because the situation here allegedly resembles that in *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1223. DEIR at 1-7 to 1-8. But that case is factually inapposite. In *Banning Ranch*, a City proposed building a park and associated access road, which was reviewed in one EIR, while another EIR reviewed a residential subdivision proposed by a private developer on adjacent property, which called for a much larger access road in the same location. 211 Cal.App.4th at 1216-17. While the projects would share the same access road, neither project depended on or assumed completion of the other project. *Id.* at 1218-19. The court found that there was no piecemealing because these two projects had different proponents and served different purposes, and because the park’s smaller access road was only a “baby step” towards the residential project. *Id.* at 1225-26. Here, by contrast, both the Centennial cleanup and the remainder of the IMM Project have the same project proponent, Rise Gold, and share the objective of making the Centennial Site suitable for industrial development, as discussed above. Unlike *Banning Ranch*, the Centennial cleanup is a necessary prerequisite to the dumping of engineered fill from the IMM Project, and the DEIR assumes that the cleanup will occur.

Segmenting the IMM Project from the Centennial RAP also prevents a full environmental analysis of the combined impacts of the RAP and the subsequent dumping of fill on the site. For example, this piecemeal approach risks understating the impacts to wetlands on the Centennial

Site. The Centennial RAP plans to excavate clean fill from portions of the Site that are not contaminated and to use this fill to cap the contaminated areas. Exhibit C (RAP) at xx, 63. The RAP states that it could destroy up to 4.35 acres of wetlands on the site, which may be mitigated via onsite wetland restoration or creation. *Id.* at 60. The Initial Study/Mitigated Negative Declaration (MND) for the RAP contends that impacts on these wetlands will be less than significant following mitigation. MND at 29, attached as Exhibit G. The IMM Project, in turn, plans to dump mine waste on 44 acres of the 56-acre Centennial Site, avoiding only 12 acres that include Wolf Creek, a 100-foot setback from the Creek, and areas containing certain sensitive plant species. DEIR at 3-15. Because the IMM Project and Centennial RAP are analyzed piecemeal in separate documents, it is impossible for the public to determine whether wetlands impacted by the RAP would be further impacted by the dumping of fill from the IMM Project, or whether that dumping would destroy or impair wetland mitigation proposed as part of the RAP.

The DEIR ignores the reality that the Centennial RAP is an integral part of the IMM Project, and improperly segments the Project by excluding the cleanup. This piecemeal description prevents an analysis of the IMM Project as a whole, and therefore violates CEQA. The DEIR's project description must be revised to recognize the cleanup of the Centennial Site as an integral part of the Project, and DEIR must analyze all of the environmental effects of the RAP as part of the Project.

D. The DEIR Lacks a Stable and Complete Project Description.

In addition to omitting the Centennial RAP and equivocating as to whether the cleanup will happen, the DEIR's project description is also unstable and incomplete in other respects. An accurate, stable and finite project description is an essential component of an informative and legally sufficient EIR. *San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 730. Here, the Project description is incomplete because it fails to adequately describe the duration of required water quality permits, and the DEIR fails to consistently describe mining and exploration activities over the entire permit period. Moreover, the DEIR does not consistently describe the duration of Project construction.

The Conditional Use Permit (CUP) for the Project would span 80 years. DEIR at 3-12, 3-28, 3-47. The Project also requires several different types of Water Board permits (*see id.* at 3-15, 3-18, 3-52), none of which would have anything approaching an 80-year time frame. For example, under the federal Clean Water Act, National Pollutant Discharge Elimination System (NPDES) permits for discharges to surface water expire every five years unless renewed. 40 C.F.R. § 122.46. As discussed in the hydrology and water quality section of this letter, Section II.A, *infra*, the DEIR relies on compliance with these regulatory requirements and permits to conclude that the Project's impacts would be less than significant. Yet the DEIR fails to clearly describe the timeframe of these Water Board permits, nor does it make any attempt to reconcile

an 80-year CUP with Water Board permits that may expire every five years. This informational deficiency makes the project description inadequate.

The DEIR also relies on a shifting project description. Despite the DEIR's clear statement that the Project's permitted mining operations would span 80 years (DEIR at 3-12, 3-28, 3-47), the DEIR's hydrology and water quality analysis refers to a 2045 "base-case" mining scenario. It states that the proposed mining plan or "base-case" scenario evaluated by the Applicant's consultant Itasca Denver, Inc. represents the exploration target over a 25-year period based on historic mapping and drill core sampling conducted to date. *Id.* at 4.8-55. Neither the Project description nor the hydrology chapter explain the basis for this "base-case scenario" or how it is compatible with the Project's 80-year timespan. Relatedly, the DEIR's hydrology and water quality chapter contains a section on "potential future exploration and mining" that discusses "possible future mining scenarios" that would extend from 26 years to 60 years after Project approval. This "additional, deeper exploration and mining" may occur as part of the Project within the 2,585-acre mineral rights boundary owned by Rise. *Id.* at 4.8-62. Once again, the DEIR's project description makes no mention of this potential future exploration and mining. The DEIR fails to explain where exactly this future exploration and mining would occur, what it would entail, and how it would relate to the 80-year conditional use permit for the Project. This omission violates CEQA. *See San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 730.

Finally, the DEIR provides an inconsistent description of the Project construction period. The DEIR's project description states that Project construction would last for 18 months. DEIR at 3-37. By contrast, the DEIR's air quality, GHG, and energy chapter assumes that Project construction would last for only 12 months, and bases its impact analyses on that assumption. *Id.* at 4.3-44 to 4.3-46, 4.3-66 to 4.3-67, 4.3-74, 4.3-92. The DEIR is therefore internally contradictory and improperly minimizes the Project's significant impacts. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 284. The DEIR must be revised so that the project description and the impact analyses consistently describe the duration of construction activities.

II. The DEIR's Fails to Adequately Analyze and Mitigate the Project's Environmental Impacts.

The discussion of a proposed project's environmental impacts is at the core of an EIR. *See* CEQA Guidelines §15126.2(a) ("[a]n EIR shall identify and focus on the significant environmental effects of the proposed project"). As explained below, the DEIR's environmental impacts analysis is deficient under CEQA because it fails to provide the necessary facts and analysis to allow the County and the public to make informed decisions about the Project. An EIR must effectuate the fundamental purpose of CEQA: to "inform the public and responsible

officials of the environmental consequences of their decisions before they are made.” *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123 (“*Laurel Heights II*”). To do so, an EIR must contain facts *and* analysis, not just an agency’s bare conclusions. *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 568. Thus, a conclusion regarding the significance of an environmental impact that is not based on an analysis of the relevant facts fails to fulfill CEQA’s informational mandate.

Additionally, an EIR must identify feasible mitigation measures to mitigate significant environmental impacts. CEQA Guidelines §15126.4. Under CEQA, “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” Pub. Resources Code § 21002.

Although it is clear that the proposed Project has the potential to cause extraordinary environmental degradation, neither the public nor decisionmakers have any way of knowing the magnitude of this harm. As we explain below, the DEIR fails to provide detailed, accurate information about the Project’s significant environmental impacts and to analyze mitigation measures or project alternatives that would reduce or avoid such impacts.

A. The DEIR Fails to Adequately Analyze and Mitigate the Project’s Hydrology and Water Quality Impacts.

1. The DEIR Does Not Adequately Analyze or Mitigate the Project’s Impacts on Domestic Water Supply Wells.

The proposed Project would intentionally affect local groundwater resources by dewatering the aquifer in the Project vicinity to lower groundwater levels. According to Baseline’s hydrogeologist, Bruce Abelli-Amen, mine workings would essentially act as an enormous groundwater extraction well that would be pumped continuously for the Project’s duration, i.e., 80 years. Exhibit A (Baseline Report) at 4, 5. The mine’s groundwater levels would be lowered by over 3,000 feet. DEIR at 4.5-55. Despite this massive dewatering operation, the DEIR fails to accurately evaluate how this loss of water would affect groundwater levels. Consequently, the document also fails to adequately evaluate the effect on residences and businesses in the Project vicinity that rely solely on private groundwater wells for their water supply.

(a) The DEIR Fails to Accurately Describe Existing Hydrologic Conditions in the Project Study Area.

The DEIR’s analysis of impacts on domestic water supplies fails from the outset because it lacks an adequate description of existing hydrological conditions. As discussed above, an accurate depiction of existing environmental conditions is critical to a complete assessment of

project impacts. First, as the DEIR admits, “baseline groundwater levels” have yet to be established. *See* DEIR Mitigation Measure 4.8-2(a) (p. 4.8-67), stating “[F]or each domestic well, a projected and seasonally averaged water level shall be estimated based on the domestic well location and the background potentiometric conditions, which will serve as a baseline groundwater level and shall be developed prior to the initiation of dewatering of the underground mine workings.” Until the DEIR identifies baseline groundwater levels absent the Project, it is not possible to evaluate how mining operations will impact groundwater levels and domestic water supply wells.

Second, the DEIR provides no evidence that the hydrologic analysis covers the full geographic area where impacts might occur. CEQA requires that an EIR must analyze environmental impacts over the entire area where one might reasonably expect these impacts to occur. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 721-23. This principle stems directly from the requirement that an EIR analyze all significant or potentially significant environmental impacts. Pub. Resources Code §§ 21061, 21068. An EIR cannot analyze all such environmental impacts if its study area does not include the geographical area over which these impacts will occur. Here, the DEIR states that “drawdowns of the water table are *generally* within the mineral rights boundary.” DEIR at 4.8-58 (emphasis added). By including the word “generally,” the DEIR admits to being uncertain about the geographic extent of where drawdowns might occur. Moreover, the DEIR provides no explanation as to how it determined that drawdowns would likely be limited to the area within the mineral rights boundary. As discussed below and as elaborated on in the Baseline Report, the area surrounding the Project site contains a fractured bedrock system which affects groundwater occurrence and flow. Exhibit A (Baseline Report) at 6, 7. Due to this complex hydrogeologic environment, it is certainly possible for drawdowns of the water table to extend beyond the mineral rights boundary. Until the DEIR accurately identifies where drawdowns would occur, the DEIR cannot provide a full and accurate accounting of the Project’s hydrologic impacts.

Baseline Environmental echoes this concern, explaining that the Applicant does not intend to monitor water levels in the actual water supply wells at overlying and nearby residences and businesses that may be affected by the Project. Instead, the Applicant proposes to install 15 monitoring wells across the Project site. Exhibit A (Baseline Report) at 11. According to Baseline, there are likely hundreds of supply wells in the region. It is possible that some of these wells are just barely satisfying the well owners’ needs under existing conditions, and that any reduction to their water level caused by the Project’s operations could lead to water levels dropping below the well pump intake. *Id.* at 10. However, because the DEIR does not cast its geographic net widely enough, the potential impacts to well users caused by the Project’s operations remain undisclosed. The DEIR must be revised to correct these deficiencies and then recirculated for public review and comment.

(b) The DEIR Lacks Thresholds of Significance for Evaluating the Project's Impacts on Groundwater Supplies.

CEQA's most basic purpose is to inform governmental decisionmakers and the public about the potentially significant environmental effects of a proposed project. CEQA Guidelines § 15002 (a) (1); 40 C.F.R. § 1500.1(b). Determining whether a project may result in a significant adverse environmental effect is one of the key aspects of CEQA. Guidelines § 15064(a) (determination of significant effects "plays a critical role in the CEQA process"). CEQA specifically anticipates that agencies will use thresholds of significance as an analytical tool for judging the significance of a Project's impacts. *Id.* § 15064.7. The determination of significance "is critical, because once 'significant effects' have been identified in the EIR, an agency must explore implementing feasible mitigation measures or alternatives to avoid or reduce the effect." *Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs.* (2001) 91 Cal.App.4th 1344, 1373.

Thus, one of the first steps in any analysis of an environmental impact is to select a threshold of significance and to support this threshold with substantial evidence. CEQA Guidelines § 15064.7 (b). Here, the DEIR contains no thresholds of significance for the Project's impacts on groundwater supplies. This flaw leads to a cascade of other failures: without a threshold, the DEIR cannot identify whether a particular effect will be significant and it cannot identify adequate mitigation to address that impact. In short, the DEIR cannot do its job. Thus, although the DEIR ultimately asserts that the Project would potentially impact groundwater supplies, the document provides no standard by which to evaluate this impact's significance.

This defect becomes most apparent when reviewing Mitigation Measure 4.8-2 (b): "If, based on the [Groundwater Monitoring Plan], it is determined that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the project applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted." DEIR at 4.8-68.

Although the DEIR never states this, it appears that the authors are relying on this 10 percent reduction figure as an ad hoc threshold of significance. The problem is that the DEIR provides no justification for this arbitrary number. Exhibit A (Baseline Report) at 10. Indeed, although Mitigation Measure 4.9-2(b) references Nevada County General Plan Policy 17.12, nothing in this policy mentions a 10 percent reduction criterion. This 10 percent figure is almost meaningless because, as discussed above, it is certainly possible that of the hundreds of supply wells in the region, some of them are just barely satisfying the well owners needs under existing conditions, and *any* reduction could lead to adverse impacts on area wells.

It is therefore critically important that the revised DEIR identify thresholds of significance, based on substantial evidence (i.e., data related to the characteristics and function of

the existing domestic wells in the Project study area). The DEIR's failure to include this information is fatal flaw requiring that the DEIR be revised and recirculated.

(c) The DEIR Does Not Accurately Evaluate the Project's Impacts Because It Relies on a Flawed Groundwater Model.

The DEIR relies on a numerical groundwater model to assess the Project's impacts on groundwater levels and specifically to determine which private wells would experience excessive drawdown. Experts agree that these models can be inaccurate and unreliable under the best of circumstances. As Baseline explains,

Accurately characterizing the flow patterns and behavior of groundwater using mathematical equations (models) is a challenging endeavor in any geologic environment. The types of hydrogeologic systems that are most readily modeled accurately are uniform (homogeneous), isotropic (consistent structure from place to place) rock and or sediments, like a uniform unfractured sandstone where water flows slowly through pore spaces around the grains of the geologic material.

Groundwater occurrence and flow within complex fractured bedrock systems, like those that occur at the project site, are exceedingly difficult to model with accuracy or reliability. It is widely known by practitioners in the hydrogeologic community that accurate prediction of groundwater behavior in fractured bedrock using groundwater models, where most of the flow occurs within the unknowable sets of primary and secondary fracture patterns, rarely occurs.

Exhibit A (Baseline Report) at 6, 7.

In addition to the inherent uncertainties of relying on models to predict groundwater impacts in a complex hydrogeologic environment such as this one, Baseline identified numerous deficiencies in the DEIR's groundwater model. For example, the model was calibrated based on pumping rates from the historical Idaho-Brunswick Mine and only one water level measurement was collected from the flooded (i.e., inactive) Union Hill shaft in 1956. Using only one water level measurement to calibrate a complex bedrock aquifer system over a large region introduces a significant amount of uncertainty to the model. Exhibit A (Baseline Report) at 7. Moreover, as Baseline explains, based on the DEIR's appendix, there is a poor hydraulic connection between the two mines, which suggests the water level measurement collected from the Union Hill Shaft is not ideal for calibrating the groundwater model. *Id.*

Nor does the model describe how drawdown would be determined relative to baseline conditions. Private domestic wells in the Project vicinity have seasonal fluctuations that may vary from 10 to 50 feet between wet and dry seasons. Exhibit A (Baseline Report) at 11 (citing DEIR Appendix K.3 at 7). The DEIR provides no explanation as to how these seasonal water fluctuations would be distinguished from Project-related drawdown.

Nor does the groundwater model accurately account for the groundwater depression that will be created by the constant drainage from the existing mine workings. As Baseline explains, calibrating the groundwater model without incorporating the proper mechanisms to simulate the drainage of groundwater from existing mine workings could introduce substantial error to the overall modeling results. Exhibit A (Baseline Report) at 8.

These and other deficiencies identified in the Baseline Report demonstrate that the DEIR's groundwater model likely does not accurately and reliably predict the Project's groundwater impacts. Indeed, even the water resources expert retained by the Applicant expressed concerns about the reliability of the DEIR's groundwater model's results. *See* Exhibit A (Baseline Report) at 7.

Finally, the DEIR calls for a Groundwater Monitoring Plan (GMP) that calls for the collection of groundwater-level information. DEIR at 4.8-67. But the GMP does not propose to monitor water levels in the actual water supply wells at overlying and nearby residences and business that may be affected by the Project. Instead, as discussed above, it proposes to install monitoring wells across the Project site at 15 different locations. Exhibit A (Baseline Report) at 11, 12 (citing the GMP at 1). The DEIR never explains how the placement of 15 monitoring wells in complex fractured bedrock spread over thousands of acres of land could provide sufficient data to evaluate the Project's impacts on residences and businesses. As Baseline explains, a monitoring well could be placed in proximity to an existing supply well and respond very differently to changing water levels in the mine during dewatering if a water-bearing bedrock fracture intersects one of the wells, but not the other. Exhibit A (Baseline Report) at 12.

Based on the flawed groundwater model output, the DEIR concludes that wells only within the East Bennett area could be affected and that impacts in all other areas would not be significant. DEIR page 4.8-62. Specifically, the DEIR determines that the Project would impact just seven supply wells in the East Bennett area during the 80-year life of the mining operation. DEIR at 4.8-66. The DEIR further notes that while only seven wells are projected to be affected, the Project would install a potable water supply line and connect up to 30 properties in the same area to the Nevada Irrigation District potable water as part of a Well Mitigation Plan. DEIR at 4.8-66, 4.8-68 (Mitigation Measure 4.8-2(c)).

However, for the reasons discussed above, and as Baseline confirms, the DEIR lacks evidentiary support that the Project would not significantly impact residences and businesses (i.e., beyond the impacts to the seven supply wells that the DEIR does disclose or the 30

properties that may be retrofitted with a water supply line). Exhibit A (Baseline Report) at 12. And as discussed below, the DEIR's mitigation measures are flawed and incapable of lessening the Project's significant impacts.

2. The DEIR's Mitigation Measures Would Not Mitigate the Project's Groundwater Impacts.

The primary goal of an EIR is to identify a project's significant environmental impacts and find ways to avoid or minimize them through the adoption of mitigation measures or project alternatives. Pub. Resources Code §§ 21002.1(a), 21061. The lead agency must adopt all feasible mitigation measures that can substantially lessen the project's significant impacts, and it must ensure that these measures are enforceable. *Id.*, § 21002; CEQA Guidelines §§ 15002(a)(3), 15126.4(a)(2); *City of Marina v. Bd. of Trustees of the Cal. State Univ.* (2006) 39 Cal.4th 341, 359, 368-69. The requirement for enforceability ensures "that feasible mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded." *Federation of Hillside and Canyon Assns. v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261 (italics omitted); CEQA Guidelines § 15126.4(a)(2). The DEIR fails to comply with these requirements.

The DEIR relies on three mitigation measures to conclude that the Project's impacts on groundwater supplies would be less than significant. None of these measures would effectively reduce the Project's impacts. Mitigation Measure 4.8-2 (a) calls for the Project's GMP to be implemented prior to the dewatering of the mine. Mitigation Measure 4.8-2(b) calls for the provision of supplemental water from the Nevada Irrigation District if any wells experience a 10 percent reduction in water. Mitigation Measure 4.8-2(c) calls for the connection of 30 properties to the Nevada Irrigation District (NID) potable water system. DEIR at 4.8-67 to 4.8-68. For the reasons discussed below, all three measures are deficient.

The DEIR explains that in order to implement the GMP, the Applicant must collect additional groundwater level data and then perform a water-level assessment for individual wells. These steps are necessary in order to evaluate *baseline* groundwater level conditions and to determine the Project's impacts on individual domestic wells. DEIR at 4.8-67. This post-approval data collection and impact analysis constitutes an inappropriate deferral of mitigation. "Formulation of mitigation measures should not be deferred until some future time." CEQA Guidelines § 15126.4(a)(1)(B). However, where mitigation for an impact "is known to be feasible," but where "practical considerations prohibit devising such measures early in the planning process," an agency "can commit itself to eventually devising mitigation measures that will satisfy specific performance criteria articulated at the time of project approval." *Cleveland Nat. Forest Foundation v. San Diego Assn. of Govs.* (2017) 17 Cal.App.5th 413, 442-43. In order to defer formulation of mitigation measures, therefore, an agency must demonstrate (a) that mitigation of the impact is feasible; (b) that practical considerations preclude devising measures at the time of review; (c) specific, articulated performance criteria that will avoid or lessen the

impact; and (d) a binding commitment to adopt measures that will meet or exceed those performance standards. Here, the DEIR does not meet these criteria.

Of paramount concern is the DEIR's failure to include performance criteria that will avoid or lessen the Project's impacts. As discussed above, the DEIR lacks thresholds of significance. Without thresholds of significance, the DEIR is unable to identify performance standards. To the extent that the DEIR preparers intend to suggest that Mitigation Measure 4.8-2(b) (Applicant will supply water to those wells that experience a 10 percent or greater reduction in water), constitutes a performance standard, it cannot do so. As discussed above, and as elaborated fully in the Baseline Report, the DEIR does not provide any factual support for its 10 percent figure. Exhibit A (Baseline Report) at 10-11. And, again, until the DEIR accurately describes existing conditions for the properties that rely exclusively on well water, the DEIR has no basis to conclude that any reduction in the amount of water caused by mining operations would not result in significant impacts. *Id.*

Mitigation Measure 4.8-2 (c) is equally problematic. Here, the DEIR calls for the connection of 30 properties to the NID water system. Again, this measure fails at the outset because there is nothing in the DEIR to suggest that the Project's impacts would not exceed 30 properties. Nor does the DEIR provide any evidence as to how this measure would reduce impacts. Courts will not defer to an agency's conclusions about the effectiveness of a mitigation measure where, as here, the measure's efficacy in reducing an impact is not apparent and there is no evidence in the record showing that it will be effective. *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 866, 875-76. As Baseline explains, to effectively ensure there is no discontinuation of water service to potentially affected users, this mitigation measure should include, at a minimum, the following components:

- Completion of a detailed water supply well inventory for all wells within the Mineral Rights Boundary, plus a substantial buffer zone;
- Investigation of all available details about each potentially affected well such as the construction design (i.e., depth, diameter, screened interval); type and use of the well (e.g., domestic, irrigation, industrial, etc.); water demand (installing totalizer meters if necessary to determine water use); and recharge rates (installing pressure transducers if necessary to monitor drawdown and recharge); and seasonal variations in water levels; and
- Development of a plan for each well to ensure that an immediate alternate water supply can and will be provided should an impact to that well occur. This plan must include provisions to ensure alternate water supplies will be provided throughout the 80-yearlife of the Project and beyond.

In addition, we direct the County to Safeguards for Well Owners and the Idaho-Maryland Mine, CEA Foundation, December 1, 2021, attached as Exhibit H. This document outlines recent permitting history at the Idaho-Maryland Mine and raises additional deficiencies in the DEIR's flawed approach to groundwater protection. This document explains that the 1996 Emperor Gold project was less impactful than the proposed Project but offered far more substantive protections for area wells. Mitigation Measure 4.8-2 must be revised to include, at a minimum, the safeguards identified in this document.

Finally, it is important to note that, because Baseline has determined that the Project would threaten water supplies in the area, the Project is inconsistent with Nevada County General Plan Policy 17.12. This policy places the burden of proof on the Applicant to show that a mining operation did not create the water problem and requires the Applicant to remedy the water problem.³

3. The DEIR Does Not Adequately Analyze or Mitigate the Project's Groundwater Quality Impacts.

Water samples from the New Brunswick shaft and drains reveal that groundwater and surface water quality are already severely degraded. *See* DEIR at 4.8-21, 4.8-22 stating that primary constituents of interest from these water samples are iron and manganese. Arsenic has also been detected above regulatory limits as has the compound cis-1,2-dichloroethylene (DCE). *Id.* Other contaminants of concern include ammonia, hexavalent chromium, pH, total suspended solids, antimony, copper and nitrate. *See* David M. Chambers' Report, submitted under separate cover.

The Project's construction and operations involve multiple activities that could result in adverse effects to water quality, including but not limited to the discharge of mine water containing iron and manganese, discharge of construction area dewatering water, erosion and sedimentation associated with the placement of engineered fill at the Centennial and Brunswick Sites, and use of cemented-paste backfill in the underground workings. DEIR at 4.8-51.

Instead of fully evaluating the Project's water quality impacts, which would require a detailed analysis of the operational water quality treatment processing, including modeling water quality, the DEIR effectively assumes that no such impacts would occur because the Applicant would be required to comply with water quality standards and waste discharge requirements.

³ *See* Chapter 17, Mineral Management, of the Nevada County General Plan; available at: <https://www.mynevadacounty.com/DocumentCenter/View/12589/Chapter-17-Mineral-Management-1995-PDF>; accessed March 3, 2022.

DEIR at 4.8-45, 4.8-52, 4.8-53.⁴ This “trust us” approach is not sufficient to mitigate a potentially significant impact. Under well-established case law, compliance with existing policies and regulations does not excuse the agency from describing project activities or from analyzing resulting impacts. *See Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1108-09 (environmental effect may be significant despite compliance with such requirements). To simply assert that water quality standards will be met is not sufficient for the public or decisionmakers to assess either the adequacy of water treatment methods proposed or the adequacy of the standards proposed for the discharge permit.

Moreover, although the Project entails a conditional use permit (CUP) that will span 80 years, the DEIR makes no attempt to reconcile the timeframe of the CUP with water quality permitting. As discussed above, the Applicant will need to obtain several different types of Water Board permits, none of which would have anything approaching an 80-year time frame. For example, NPDES permits for discharges to surface water expire, unless renewed, every five years per the federal Clean Water Act. 40 C.F.R. § 122.46. The DEIR provides no evidence that water quality will be protected for the entire 80-year Project duration given the timeframes of the various Water Board permitting requirements.

The extensive flaws in the DEIR’s analysis of groundwater supply and groundwater quality impacts requires that the DEIR be comprehensively revised and recirculated.

B. The DEIR Fails to Adequately Analyze and Mitigate the Project’s Noise and Vibration Impacts.

The Project’s activities are expected to generate substantial noise levels. Many of these operations would generate noise levels of 85 dBA and begin early in the morning and extend into the evening. Certain operations would occur 24 hours per day for 80 years (*see e.g.*, above ground facility operations (gold mineralization processing)). Other operations, including the offsite hauling of gold concentrate and “engineered fill,” would begin at 6:00 a.m. and run until 10:00 p.m. seven days a week. DEIR at 3-26; 3-37; 4.10-31. Although tunneling and blasting would occur throughout the Project’s 80-year duration, the DEIR does not identify the hours of these operations. All of these mining operations would occur in a rural residential area and as close as 300 feet from the nearest residence. DEIR at 3-11, 3-15, 4.10-33.

Despite the potential for severe noise and vibration impacts, the DEIR’s analysis of and mitigation for these impacts is utterly deficient. The DEIR’s failure to accurately account for and disclose all of the Project’s noise and vibration impacts prejudicially impairs the ability of

⁴ Although DEIR Chapter 4.8, Hydrology and Water Quality, includes numerous references to the groundwater supply model, we could find no indication that any modeling was conducted to evaluate the Project’s impacts on water quality.

decisionmakers and the public to understand how the Project would affect the surrounding community.

1. The DEIR Declines to Conduct Impact Analyses Relying on the Flawed Premise that the Project Would Be Required to Comply with County Standards.

The DEIR repeatedly asserts that the Project would not have significant noise impacts because it would be required to comply with generalized County noise standards. *See* Tables 4.10-12, 4.10-13, 4.10-14. Yet, mere compliance with the County's standard does not necessarily mean noise impacts are insignificant. *Oro Fino Gold Mining Corporation v. County of El Dorado* (1990) 225 Cal.App.3d 872, 881-82. The proper question is not the relative amount of noise resulting from the Project, but "whether any additional amount of [] noise should be considered significant" in light of existing conditions. *Los Angeles Unified School Dist. v. City of Los Angeles* (1997) 58 Cal.App.4th 1019, 1025-26. In *King and Gardiner Farms*, the court recently rejected a noise analysis that concluded that a project's impacts would be insignificant simply because they complied with the County's noise ordinance and general plan. Of particular importance here, the court found the "conclusion that conformity with the absolute or maximum noise level specified in a general plan does not prevent a fair argument from being made that the proposed project will generate environmentally significant noise impacts." 45 Cal.App.5th 814, 887. Rather, as established in *Keep Our Mountains Quiet v. County of Santa Clara*, "the lead agency should consider both the increase in noise level and the absolute noise level associated with a project." (2015) 236 Cal.App.4th 714, 733.

Here, the rural-residential noise setting is exceptionally quiet. The median/L50 noise levels indicate that people in the area enjoy noise levels below 40 dBA to 50 dBA 50% of the time (specifically, 50% of each hour). Exhibit B (Salter Report) at 4. In addition, residents in the area are currently located away from notable sources of ambient noise and thereby currently enjoy very low nighttime background noise levels between 30 dBA and 45 dBA. *See Id.* at 2, (citing DEIR Appendix L, Appendix B-1).

In light of this very quiet ambient environment, the DEIR should have thoroughly examined the Project's potential to generate nighttime noise. Unfortunately, it does no such thing. The DEIR asserts that because the Project's on-site noise sources must comply with the County's nighttime noise level standards, an evaluation of sleep disturbance is not warranted. DEIR at 4.10-23. This assertion is absurd. The Project includes many operations that will occur during early morning or nighttime hours, including dewatering, indoor facility construction, truck loading/unloading and off-site hauling mineralization processing, and water treatment. DEIR at 3-37. The combination of morning and nighttime industrial activities and low background/ambient noise levels represent a significant risk for Project-related noise to impact the community, annoy residents, and cause sleep disturbance. The revised DEIR must evaluate these impacts and identify and implement appropriate mitigation.

The DEIR also fails to take into account the absolute increase in noise levels compared to ambient background conditions. As the Salter Report explains, certain operations could be 25-35 dB above background ambient noise levels. These noise levels would be perceived as more than four times as loud as the median ambient noise levels and would be expected to result in an aggressive community response and complaints. Yet here too, the DEIR incorrectly determines such impacts would be less than significant because overall noise from these operations would not exceed the County's standards. Exhibit B (Salter Report) at 4. The revised DEIR must evaluate both the increase in noise level and the absolute noise level associated with the Project.

2. The DEIR Fails to Disclose the Geographic Extent of the Project's Noise and Vibration Impacts.

The DEIR defines the Project as consisting of two separate project sites; the Centennial and Brunswick Sites totaling 175 acres. DEIR at 4.9-1. The DEIR identifies the noise and vibration measurement locations occurring solely at the Centennial Site, the Brunswick Site and along the proposed pipeline location between the two sites. *See* DEIR Figure 4.10-3 (p. 4.10-6).

It appears the DEIR is artificially restricting the geographic size of the study area. While processing would occur on the Centennial and Brunswick sites (175-acres), mine development (tunneling) and gold mineralization production (tunneling and production blasting) would occur throughout the Applicant's 2,585 acre mineral rights boundary owned by the Applicant. DEIR at 3-19, 4.9-1; *see also* Figure 3-2 (p. 3-4). Tunneling and production blasting could certainly result in excessive noise levels and vibration. Despite this fact, the DEIR provides no evidence that noise and vibration impacts were measured throughout the entire mineral rights boundary. As discussed above, an EIR must analyze environmental impacts over the entire area where one might reasonably expect these impacts to occur. *Kings County Farm Bureau*, 221 Cal.App.3d at 721-23. Contrary to this requirement, the DEIR fails to provide the required evidentiary support that the DEIR accurately accounts for the full extent of the Project's noise impacts. The revised DEIR must disclose the Project's potential for noise and vibration impacts throughout the entire mineral rights boundary.

3. The DEIR Fails to Adequately Distinguish the Project's Construction from Its Operational Activities and thus Potentially Fails to Recognize that Certain Impacts Could Be Significant Under CEQA.

The DEIR's analysis of construction-related noise raises more questions than it answers. As an initial matter, the DEIR fails to clearly distinguish the Project's construction-related noise sources from its operational noise sources. This distinction is critical because the DEIR asserts that the County's noise standards do not apply to construction-related activities. *See* DEIR at 4.10-16; *see also* Table 4.10-11 (p. 4.10-29, fn. 2) "[b]ecause the Nevada County Zoning Ordinance exempts construction activities from the noise standards, these criteria are not applicable to this component of the project. Results of this analysis are provided to give an

indication as to whether or not construction noise increases would be substantial relative to existing ambient conditions at these nearest receptors.” If, as appears evident, the DEIR characterizes an operational activity as a construction project it may have incorrectly determined such impacts to be exempt from the County’s noise standards and also determined the impact to be less-than-significant under CEQA. For example, the DEIR states that mine development (tunneling) would be constructed throughout the life of the mine. DEIR at 3-19. This would require drilling and the use of explosives. DEIR at 3-19. Similarly, a new mine shaft would be developed on the Brunswick Site. DEIR at 3-22. These massive project components appear to be characterized as construction activities. Yet, they have the potential to be extraordinarily noisy as they would require extensive drilling and rock excavation. *Id.* If the DEIR characterizes these and other project components as construction rather than operation, it inappropriately assumes the noise from these sources would be exempt from the County’s noise standards.

The first step in remedying this deficiency is to clearly categorize each Project component as either construction-related or operation-related. For each construction-related Project component, the DEIR must disclose fundamental details such as the construction-phasing plan, including the timing and duration of each and every project. This analysis must also disclose each construction-project that is expected to occur over the Project’s 80-year timeframe. Finally, in order for the public and decisionmakers to verify whether the DEIR actually accounts for the increase in noise and vibration levels for each construction-related component, the DEIR must identify the location (i.e., page number) in the DEIR and/or its technical appendices depicting the results of the specific noise calculations.

Second, although the DEIR acknowledges that the Project’s construction activities at the Centennial Site and Brunswick Site could result in substantial temporary increases in noise exposure at eight receptors, it incorrectly concludes that these substantial increases in noise would not result in a significant impact under CEQA. DEIR at 4.10-29, 4.10-30. As discussed above, in evaluating a project’s impacts under CEQA, an agency must address the actual impacts of a project and cannot hide behind metrics obscuring evidence of those impacts. *Protect Amador Waterways*, 116 Cal.App.4th at 1110-11 (finding that narrowly designed significance standards improperly foreclose complete consideration of a project’s impacts). Here, the Project would result in a substantial increase in noise levels; that these impacts may be exempt from regulation under the County’s noise ordinance does not make these impacts insignificant. If anything, the County’s failure to regulate these noise impacts reinforces the need to identify them as significant and adopt adequate mitigation, as required by CEQA. The revised DEIR must identify this increase as a significant impact and identify feasible mitigation measures and/or project alternatives to reduce this impact.

4. The DEIR Fails to Identify the Timing of Tunneling and Blasting Operations and Therefore Likely Underestimates the Project's Noise and Vibration Impacts.

The DEIR identifies mine development (tunneling) and gold mineralization production (tunneling and production blasting) as part of the Project, but it does not identify the hours of operation for these Project components. *See* DEIR at 3-19; Figure 3-2 (p. 3-4); Table 3-7 (p. 3-37). The DEIR states that underground exploration and mining would occur 24 hours per day, 7 days per week. DEIR at 3-37. Assuming that underground exploration and mining include mine development and gold mineralization production, tunneling and blasting could occur at night. If this is the case, the Project's noise and vibration impacts would be far more severe than the DEIR discloses.

To the extent the County intends to rely on assumptions in the DEIR's technical appendix to suggest that tunneling and blasting would only occur during the day time, it cannot. The DEIR's Appendix M (Blasting Report) states, "[t]herefore, it is assumed that on average 7 drifts round blasts will be required per day. Blasting of drift rounds is normally done between shifts and therefore, on average, 3 to 4 drifts rounds would be blasted every 12 hours between shift changes." Appendix M at 15. The DEIR indicates that the 12 hour shifts will change at 7:00 a.m. and 7:00 p.m. DEIR at 3-36. Yet, the data included in Appendix M are simply modeling assumptions. Without explicit restrictions in the DEIR's project description pertaining to the hours of tunneling and blasting, coupled with conditions of approval, the DEIR cannot simply assume that tunneling and blasting operations would not occur at night and would not adversely impact nearby receptors. The revised DEIR must clearly identify the hours of mine development and gold mineralization production. If these operations occur at night or early in the morning, the revised DEIR must evaluate the potential for noise and vibration to cause sleep disturbance.

5. The DEIR Omits an Analysis of the Noise Impacts Resulting from Remediation of the Centennial Site.

The majority of the Centennial Site cannot be developed because of unstable soils and/or contamination. DEIR at 4.9-1, 4.7-3. As discussed above, DTSC's remediation project calls for engineered fill to be transported by truck from the Brunswick Site and placed on the Centennial Site. DEIR at 2-2. As we have explained, the DEIR assumes the baseline condition at the Centennial Site is post-remediation. DEIR at 1-6. However, the DEIR also acknowledges the possibility that clean up on the Centennial Site would not be complete upon commencement of mining, in which case engineered fill would be placed at the Brunswick Site or transported offsite to be utilized in local and regional construction markets. *See e.g.*, DEIR at 4.7-37.

According to the DTSC MND for the Centennial M1 Property Clean-Up Project Remedial Action Plan, activities involved with site remediation will include site clearing, excavation, grading, material transport, and compaction. Exhibit G (MND) at 64. Although

remediation of the Centennial Site could occur during commencement of mining, the DEIR does not analyze noise from remediation-related operations or the truck trips that would occur from these remediation activities.

6. The DEIR Substantially Underestimates Operational Noise Impacts.

The DEIR's analysis of the Project's operational noise and vibration impacts fails to comply because it substantially underestimates the Project's impacts. As a result, the DEIR avoids disclosing significant impacts and avoids having to identify feasible mitigation measures. Examples of the most egregious errors are set forth below.

(a) The DEIR Fails to Adequately Analyze Noise Impacts from the Placement and Compaction of "Engineered Fill" Operations.

Placement and compaction of "engineered fill" operations are expected to occur for at least five to six years at the Brunswick and Centennial sites. These operations would require the use of bulldozers, graders, excavators, front-end loaders and compactors. The DEIR relies on a computer noise model to estimate noise levels at nearby sensitive receptors and concludes that noise from "engineered fill" activities would not exceed the County noise standards at any receptor location. DEIR Table 4.10-14 (p. 4.10-33). However, a peer review of the DEIR's analysis conducted by Salter determined that the DEIR substantially underestimates the level of noise the surrounding community would experience. In fact, many of the calculated noise levels exceed the DEIR's estimates by up to 14 dB. Exhibit B (Salter Report) at 3, 4. By underestimating the actual noise levels that would be generated by the Project's operations, the DEIR avoids identifying significant impacts at 11 receptor locations near the Brunswick Site. *Id.*

Salter determined that the DEIR further underestimates the DEIR's noise impacts because it compares Project-related noise to ambient conditions near roadways. When noise monitoring devices are placed near roadways, they detect intermittent noise associated with passing cars and trucks. Yet, the median and "background" ambient noise levels indicate that much of the time people experience notably lower noise levels. Exhibit B (Salter Report) at 4. As discussed above, had the DEIR evaluated the absolute increase in projected noise levels against accurate ambient conditions, the DEIR would have determined that noise levels with the Project could increase by 20 to 35 db. As the DEIR reveals, a 5.0 dB increase in noise level is considered a significant impact.⁵ See DEIR at Table 4.10-5 (p. 4.10-17). In addition to comparing the

⁵ Inexplicably, the DEIR relies on varying thresholds for the Project's traffic and on-site noise sources. The DEIR relies on a numerical increase in noise only to determine the significance of the Project's traffic noise impacts. See DEIR Table 4.10-5 (p. 4.10-17), identifying +5.0 dB or more as constituting a significant traffic noise impact. For on-site noise sources, it relies on the noise limits included in the Nevada County General Plan Noise Element and the Nevada County Land Use and Development Code. DEIR Table 4.10-4 (p. 4.10-12); 4.10-15.

Project's noise levels to the County's standards, it should have evaluated the Project's impacts against ambient noise, i.e., the noise levels that people actually experience. Exhibit B (Salter Report) at 4. The revised DEIR must provide this analysis.

(b) The DEIR Relies on Flawed Assumptions Regarding Equipment "Upgrades" to Conclude the Project Would Not Exceed the County's Noise Standards.

The DEIR assumes the implementation of various "upgrades" to mechanical equipment in its calculation of projected noise levels but it fails to include any enforceable commitment to actually implement these upgrades. The DEIR concludes that with implementation of these upgraded measures, operational noise would be below County standards and the Project's impacts would be less than significant. DEIR at 4.10-41. For example, as Salter explains, the DEIR assumes the Project's metal buildings would achieve the highest possible sound insulation system and the project's ventilation fan(s) would employ high performance industrial fan silencers. Exhibit B (Salter Report) at 5-6. Yet, we can find no evidence in the DEIR or the technical appendices that the Applicant has committed to installing this equipment. Similarly, the DEIR appears to rely on specific assumptions regarding backup generators, including engine exhaust mufflers, sound isolating building construction, and radiator fan silencers, but again, the document does not identify the specific type of equipment. Nor does it identify the expected noise-attenuation of each piece of equipment. *Id.* By assuming that these "upgrades" are already incorporated into the Project when conducting the noise analysis, the DEIR obscures the true extent of the Project's noise impacts. As Salter explains, "the DEIR appears to 'promise' a less-than-significant noise impact, but omits the controls, assurances, and appropriate mitigation to ensure that this claim is actually achieved. Without requiring the aforementioned noise reducing measures, or assumed 'upgrades,' the DEIR fails to adequately protect the community from the potential for excessive noise." *Id.* The revised DEIR must evaluate the significance of the Project's noise impacts without these upgrades. *Lotus v. Dept. of Transportation* (2014) 223 Cal.App.4th 645, 655-57.

(c) The DEIR Fails to Adequately Analyze or Mitigate the Noise and Vibration Impacts from the Project's Blasting Operations.

The DEIR relies on an overly lenient threshold of significance to assert that vibration from the Project's blasting operations would be barely perceptible to nearby receptors. Exhibit B (Salter Report) at 7-8. The DEIR identifies a 0.4 in/sec peak particle velocity (PPV) vibration limit based primarily on a vibration study performed following an underground nuclear blast in Mississippi in 1964. Exhibit B (Salter Report) at 8; DEIR at 4.10-58. Salter explains that human responses to a single blast does not reflect the impact on the community from ongoing, perceptible and potentially unpleasant vibration over the 80-year lifespan of this Project. Exhibit B (Salter Report) at 7-8. Nevertheless, the DEIR references this study as it is described in a U.S. Bureau of Mines (USBM) 1971 document entitled "Blasting Vibrations and Their Effects on

Structures.” *Id.* The claim extracted from the USBM document is that “less than 8% of people would complain about blasting activities if the peak particle velocity (PPV) was below 0.4 in/sec.” DEIR, Appendix M, at 7. However, as Salter explains, the original chart this is drawn from provides additional context: The proposed limit of 0.4 in/sec. PPV is characterized as clearly perceptible and borderline unpleasant. Exhibit B (Salter Report) at 8. A Caltrans Manual confirms that blasting vibration of 0.4 in/sec would be considered “strongly perceptible.” *Id.*

Salter explains that a 0.4 in/sec vibration limit might be appropriate in certain scenarios, such as for a short-term event. However, this Project involves ongoing mining operations for 80 years. According to Salter, this impact would be far more severe when blasting operations occur at night, especially because the DEIR does not include any restrictions on nighttime operations. Exhibit B (Salter Report) at 9. In this regard, the DEIR ignores crucial guidance set forth by the U.S. Office of Surface Mining and Reclamation and Enforcement (OSMRE):

All blasting must take place during daylight hours unless more restrictive times are specified. If night-time blasting is approved by the regulatory authority, it must be based on evidence from the operator that the public will be protected from adverse noise and other impacts.

Exhibit B (Salter Report) at 9 (citing OSMRE Blasting Guidance Manual).

The DEIR provides no evidence that the public will be protected from adverse effects from the Project’s blasting operations. It provides no special consideration and therefore no additional restrictions on blasting vibration during evening and nighttime hours. According to Salter, subjecting residents to “strongly perceptible” and borderline “unpleasant” vibration for the rest of their lives constitutes a significant impact. Exhibit B (Salter Report) at 9. Because the DEIR fails to disclose this impact, it must be revised and recirculated.

The DEIR errs further in its evaluation of noise from the Project’s blasting operations. To evaluate the Project’s blasting-related noise impacts, the DEIR relies on noise measurements conducted at the Sutter Gold underground mine in Amador County. DEIR at 4.10-44. The Sutter Gold study found blasting noise to be 75 dBA, on average, at a distance of 200 feet from the mine portal. *Id.* However, to translate those findings to the Project’s Brunswick Site, the DEIR assumes that noise at the Project site would be reduced by 20 dB compared to the Sutter Gold mine. *Id.* Other than mentioning the difference in orientation and size of the portal, this claim of 20 dB noise reduction is unsubstantiated. As the Salter Report explains, twenty decibels of noise reduction is a substantial change in noise emission. *Id.* Without further data or evidence to back up this 20 dB claim, the DEIR cannot simply assume these lower noise levels.

According to Salter, without the unsubstantiated 20 dB of reduction, blasting noise at the nearest sensitive receptors would be between 72 and 77 dBA. Exhibit B (Salter Report) at 10. As stated above and in the DEIR, ambient median and “background” noise levels at many sensitive receptors is between 35 dBA and 50 dBA. Thus, the blasting noise could be substantially above the ambient noise levels, by approximately 25 to 40 dB. Salter determines such an event to be considered a disturbance, likely resulting in complaints, particularly at night when sleep disturbance would be expected. *Id.* This is a significant undisclosed impact requiring that the DEIR be revised and recirculated.

C. The DEIR Fails to Adequately Analyze and Mitigate the Project’s Impacts Relating to Hazards and Hazardous Materials.

1. The DEIR Omits an Accurate Description of Existing Conditions.

For the reasons discussed above, an accurate depiction of the existing environmental setting is critical to a complete assessment of the Project’s impacts. Yet here too, the DEIR fails to provide an adequate description of the hazardous conditions on the Project’s Centennial Site.

The existing waste rock and mine tailings that were generated from historic mining activities contain contaminants at levels exceeding regulatory thresholds, including California hazardous waste thresholds. Exhibit A (Baseline Report) at 2. These existing waste rock and mine tailings at the Centennial Site have been present (and have represented a persistent environmental hazard) since the former mining operation at the site shut down over 60 years ago (circa 1956). As discussed above, the owner of the Centennial Site entered into a Voluntary Cleanup Agreement with the DTSC to address the hazards associated with the legacy waste rock and mine tailings generated from previous mining operations. It should be noted that cleanup actions were not initiated by the site owner until they were ready to reopen the mine. It is also important to note that under existing conditions, the majority of the Centennial Site cannot be developed due to unstable soils and/or contamination. DEIR at 4.7-3.

Despite these circumstances, the DEIR assumes as baseline conditions that the Centennial Site will be cleaned up pursuant to the Voluntary Clean Up Agreement with DTSC. *See* DEIR at 4.7-3, 4.7-4, “this EIR does not use the existing condition at the site for the environmental baseline and instead uses an environmental baseline that reflects the anticipated conditions for the Centennial Industrial Site following implementation of the [Remedial Action Plan];” and 4.7-32, “the baseline condition for the Centennial Industrial Site has been adjusted for this analysis to reflect post-remediation condition.”

The problem with this approach is that the DEIR does not provide the necessary assurance that this cleanup will occur prior to implementation of other Project components. In several instances, the DEIR acknowledges that clean up on the Centennial Site may not be complete upon commencement of mining and that it may not even be completed within the 80-

year permit life. *See* DEIR at 3-26, “[i]t is the applicant’s *intent* to prioritize the placement of the engineered fill at the Centennial Industrial site” (emphasis added); *see also* DEIR at 3-26, “Notwithstanding the priority of placing engineered fill at the Centennial Site, the ultimate approach to engineered fill placement will need to remain flexible to address any potential unforeseen circumstances. One such scenario would be if the remediation of the Centennial Site, currently under DTSC oversight, is not complete upon commencement of mining, in which case engineered fill would be placed at the Brunswick Industrial Site and/or transported off-site to be utilized in local and regional construction markets.”

Absent full disclosure of existing, baseline hazardous conditions on the Project site, it is impossible for decisionmakers or the public to fully evaluate the hazardous impacts associated with the Project.

2. The DEIR Fails to Analyze or Mitigate Hazardous Impacts Relating to Waste Rock and Mine Tailings.

The DEIR fails to evaluate how future waste rock and mine tailings generated by the proposed Project would be managed to ensure that they do not pose a health hazard to people or the environment. The DEIR provides almost no information that demonstrates the chemical quality of the rock proposed to be mined would differ in any way from the rock that was mined historically. According to the Baseline Report, in the absence of this information, it is reasonable to assume that any newly generated waste rock and mine tailings would have similar chemical characteristics as the rock mined in the past. Therefore, the waste rock and mine tailings generated by the proposed Project will almost certainly contain asbestos, silica, and trace heavy metal toxic air contaminants (TACs) including arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and vanadium that could pose a health risk to people and the environment. DEIR at 4.3-79; Exhibit A (Baseline Report) at 3.

As mentioned above, the DEIR tries to “rebrand” the waste rock and mine tailings as “engineered fill,” apparently in the hopes that the waste material can be transported off-site for use at various unspecified construction sites throughout the region as fill material. Although this material would almost certainly result in numerous new contaminated wastes sites that pose a threat to the public and the environment, the DEIR fails to provide *any* analyses of these impacts.

The DEIR suggests that any impacts would be mitigated because the Applicant will comply with RWQCB requirements. Yet, for the reasons discussed in this letter, it is not sufficient to rely on regulatory permitting to assert that impacts will be mitigated. The DEIR must first comprehensively analyze these impacts and then demonstrate how regulatory compliance will ensure impacts are sufficiently mitigated. This analysis must take into account the fact that similar historic actions have been demonstrated to result in environmental harm that has persisted for decades.

3. The DEIR Fails to Evaluate or Mitigate Flight Hazards at Nevada County Air Park.

The closest public use airport to the Project site is the Nevada County Air Park, less than one-mile (approximately 4,000 feet) northeast of the Brunswick Site. DEIR at 4.7-36. When the weather is cool, the Project will cause saturated air to become super-saturated and create a continuous plume cloud. *See* Report prepared by CEA Foundation, submitted under separate cover. A southwest breeze will move this plume towards the airport and potentially obstruct the airspace surrounding the airport. *Id.* This large volume of heated air will updraft, possibly causing turbulence for air traffic. It could also develop into a standing cloud or fog that will impede visibility for aircraft and/or the tower and thus pose a hazard to flight. *Id.* Because the DEIR neither discloses, analyzes or mitigates this impact, it must be revised and recirculated.

4. The DEIR Fails to Adequately Analyze the Project's Cumulative Impacts Relating to Hazards and Hazardous Materials.

The DEIR fails to analyze cumulative hazards to the public and environment related to increases in the transport, storage, and use of hazardous materials. The DEIR suggests there would be no cumulative impacts because no other cumulative projects are anticipated to haul hazardous materials along Brunswick Road on an ongoing basis. DEIR at 4.7-39. This is incorrect. As discussed above, DTSC's RAP would require transporting by truck "engineered fill" from the Brunswick Site to the Centennial Site. DEIR at 2-2; Exhibit G (MND). The MND clearly acknowledges that implementation of the RAP may temporarily increase the risk of exposure of soil contaminants to the public. Exhibit G (MND) at 50. Consequently, the DEIR should have analyzed how the transport, storage and use of hazardous materials from the proposed Project together with the RAP would affect public health and safety. To the extent that the DEIR preparers might suggest that the cleanup of the Centennial Site would occur prior to the proposed Project, it cannot do so. Again, as discussed above, according to the DEIR, the possibility exists that clean up on the Centennial Site would not be complete upon commencement of mining. DEIR at 4.7-37. It also acknowledges the possibility that clean up on the Centennial Site would not be completed within the 80-year permit life of the proposed mine Project, and that "engineered fill" would be placed at the Brunswick Site and/or transported off-site to be utilized in local and regional construction markets. *Id.* The revised DEIR must analyze the cumulative effects of the RAP along with the proposed Project.

D. The DEIR Fails to Adequately Analyze and Mitigate the Project's Air Quality Impacts.

The DEIR's analysis of air quality contains numerous flaws. First, the DEIR fails to analyze the Centennial Site's cleanup's impact on air quality, or the air quality impacts that may result from the Project if the Centennial cleanup does not occur. Second, the DEIR's analysis of air quality impacts from Project construction assumes a construction timeline that contradicts the

Project description. Third, the DEIR improperly relies on assumed mitigation measures for air quality impacts, failing to acknowledge those measures as mitigation. Fourth, the DEIR fails to mitigate significant air quality impacts from operational emissions of criteria air pollutants. Finally, the DEIR's Health Risk Assessment fails to disclose essential information and lacks substantial evidence to support its conclusions. The DEIR must be revised to correct these flaws.

1. The DEIR Fails to Analyze the Centennial RAP's Impact on Air Quality.

The Centennial RAP is an integral part of the IMM Project, as discussed in Section I.C, *supra*. Remediation of the Centennial Site is a necessary prerequisite to the dumping of mine waste from the Project on that site, and the Project's eventual reclamation of the site. *Id.* As explained above, the DEIR must therefore include the Centennial RAP as part of the Project, and must analyze all of the environmental impacts resulting from the RAP, including air quality impacts.

The Centennial RAP would involve mixing soil with over 335 tons (22 truckloads) of cement to stabilize the contaminants in that soil. Exhibit G (MND) at 3. It would require the clearing of existing vegetation, the excavation and grading of 36.7 acres of land on the Centennial Site, and the movement of 129,100 cubic yards of soil using backhoes and other heavy equipment. *Id.* at 3-4; Exhibit E (RAP) at 44. The MND for the Centennial RAP finds that the cleanup would generate potentially significant criteria air pollutant emissions that require mitigation. Exhibit G (MND) at 24-25. The DEIR improperly fails to disclose or analyze the impacts of these cleanup activities on air quality. DEIR at 4.3-66 to 4.3-102. The DEIR's omission of these impacts violates CEQA. *See County of Inyo*, 172 Cal.App.3d at 165-66; *Nelson*, 190 Cal.App.4th at 271. By failing to include this essential information, the DEIR prevents informed analysis of the Project's impacts and is therefore legally inadequate.

2. The DEIR Fails to Analyze Air Quality Impacts that May Result from the IMM Project if the Centennial Cleanup Does Not Occur.

The DEIR also fails evaluate air quality impacts that may result from the Project if the Centennial cleanup does not occur. The DEIR acknowledges that the Centennial Site might never be remediated during the 80-year term of the mine permit. DEIR at 1-3, 3-26. If that occurs, the Centennial Site will never become available for dumping of mine waste, and an additional 1.6 million tons of mine waste from the Project will need to be trucked offsite once the dumping area at the Brunswick Site is full. *Id.* at 1-3, 3-32 to 3-33, 3-26. The DEIR must evaluate the potential impacts of the offsite trucking of those additional 1.6 million tons of mine waste on air quality. The DEIR lacks this analysis. Instead, the DEIR's air quality analysis simply assumes that the Centennial RAP will be completed and that dumping of fill at the Centennial site will occur in the first five years of Project operations. *See id.* at 4.3-50, 4.3-53 to 4.3-54, 4.3-67 to 4.3-68, 4.3-93.

Because there is no assurance that remediation of the Centennial Site will be completed within the lifetime of the Project, it's speculative to assume that the site will be available for fill placement. *See* Exhibit A (Baseline Report) at 12-13. If the Centennial RAP is never completed and no fill is ever placed at the Centennial Site, that fill must be trucked offsite for an additional five years, resulting in additional air pollutant emissions not disclosed in the DEIR. The document's failure to disclose or analyze this impact deprives the public and decision-makers of essential information in violation of CEQA. *See Banning Ranch*, 2 Cal.5th at 941-42. The DEIR's analysis for criteria air pollutants should be revised to assume that remediation of the Centennial Site may not be completed within the lifetime of the Project, and must evaluate the resulting air quality impacts of additional off-site trucking. *See* Exhibit A (Baseline Report) at 13. As demonstrated in Baseline's analysis of daily NO_x emissions, these additional off-site truck trips would result in more severe air quality impacts than those disclosed in the DEIR. *Id.*

5. The DEIR's Analysis of Construction Emissions Contradicts the Project Description.

The DEIR's analysis of air quality impacts from Project construction is unsupported because it contradicts the Project description regarding the duration of construction. The Project description states that construction would last for 18 months. DEIR at 3-37. By contrast, the DEIR's air quality analysis assumes that Project construction would last for only 12 months, and bases its impact evaluation on that assumption. *Id.* at 4.3-44 to 4.3-46, 4.3-66 to 4.3-67, 4.3-74. The DEIR is therefore internally contradictory. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee*, 210 Cal.App.4th at 284. The DEIR asserts that "the construction scenario assessed herein is the worst-case, because if the same construction activities were to be spread over a longer period (i.e., a period in excess of 12 months), the amount of overlap of equipment usage would be reduced, which would result in reduced max daily and annual emissions." DEIR at 4.3-44. However, the DEIR fails to provide any evidence in support of this statement, which fails to account for the fact that a longer construction period would result in a longer period of construction-related air pollution exposure for nearby receptors. The DEIR's air quality analysis must be revised to assume the same construction duration as the Project description.

3. The DEIR Improperly Relies on Assumed Air Quality Mitigation Measures, Preventing Informed Impact Analysis.

The DEIR lists three "applicant-proposed emissions reduction measures" intended to reduce the Project's air quality impacts. DEIR at 4.3-65. However, the DEIR does not classify these measures as mitigation, explaining that "[t]he analysis presented within this chapter *assumes* that all of the applicant proposed measures (APMs) presented below would be implemented." *Id.* (emphasis added). The DEIR assumes the APMs will be incorporated into the Project, but the APMs were not identified as Project features in the Project description, and there

is no assurance that these measures will be implemented as a part of the Project. *See* Exhibit A (Baseline Report) at 14. These applicant-proposed measures are in reality mitigation measures, which the DEIR improperly fails to recognize as such. This approach violates CEQA. In evaluating a project's impacts, an agency may not "compress[] the analysis of impacts and mitigation measures into a single issue" by incorporating an assumed mitigation measure into a project's features. *Lotus*, 223 Cal.App.4th at 656. A project's significant impacts must be determined first, and then the CEQA document must identify enforceable mitigation that will address those impacts. *Id.* at 656, 658.

Here, applicant-proposed measure APM-AQ-1 (Exhaust Emission Controls) requires that "[a]ll off-road diesel-fueled equipment and emergency generators owned by Rise Grass Valley Inc. shall be equipped with Tier 4 Final engines." DEIR at 4.3-65. It also requires that "[u]nnecessary construction vehicle idling time shall be minimized" and that "[a]ll off-road equipment shall be maintained in accordance with manufacturer's specifications." *Id.* APM-AQ-2 (Surface Fugitive Dust Controls) calls for wetting or covering of "all exposed soil surfaces (e.g., unpaved disturbed areas, unpaved parking areas, and unpaved staging areas, and soil piles)" to prevent fugitive dust emissions during construction and operations, and calls for construction techniques to minimize dust from roadways. DEIR at 4.3-65. APM-AQ-3 calls for the Applicant to implement an "ASUR Plan, which incorporates measures designed to minimize asbestos in engineered fill produced by the project, as well as minimize the emission of asbestos-containing dust from the underground mine." *Id.*

Each of these three measures are de facto mitigation measures, as they are clearly intended to minimize the Project's air quality impacts by reducing emissions sources. *See* CEQA Guidelines §15370 (defining "mitigation"); DEIR at 4.3-81 (asserting that APM-AQ-2 would reduce the fugitive dust generated by the Project); 4.3-82 (finding that APMs would reduce Project emissions of criteria pollutants); 4.3-87 (noting that APM-AQ-1 would reduce air pollution). However, the DEIR's calculation of "unmitigated" emissions of criteria air pollutants expressly assumes that APM-AQ-1 and APM-AQ-2 have already been implemented. DEIR Table 4.3-17 (p. 4.3-70); 4.3-73. The DEIR makes no attempt to calculate what the Project's emissions would be without the APMs, and does not separately quantify the emission reductions that would result from these measures. By assuming that these measures are already incorporated into the Project when conducting its air quality analysis, the DEIR obscures the true extent of the Project's air quality impacts. The DEIR must be revised to classify the APMs as mitigation measures, and must evaluate their effectiveness in reducing air quality impacts. The DEIR must evaluate the significance of the Project's air quality impacts without these mitigation measures, *before* considering the effectiveness of mitigation and the significance of Project impacts after mitigation. *Lotus*, 223 Cal.App.4th at 656, 658; *see* Exhibit A (Baseline Report) at 14. Only then can decisionmakers and the public fully understand the Project's impacts.

4. The DEIR Fails to Mitigate Significant Air Quality Impacts from Operational Emissions of ROG, NO_x And PM₁₀.

The DEIR concludes that the Project would not conflict with or obstruct implementation of an applicable air quality plan, and that this impact would be less than significant after mitigation. DEIR at 4.3-66. However, the DEIR's proposed mitigation fails to account for the Project's operational emissions of criteria air pollutants. The DEIR concludes that daily operational emissions of ROG, NO_x and PM₁₀ are significant under Northern Sierra Air Quality Management District (NSAQMD) significance criteria and require mitigation. *Id.* at 4.3-67 to 4.3-70, 4.3-73; *see* Exhibit A (Baseline Report) at 14. It finds that without mitigation, these significant operational emissions could conflict with or obstruct implementation of the NSAQMD's Ozone Attainment Plan. DEIR at 4.3-70; *see id.* at 4.3-66.

Despite finding that operational emissions of ROG, NO_x, and PM₁₀ require mitigation, the DEIR does not propose any mitigation measures to address operational emissions of those pollutants. *Id.* at 4.3-77 to 78. The DEIR includes two mitigation measures (Mitigation Measures 4.3-1(a) and 4.3-1(b)) which exclusively address *construction* emissions. *Id.* at 4.3-77 to 78. As written, nothing in Mitigation Measures 4.3-1(a) and 4.3-1(b) would do anything to reduce the Project's operational emissions. *See* Exhibit A (Baseline Report) at 14. Mitigation Measure 4.3-1(a) states that it contains measures "for use during construction," including the use of grid power where feasible "during construction" and temporary traffic control "during all phases of the construction." DEIR at 4.3-77. Mitigation Measure 4.3-1(b) calls for a "Construction Exhaust Emissions Minimization Plan" which applies to equipment used during construction. *Id.* at 4.3-77 to 4.3-78.

Inexplicably, however, the DEIR claims that *operational* emissions of ROG, NO_x, and PM₁₀ would be mitigated to a less than significant level after implementation of these purely construction-related mitigation measures. *Id.* at 4.3-75 to 4.3-76 (Table 4.3-19, showing "mitigated" operational emissions levels for those pollutants as not significant). The DEIR does not provide any evidence as to how operational emissions of ROG, NO_x, and PM₁₀ —which it acknowledges are significant before mitigation—could be reduced to a less than significant level when the DEIR does not include any mitigation measures for those operational impacts. *See* Exhibit A (Baseline Report) at 14. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee*, 210 Cal.App.4th at 284. Courts will not defer to an agency's conclusions about the effectiveness of a mitigation measure where, as here, the measure's efficacy in reducing an impact is not apparent and there is no evidence in the record showing that it will be effective. *King & Gardiner Farms*, 45 Cal.App.5th at 866, 875-76.

This unexplained discrepancy between the DEIR's significance conclusion for pre- and post-mitigation operational emissions of ROG, NO_x, and PM₁₀ and the lack of operational

mitigation measures cannot be attributed to any impact of the applicant-proposed measures for emissions reduction identified in the DEIR. *See* DEIR at 4.3-65. In fact, the DEIR expressly notes that its calculations of “unmitigated” emissions of these criteria pollutants already reflect reductions from the assumed applicant-proposed measures discussed above in Section II.D.4, which the DEIR does not classify as mitigation. *Id.* at 4.3-73 (“The emission data presented in Table 4.3-17 (i.e., unmitigated emissions) reflect the reductions that would occur with implementation of APM-AQ-1 and APM-AQ-2.”). The DEIR must be revised to fully explain the basis for its conclusion that operational emissions of ROG, NO_x, and PM₁₀ would be mitigated to a level below significance, and then recirculated.

6. The DEIR’s Health Risk Assessment Fails to Disclose Essential Information and Lacks Substantial Evidence to Support Its Conclusions.

The DEIR indicates that the Project would generate toxic air contaminants that could pose health risks to people in the vicinity of the Project site. DEIR at 4.3-79. However, the DEIR fails to provide sufficient information to enable informed analysis of these health impacts, and therefore lacks substantial evidence for its conclusion that these impacts would be less than significant after mitigation. *See* Exhibit A (Baseline Report) at 17-18.

The DEIR states that Project construction and operations would produce diesel particulate matter (DPM) emissions from off-road equipment, haul truck trips, and generators, while mining activities such as blasting and crushing, ore processing, and soil movement would generate emissions of asbestos, silica, and trace heavy metal TACs including arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and vanadium. DEIR at 4.3-79. The DEIR includes a health risk assessment (HRA) for nearby sensitive receptors exposed to concentrations of TACs generated by the Project. *Id.* at 4.3-79 to 4.3-80; *see* DEIR Appendix E.1 (Air Quality and GHG Technical Report); Appendix B (Health Risk Assessment) at 26-27. The HRA analyzes air dispersion of 25 sources of TAC emissions during construction and operation of the Project. *See* HRA at 8-12. Based on the air dispersion model results, the HRA estimated the health risks for a sensitive receptor exposed to 33 different TACs. *Id.* at 25.

The DEIR concludes that before mitigation, the Project’s effect on increased cancer risk for the “Maximally Exposed Individual Resident” would be 10.4 persons per million, exceeding the applicable NSAQMD significance threshold of 10 persons per million, resulting in a significant impact. DEIR at 4.3-80. However, with implementation of Mitigation Measure 4.3-1(b), which requires Tier 4 engines during construction, the DEIR concludes that the Project would result in an incremental cancer risk of 7.6 persons million. *Id.* at 4.3-80. The DEIR’s asserted 27 percent reduction in cancer risk is surprising, because Mitigation Measure 4.3-1(b)

only reduces emissions during the one-year Project construction period,⁶ and does not reduce any emissions over the remaining 80 years of Project operations. *Id.* at 4.3-77 to 4.3-78. The DEIR finds that after mitigation, the Project's impacts on increased cancer risk and other health risks would be less than significant. *Id.* at 4.3-79, 4.3-80, 4.3-82. This conclusion is not adequately supported, because the DEIR fails to provide essential information about how health risks were calculated, making it impossible to evaluate the effectiveness of Mitigation Measure 4.3-1(b).

The DEIR fails to adequately disclose or document the results of the HRA for the numerous sources of TAC emissions associated with the Project. *See* Exhibit A (Baseline Report) at 17-18. The DEIR only presents the total cancer risk, chronic health risk, and acute health risk for a sensitive receptor, despite finding that receptors could be exposed to 33 different TACs from 25 different sources at different times over a 30-year period. DEIR at 4.3-80; *see* HRA at 8-12, 25-27. The individual health-risk contributions from each emission source, TAC, and year of exposure are not documented or summarized anywhere in the DEIR or HRA. In addition, no graphics are provided to show the location of the modeled emission sources, sensitive receptors, and results of the air dispersion modeling. As a result, the DEIR fails to provide sufficient information for the public or decisionmakers to review the findings of the health risk assessment and evaluate the effectiveness of the proposed mitigation measures. *See* Exhibit A (Baseline Report) at 17-18. An EIR must include adequate data to enable the public and decisionmakers to understand a project's impacts and draw informed conclusions. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442. Here, because the DEIR air quality analysis fails to provide this essential information about its analytical methods, it also lacks substantial evidence to support its conclusions. The DEIR must be revised to properly document the findings of the HRA.

E. The DEIR Fails to Adequately Analyze or Mitigate the Project's GHG Emissions.

The DEIR's analysis of GHG emissions suffers from several key deficiencies. First, the DEIR fails to analyze the Centennial Site cleanup's impact on GHG emissions, or the emissions that may result from the IMM Project if the Centennial cleanup does not occur. Second, the DEIR's analysis of GHG emissions from Project construction assumes a construction timeline that contradicts the Project description. Third, the DEIR improperly relies on assumed mitigation measures for GHG impacts, failing to acknowledge those measures as mitigation. Fourth, the DEIR's significance threshold for operational GHG emissions is unsupported. Finally, the DEIR relies on third-party GHG mitigation offsets which lack adequate performance standards and are improperly deferred.

⁶ While the DEIR's air quality analysis assumes that construction would last for one year (DEIR at 4.3-44), the DEIR's project description states that construction would last for 18 months (DEIR at 3-37). The DEIR is therefore internally inconsistent, as discussed above in Section I.D.

1. The DEIR Fails to Analyze the Centennial RAP's Impact on GHG Emissions.

As discussed in Sections I.C and II.D.1, *supra*, the DEIR must include the Centennial RAP as part of the Project, and must analyze all of the environmental impacts resulting from the RAP. *Id.* Accordingly, the DEIR must evaluate the GHG emissions that result from the cleanup of the Centennial Site. The Centennial RAP would involve cement mixing, clearing of existing vegetation, excavation and grading of 36.7 acres of land, and the use of backhoes and other heavy equipment. Exhibit G (MND) at 3-4; Exhibit E (RAP) at 44. The MND concludes that the RAP's operation of off-road diesel equipment would generate approximately 1,077.25 metric tons of CO₂ equivalent in GHG emissions. Exhibit G (MND) at 47. The DEIR improperly fails to disclose or analyze the impacts of these RAP activities on GHG emissions. DEIR at 4.3-66 to 4.3-102. The DEIR's omission of these impacts prevents informed analysis and violates CEQA. *See County of Inyo*, 172 Cal.App.3d at 165-66; *Nelson*, 190 Cal.App.4th at 271. The revised DEIR must provide this analysis.

2. The DEIR Fails to Analyze GHG Emissions that May Result from the Project if the Centennial Cleanup Does *Not* Occur.

The DEIR also fails to evaluate GHG emissions that would result from the Project if the Centennial Site cleanup does not occur, as discussed in Sections I.B and II.D.2, *supra*. The DEIR acknowledges that the Centennial Site might never be remediated during the 80-year term of the mine permit, which would require trucking an additional 1.6 million tons of mine waste to offsite locations after the Brunswick Site is full. DEIR at 1-3, 3-32 to 3-33, 3-26. The DEIR must evaluate the GHG impacts of that additional offsite trucking, but fails to do so. Instead, the DEIR's GHG analysis simply assumes that the Centennial RAP will be completed and that fill dumping at the Centennial Site will occur in the first five years of Project operations. *See id.* at 4.3-50, 4.3-53 to 4.3-54, 4.3-67 to 4.3-68, 4.3-93. Because there is no assurance that remediation of the Centennial Site will be completed within the lifetime of the Project, it's speculative to assume that the site will be available for fill placement. *See Exhibit A (Baseline Report)* at 12-13. As discussed in Section I.B, *supra*, the DEIR must evaluate Project impacts relative to existing conditions at the Centennial Site, considering the possibility that the RAP may never occur and analyzing the impacts that would result in that scenario.

The DEIR finds that the Project would generate annual operational GHG emissions of 7,221 MT CO₂e in years 2022 to 2026, when it assumes fill would be dumped at the Centennial Site, 6,999 MT CO₂e in years 2027 to 2032, when fill would be dumped at the Brunswick Site, and 9,041 MT CO₂e in years 2033 to 2,102, when fill would be trucked offsite. DEIR at 4.3-93 to 4.3-94. The DEIR indicates that almost all of the variation in annual emissions between these three time periods is attributable to on-road vehicle emissions, which include emissions from trucks carrying mine waste. *Id.* If the Centennial RAP is never completed and no fill is ever

placed at the Centennial Site, that fill must be trucked offsite for an additional five years, resulting in an annual increase of 1,820 MT CO₂e for each of those years. The DEIR does not disclose this important impact. The document's failure to disclose or analyze this impact deprives the public and decision-makers of essential information in violation of CEQA. *See Banning Ranch*, 2 Cal.5th at 941-42. The DEIR's GHG analysis should be revised to assume that remediation of the Centennial Site may not be completed within the lifetime of the Project, and must evaluate the resulting GHG impacts of additional off-site trucking. *See* Exhibit A (Baseline Report) at 13.

3. The DEIR's Analysis of Construction GHG Emissions Contradicts the Project Description.

The DEIR's analysis of GHG impacts from Project construction is unsupported because its assumptions regarding the duration of construction contradict the Project description. The DEIR's Project description states that Project construction would last for 18 months. DEIR at 3-37. By contrast, the DEIR's GHG analysis assumes that Project construction would last for only 12 months, and bases its impact evaluation on that assumption. *Id.* at 4.3-44 to 4.3-46, 4.3-92. The DEIR is therefore internally contradictory. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee*, 210 Cal.App.4th at 284. The DEIR asserts that "the construction scenario assessed herein is the worst-case, because if the same construction activities were to be spread over a longer period (i.e., a period in excess of 12 months), the amount of overlap of equipment usage would be reduced, which would result in reduced max daily and annual emissions." DEIR at 4.3-44. The DEIR fails to consider whether an 18-month construction period could result in greater total GHG emissions than a 12-month construction period, even if those emissions are spread out over a longer period. The DEIR's GHG analysis must be revised to assume the same construction duration as the Project description.

4. The DEIR Likely Underestimates the Project's GHG Emissions Because it Assumes the Use of Electrically Powered Equipment.

The DEIR assumes the implementation of electrically powered equipment for its construction and operations and almost certainly relies on these features in its calculations of the Project's GHG emissions. *See e.g.*, DEIR Tables 4.3-7 and 4.3-10 (pp. 4.3-46 and 4.3-51). Yet, we can find no evidence in the DEIR that this equipment would actually be electrified. Unless the Project includes electrification as a condition of approval, the DEIR cannot take credit for these features in its GHG emissions' inventories. This defect also pertains to the DEIR's air quality and energy analyses.

5. The DEIR Improperly Relies on Assumed GHG Mitigation Measures, Preventing Informed Impact Analysis.

As discussed in Section II.D.4, *supra*, the DEIR lists several “applicant-proposed emissions reduction measures” which it does not classify as mitigation, and simply assumes that those measures would be implemented when conducting impact analysis. DEIR at 4.3-65. The APMs were not identified as Project features in the Project description, and there is no assurance that these measures will be implemented as a part of the Project. *See* Exhibit A (Baseline Report) at 14. These applicant-proposed measures are in reality mitigation measures, which the DEIR improperly fails to recognize as such. As explained above, this approach violates CEQA. *See Lotus*, 223 Cal.App.4th at 656. A project’s significant impacts must be determined first, and then the CEQA document must identify enforceable mitigation measures and evaluate the measures’ effectiveness in addressing project impacts. *Id.* at 656, 658; *see* Exhibit A (Baseline Report) at 14.

This error invalidates the DEIR’s analysis of GHG emissions, just as it does for the air quality and energy use analyses. In addition to requiring Tier 4 engines, applicant-proposed measure APM-AQ-1 (Exhaust Emission Controls) requires that “[u]nnecessary construction vehicle idling time shall be minimized” and that “[a]ll off-road equipment shall be maintained in accordance with manufacturer’s specifications.” DEIR at 4.3-65. APM-AQ-1 thus seeks to reduce the Project’s GHG emissions as well as its air quality and energy impacts. *Id.* at 4.3-87 (noting that APM-AQ-1 would reduce GHG emissions). APM-AQ-1 is a de facto mitigation measure. *See* CEQA Guidelines §15370. The DEIR’s analysis of the Project’s GHG emissions impermissibly assumes that APM-AQ-1 has been implemented *before* evaluating the significance of impacts or considering mitigation. DEIR at 4.3-65; Table 4.3-23 (p. 4.3-94). The DEIR makes no attempt to calculate what the Project’s GHG emissions would be without APM-AQ-1, and does not separately quantify the emission reductions that would result from that “applicant proposed” measure. This approach prevents informed analysis of Project impacts, violating CEQA. *Lotus*, 223 Cal.App.4th at 656. The DEIR must be revised to classify the APMs as mitigation measures, analyze the Project’s GHG impacts without those measures, and then evaluate the APMs’ effectiveness in reducing GHG missions.

6. The DEIR’s Significance Threshold for Operational GHG Emissions Is Not Supported by Substantial Evidence.

The DEIR uses an unsupported significance threshold for operational GHG emissions, understating the significance of the Project’s emissions and improperly avoiding mitigation for those emissions. The DEIR calculates that the Project would generate annual operational emissions of 7,221.64 metric tons of CO₂ equivalent (MT CO₂e) in years 2022 to 2026, 6,999.63 MT CO₂e in years 2027 to 2032, and 9,041.23 MT CO₂e in years 2033 to 2102. DEIR at 4.3-93 to 4.3-94. By far the largest source of the Project’s operational GHG emissions would come from

consumption of grid power by electric mining equipment. *See id.* The Project would consume 49,613 MWh of PG&E-supplied electricity annually during operations, generating 4,635.82 MT CO₂e per year. *See id.* at 4.3-88, 4.3-93 to 94.⁷ Once the Brunswick and Centennial sites have reached their maximum capacity for dumped fill, and mine waste is instead trucked offsite beginning in 2033, emissions from on-road vehicles would become the second-largest source of annual GHG emissions, generating over 3,123.46 MT CO₂e per year for the remaining 70 years of the permit. *Id.* Other sources of GHG emissions generated during Project operations would include off-road vehicles and equipment, emergency generator use, underground blasting, and solid waste. *Id.* The DEIR fails to adequately analyze these emissions, and lacks adequate support for the significance threshold used to evaluate them.

The CEQA Guidelines mandate that “[i]n determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change” and that “[t]he agency's analysis should consider a timeframe that is appropriate for the project.” CEQA Guidelines § 15064.4(b). “[W]hen determining the significance of impacts from greenhouse gas emissions on the environment,” an EIR must consider not only “[w]hether the project emissions exceed a threshold of significance that the lead agency determines applies to the project,” but also “[t]he extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting,” and “[t]he extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.” *Id.* GHG significance thresholds that are not supported by substantial evidence violate CEQA. *Golden Door Properties, LLC v. County of San Diego* (2018) 27 Cal.App.5th 892, 904-05.

Here, the DEIR relies on a significance threshold of 10,000 MT CO₂e per year to conclude that operational GHG emissions are less than significant, but fails to adequately justify its chosen threshold. While the DEIR acknowledges that the Project's unmitigated GHG emissions during Project construction would be significant (DEIR at 4.3-93), the DEIR claims the Project's much larger operational GHG emissions across the remainder of the 80-year permit period would be less than significant, with no need for mitigation (*id.* at 4.3-93 to 4.3-94). The DEIR sets a significance threshold of 1,100 MT CO₂e per year for the Project's construction emissions, and found that the Project would generate annual emissions of 3,444 MT CO₂e during construction, exceeding this threshold. *Id.* at 4.3-92. However, the DEIR found that the Project

⁷ The DEIR does not discuss its assumptions regarding the current carbon intensity of PG&E's power generation mix, but concludes that the Project will not interfere with PG&E's ability to meet California's Renewable Portfolio Standard mandate that all electricity produced within the state be renewably sourced by the year 2045. DEIR at 4.3-88. The DEIR should disclose its assumptions regarding the carbon intensity of fuel used to generate electricity for the Project so that the full scope of its impacts are disclosed and mitigated.

would generate annual operational emissions of 7,221.64 MT CO_{2e} in years 2022 to 2026, 6,999.63 MT CO_{2e} in years 2027 to 2032, and 9,041.23 MT CO_{2e} in years 2033 to 2102, less than the DEIR's chosen significance threshold of 10,000 MT CO_{2e} per year for the Project's operational emissions. *Id.* at 4.3-93 to 4.3-94. As discussed below, the DEIR's 10,000 MT CO_{2e} threshold for operational emissions is not supported by substantial evidence. If the DEIR had applied an appropriate significance threshold for operational GHG emissions, impacts would be significant in every year of the permit period, and would require mitigation.

The DEIR states that “neither the NSAQMD nor the County has adopted numerical thresholds of significance for GHG emissions that would apply to the project.” *Id.* at 4.3-42. The DEIR seeks to justify its chosen significance threshold of 10,000 MT CO_{2e} for operational GHG emissions by looking to other air districts. The DEIR notes that the Sacramento Metropolitan Air Quality Management District (SMAQMD), Placer County Air Pollution Control District, Bay Area Air Quality Management District (BAAQMD), and South Coast Air Quality Management District (SCAQMD) use a 10,000 MT CO_{2e} significance threshold for operational GHG emissions from stationary sources. *Id.* at 4.3-42 to 4.3-43. The DEIR therefore concludes that it is appropriate to use the same 10,000 MT CO_{2e} threshold for the Project's operational GHG emissions “because the project is an industrial project that includes stationary sources.” *Id.* at 4.3-43.⁸

However, the DEIR cannot simply rely on the significance thresholds chosen by other air districts, because the justifications for adopting these thresholds are unique to each air district. *See* Exhibit A (Baseline Report) at 18-19. These air districts have prepared detailed GHG inventories to identify and evaluate strategies for achieving the statewide GHG reduction goals within their air district. *Id.* The DEIR does not discuss the justifications provided by each air district for adopting the 10,000 MT CO_{2e} significance threshold. The DEIR cannot simply assume that the justifications used by other air districts to adopt that threshold also apply in Nevada County, which has not adopted a numerical threshold. *Id.* The DEIR thus lacks substantial evidence that this significance threshold should be applied to the Project.

Moreover, the DEIR's 10,000 MT CO_{2e} significance threshold is not consistent with California's latest GHG-reduction targets. Other air districts referenced in the DEIR originally adopted 10,000 MT CO_{2e} s GHG thresholds for stationary sources to achieve the statewide GHG reduction goal set under A.B. 32 (2006), which was to reduce GHG emissions to 1990 levels by the year 2020. *Id.*; *see* DEIR at 4.3-26. Those thresholds are now outdated. In September 2016, S.B. 32 established a new statewide target, calling for reductions in GHG emissions to 40 percent

⁸ The DEIR's analysis fails to acknowledge that for 70 years of the Project's 80-year lifespan, more than 35 percent of annual operational GHG emissions will come from vehicles, which are mobile sources. *Id.* at 4.3-93 to 4.3-94. Vehicles would be the second-largest GHG emissions source during that period, after electricity consumption.

below 1990 levels by 2030. *Id.* SCAQMD's GHG threshold for stationary sources was adopted in 2008 (*see* DEIR at 4.3-42), BAAQMD's threshold was adopted in 2010, and the SMAQMD threshold was adopted in 2014. None of these thresholds were designed to meet S.B. 32's more ambitious GHG reduction mandate. The DEIR's 10,000 MT CO₂e significance threshold is not consistent with the S.B. 32's statewide GHG reductions goals for 2030 and beyond. *See* Exhibit A (Baseline Report) at 18-19.

The DEIR must use a significance threshold that will achieve California's new statewide GHG reductions goals over the proposed 80-year lifetime of the Project. In light of those state goals and the severity of climate change, *any* operational GHG emissions over existing conditions should be considered significant. Since 2010, scientific research has made clear that any additional GHG emissions will contribute to the serious and growing climate crisis. *See* Intergovernmental Panel on Climate Change, *Climate Change 2021: The Physical Science Basis, Summary for Policymakers* (October 2021), attached as Exhibit I. Recognizing this reality, in 2018 Governor Brown signed Executive Order 55-18, calling for the state to achieve carbon neutrality as soon as possible and no later than 2045, and to achieve and maintain net-negative emissions thereafter. *See* DEIR at 4.3-29. Given these facts, the DEIR should establish a net zero threshold for new GHG emissions from the Project. *See e.g.*, CARB 2017 Climate Change Scoping Plan, attached as Exhibit J, at 101 ("Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development."). The DEIR does not explain why the Project should not be judged by a significance threshold requiring no net increase in GHG emissions.

The DEIR also fails to consider the full scope of operational emissions over the Project's 80-year lifespan. While the DEIR concludes that the Project would generate annual operational emissions of 7,221.64 MT CO₂e in years 2022 to 2026, 6,999.63 MT CO₂e in years 2027 to 2032, and 9,041.23 CO₂e in years 2033 to 2102 (DEIR at 4.3-93 to 4.3-94), it never bothers to calculate the total operational GHG emissions that will be generated from the Project over the 80-year permit period. By failing to provide this essential information, the DEIR forces the public and decisionmakers to calculate this total themselves: the Project's total operational GHG emissions over the 80-year permit period would be approximately 710,992 MT CO₂e, not including construction or reclamation ((7,221.64 x 5 years)+(6,999.63 x 6 years)+(9,041.23 x 70 years)). The DEIR's failure to provide this key fact makes it inadequate as an informational document, violating CEQA. *See Banning Ranch*, 2 Cal.5th at 941-42.

Because the DEIR does not adequately analyze operational GHG emissions, its finding that those emissions are less than significant is unsupported, and there is no basis to conclude that no mitigation is required for those emissions. The DEIR must be revised to analyze operational GHG emissions against a net zero significance threshold, and must include enforceable mitigation for any net increase in GHG emissions from the Project.

7. The DEIR's GHG Mitigation Offsets Lack Adequate Performance Standards and Are Improperly Deferred.

The DEIR relies on unenforceable, improperly deferred third-party carbon credits to offset the Project's construction-related GHG emissions.⁹ The DEIR finds that the Project's GHG emissions from construction are significant and require mitigation. DEIR at 4.3-92 (Impact 4.3-7; Table 4.3-23). The DEIR sets a significance threshold of 1,100 MT CO₂e per year for the Project's construction emissions, and found that the Project would generate annual emissions of 3,444 MT CO₂e during construction, exceeding this threshold. *Id.* The DEIR proposes to mitigate the Project's construction-related GHG emissions in part by requiring the Applicant to "retire carbon offsets in a quantity sufficient to offset the project's construction greenhouse gas (GHG) emissions to below the 1,100 [MT CO₂e] per year construction threshold," mandating that "Rise shall retire carbon offsets equaling 2,345 MT CO₂e" before Nevada County issues a grading permit for the Project. *Id.* at 4.3-96 (Mitigation Measure 4.3-7(b)).

The DEIR thus proposes to mitigate only 68 percent of the Project's construction-related GHG emissions and the entirety of that mitigation will rely on offsets. (The DEIR includes another mitigation measure for construction-related GHG emissions, Mitigation Measure 4.3-7(a), but does not attempt to quantify that measure's effect on emissions). *Id.* at 4.3-95 to 4.3-96. Assuming that Project construction is projected to last for only one year (*id.* at 4.3-92),¹⁰ Mitigation Measure 4.3-7(b) calls for a one-time purchase of GHG offsets, rather than a recurring annual commitment.

Here, the DEIR's proposed GHG mitigation offsets are inadequate for several reasons. First, the DEIR fails to ensure that the proposed offsets are additional, real, permanent, verifiable, and enforceable, as required by California Air Resources Board (CARB) regulations and the terms of the mitigation measure itself. Second, the proposed GHG offset mitigation measure is impermissibly deferred without adequate performance standards, in violation of CEQA. Third, the EIR fails to evaluate the foreseeable environmental impacts of offset projects. Finally, the DEIR fails to analyze additional feasible on-site mitigation for GHG emissions.

⁹ The DEIR does not propose to mitigate the Project's (much larger) operational GHG emissions, because it relies on a higher significance threshold to find those emissions less than significant, as discussed in Section II.E.5, *supra*.

¹⁰ While the DEIR's GHG analysis assumes that construction would last for one year (DEIR at 4.3-44, 4.3-92), the DEIR's project description states that construction would last for 18 months. DEIR at 3-37. The DEIR is therefore internally inconsistent. *See* Sections I.D and II.E.3, *supra*.

(a) The DEIR Fails to Ensure that Proposed Mitigation Offsets Are Additional, Real, Permanent, Verifiable, and Enforceable.

The CEQA Guidelines require that “lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions” from a project. CEQA Guidelines § 15126.4(c). The Guidelines authorize “[o]ff-site measures, including offsets that are not otherwise required, to mitigate a project’s emissions.” *Id.* § 15126.4(c)(3). However, like other mitigation measures, such offsets “must be fully enforceable through permit conditions, agreements, or other legally-binding instruments.” *Id.* § 15126.4(a)(2).

Here, the DEIR’s GHG offset mitigation measure is unenforceable, impermissibly delegates verification and enforcement to private third parties, and lacks specific performance standards essential to ensure the effectiveness of the mitigation. Mitigation Measure 4.3-7(b) defines an eligible carbon offset as “an instrument, credit or other certification verifying the reduction of GHG emissions” issued by one of three private, third-party registries: “the Climate Action Reserve, the American Carbon Registry, or Verra (previously, the Verified Carbon Standard).” DEIR at 4.3-96. Measure 4.3-7(b) provides that the “protocols and methodologies that define the eligibility of carbon offset projects and set forth standards for the estimation, monitoring and verification of GHG reductions” from those offsets “shall . . . [b]e developed by the registries” and must “[a]dhere to the principles set forth in the program manuals of each of the aforementioned registries.” *Id.* at 4.3-97. The DEIR thus delegates the task of developing appropriate protocols for the mitigation offsets to the third-party registries.

The measure requires that “[e]ach carbon offset used to reduce GHG emissions shall achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions.” *Id.* at 4.3-97. This language parallels CARB’s regulations for GHG offsets, which mandate that “[a] registry offset credit must . . . [r]epresent a GHG emission reduction . . . that is real, additional, quantifiable, permanent, verifiable, and enforceable.” Cal. Code Regs., tit. 17, § 95970(a). But section 95970 is not cited or incorporated in Measure 4.3-7(b), and the mitigation measure fails to adequately ensure that these criteria will be met. The measure asserts that “[t]he protocols and methodologies of the Climate Action Reserve, the American Carbon Registry, and Verra establish and require carbon offset projects to comply with standards designed to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions.” DEIR at 4.3-98. However, there is no guarantee that the registry’s protocols will achieve these standards.

Mitigation Measure 4.3-7(b) requires that the offset protocols and methodologies “shall . . . [b]e approved by the California Air Resources Board, and be compliant with 17 CCR § 95972.” *Id.* at 4.3-97. Section 95972 mandates that GHG offset protocols must “[a]ccurately determine the extent to which GHG emission reductions and GHG removal enhancements are achieved by the offset project type,” “[e]nsure GHG emission reductions and GHG removal

enhancements are permanent,” and “[e]stablish the eligibility and additionality of projects using standard criteria.” Cal. Code Regs., tit. 17, § 95972(a). However, Measure 4.3-7(b)’s mandate that offset protocols be CARB-approved and compliant with Section 95972 is *not* a sufficient basis to conclude that the GHG offsets used by the mitigation measure will be additional, real, permanent, quantifiable, verifiable, and enforceable.

In *Golden Door*, 50 Cal.App.5th at 511-15, the court invalidated an EIR’s GHG mitigation measure which allowed the purchase of offset credits from any carbon offset registry approved by CARB. The court found that the mitigation measure violated CEQA because it lacked sufficient safeguards to ensure the GHG offsets were real, permanent, verifiable, and enforceable, as required under A.B. 32. *Id.* at 511. The court concluded that CARB’s approval of a registry administering an offset did not necessarily mean an emissions reduction protocol developed by that registry complied with A.B. 32’s realness, permanency, verifiability, and enforceability requirements. *Id.* at 511-512.

Mitigation Measure 4.3-7(b) has many of the same flaws as the measure invalidated in *Golden Door*. Like the offset measure in *Golden Door*, here the measure relies entirely on protocols adopted by voluntary market registries, which may not meet standards necessary to ensure that Project emissions actually will be reduced to a less than significant level. *See Golden Door*, 50 Cal.App.5th at 511-12. In fact, studies have shown that third-party offset registry protocols frequently fail to ensure compliance with standards necessary for offset quality, as explained in comments prepared by Dr. Barbara Haya in connection with a recent development project in San Diego County. *See* Comments of Barbara Haya, Ph.D. in Response to Additional Information Regarding Carbon Offset Protocols for Greenhouse Gas Emission Reduction (Sept. 17, 2020) (“Haya 2020 Comments”), attached as Exhibit K, at 1, 3-5.¹¹ Moreover, the measure outsources enforcement of offset standards to those same third-party registries. Measure 4.3-7(b)’s requirement that CARB approve the offset *protocol* does go slightly further than the measure invalidated in *Golden Door*, which simply required that a *registry* be approved by CARB. 50 Cal.App.5th at 511. However, CARB’s approval of a protocol developed by a third-party registry is still not sufficient grounds to conclude that offsets generated under that protocol will be real, permanent, verifiable, and enforceable. Like the measure invalidated in *Golden Door*, Measure 4.3-7(b) relies on “unspecified and undefined offset protocols, occurring in unspecified locations.” *Id.* at 520. Measure 4.3-7(b) therefore fails to satisfy CEQA’s requirements for specific, effective, enforceable mitigation. *See* CEQA Guidelines § 15126.4.

¹¹ Dr. Haya is an expert in energy policy and carbon offsets at the University of California, Berkeley. Dr. Haya’s comments on the Otay Ranch Resort Village (Village 13) project in San Diego County are directly relevant to the IMM Project because the EIR for that project similarly proposed the use of offsets to mitigate the project’s GHG emissions.

Perhaps anticipating comparisons to the mitigation measure invalidated in *Golden Door*, Mitigation Measure 4.3-7(b) claims that it is “not intended to apply or incorporate the requirements of any other statutory or regulatory scheme not applicable to the project (e.g., the Cap-and-Trade Program).” DEIR at 4.3-98. But while the measure here does not purport to adhere to California’s cap and trade regulations, it seeks to rely on CARB approval and CARB regulations, like the measure in *Golden Door*. Measure 4.3-7(b) expressly relies on the requirement that the offset protocols be approved by CARB and comply with the offset regulations at California Code of Regulations, title 17, section 95972 (DEIR at 4.3-97), in much the same way that the mitigation measure in *Golden Door* relied on the cap-and-trade regulations at Health & Safety Code section 38562(d)(2). The relevant substantive provisions of the regulations are similar, and the same principle applies: CARB approval and compliance with CARB regulations is not enough to ensure that GHG offsets are additional, real, permanent, quantifiable, verifiable, and enforceable.

(i) Measure 4.3-7(B) Allows Out-Of-State Offsets that May Be Unenforceable or Fall Short of California’s Standards.

Like the measure invalidated in *Golden Door*, the GHG mitigation measure here also lacks adequate limits on the geographic location of GHG offsets. In *Golden Door*, the court found that the offset mitigation measure was invalid because CARB lacked the means to determine the validity of offsets located in foreign countries, including whether emissions reductions would be additional to reductions that would otherwise occur, and because CARB lacked enforcement authority over foreign offsets. 50 Cal.App.5th at 512-513.

Here, by requiring that offset protocols must comply with California Code of Regulations, title 17, section 95972 (DEIR at 4.3-97), Measure 4.3-7(b) limits offsets to those generated in the United States or its territories. (Section 95972 requires that “[a] Compliance Offset Protocol must specify where the protocol is applicable” and that “[t]he geographic boundary must be within the United States or United States Territories.” Cal. Code Regs., tit. 17, § 95972(c).) However, Measure 4.3-7(b) specifies that an eligible offset “shall include, *but is not limited to*, an instrument, credit or other certification issued by [the listed] registries for GHG reduction activities within the Nevada County region.” DEIR at 4.3-96 (emphasis added). Thus, the mitigation measure here does *not* require GHG offsets to be located in Nevada County or in the State of California: eligible offsets may be located in any U.S. state or territory. The measure therefore suffers from a similar problem as the one in *Golden Door*: The County lacks enforcement jurisdiction over out-of-county projects, and neither the County nor CARB has authority to enforce offsets located outside of California. Moreover, the County may lack the ability to determine the validity of offsets located in other U.S. states or territories. The mitigation measure does not require that offsets generated by out-of-state projects be subject to

laws at least as stringent as California's. The lack of narrower geographic limits on GHG offsets makes Measure 4.3-7(b) unenforceable.

(ii) Measure 4.3-7(B) Relies on Registries that Use Ineffective Protocol Methodologies.

Measure 4.3-7(b) allows the use of offsets issued by the Climate Action Reserve, the American Carbon Registry, or Verra registry, but many protocols used by those registries have been shown to be ineffective. Studies have shown that the “standardized” approach to additionality used by many Climate Action Reserve protocols has failed to ensure effective “additional” emissions reductions due to substantial “over-crediting” and leakage problems. *See* Exhibit K (Haya 2020 Comments) at 1-5. The County's reliance on registries that use Clean Development Mechanism (CDM) methodologies and additionality standards also undermines the effectiveness of proposed mitigation. *See id.* at 2. Studies have shown that offsets that rely on CDM methodologies and additionality tools do not produce additional GHG reductions. *Id.* Numerous Verra and American Carbon Standard protocols explicitly rely on CDM methodologies, CDM additionality tests, or both. *See id.* Those methodologies and tools have been imported into the named registries' manuals and protocols. Measure 4.3-7(b) provides that “[t]he Project shall neither purchase offsets from the Clean Development Mechanism (CDM) registry nor purchase offsets generated under CDM protocols.” DEIR at 4.3-96. But this provision does not go far enough: while it prohibits offset purchases from the CDM registry and purports to exclude offsets generated under protocols developed by that registry, it does not expressly prohibit offsets from other registries that use equivalent methods or tools. Measure 4.3-7(b) thus fails to ensure that offsets from the Climate Action Reserve, the American Carbon Registry, or Verra will effectively mitigate Project impacts.

(iii) Measure 4.3-7(B) Relies on the County's Discretionary Review Where It Lacks Expertise.

Measure 4.3-7(b) inappropriately relies on the County's judgment to decide whether a GHG offset is adequate. DEIR at 4.3-98 to 4.3-99. The measure's “Reporting and Enforcement Standards” require that “[p]rior to issuance of requested grading permits, Rise [Gold] shall submit a report to the County that identifies the quantity of emission reductions required by this mitigation measure, as well as the carbon offsets to be retired to achieve compliance with this measure.” *Id.* at 4.3-98. The County will then review the report and determine whether the project's carbon offsets meet the requirements of the mitigation measure. *Id.* at 4.3-98 to 4.3-99.

The County's judgment is not sufficient to support a conclusion that all offset credits issued under these protocols will satisfy necessary standards. Offset protocol methodologies are a highly technical field, and there is no evidence that the County has the relevant expertise to conduct such a review. Rather, it appears likely that the County will simply accept the registries' own review of their protocols and/or CARB approval of those protocols as sufficient evidence of

their adequacy. *See id.* at 4.3-96 (“offsets may be used if report is submitted to the County “demonstrating that each registry *shall continue its existing practice* of requiring [the standards listed below] for the development and approval of protocols or methodologies”) (emphasis added); *id.* at 4.3-98 (“The protocols and methodologies of the Climate Action Reserve, the American Carbon Registry, and Verra establish and require carbon offset projects to comply with standards designed to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions.”) The County’s apparent failure to recognize that numerous protocols included in Climate Action Reserve, the American Carbon Registry, or Verra registries rely on CDM methodologies and additionality tests—even as the measure claims credits generated under CDM protocols will not be accepted—demonstrates that County officials may not be able to render an informed judgment as to whether specific protocols are adequate.

(iv) The DEIR Lacks Substantial Evidence that Measure 4.3-7(B) Would Be Effective.

When a lead agency relies on mitigation measures to find that project impacts will be reduced to a level of insignificance, there must be substantial evidence in the record demonstrating that the measures are feasible and will be effective. *Sacramento Old City Assn. v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1027; *Kings County*, 221 Cal.App.3d 690, 726-29. An agency’s conclusion that a proposed mitigation measure will in fact reduce GHG emissions below the significance threshold must be both legally sound and supported by specific, quantitative evidence. *See Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204, 227-28.

Here, for all of the reasons discussed above, the DEIR does not provide substantial evidence to support its conclusion that GHG offsets obtained through Measure 4.3-7(b) actually will achieve the claimed reduction in emissions. The DEIR therefore lacks legal and evidentiary support for its conclusion that the Project’s GHG emissions will be less than significant. The DEIR must be revised to provide enforceable mitigation for the Project’s GHG emissions.

(b) The GHG Offset Mitigation Measure Is Impermissibly Deferred Without Adequate Performance Standards.

Mitigation Measure 4.3-7(b) impermissibly defers the DEIR’s mitigation for the Project’s construction-related GHG emissions without sufficient performance standards or assurances of effectiveness. As we explain above, CEQA allows deferral of mitigation measures until after Project approval only when it is “impractical or infeasible” to develop those measures before approval, the agency “commits itself to the mitigation,” and the EIR “adopts specific performance standards” and identifies actions that can “feasibly achieve” those standards. CEQA Guidelines § 15126.4(a)(1)(B). These requirements apply to mitigation measures that employ GHG offsets. *See id.* § 15126.4(c)(3). Mitigation for a project’s GHG impacts is impermissibly deferred if it relies on development of future management plans without articulating specific,

objective performance standards and providing assurances that the proposed mitigation will be effective. *Golden Door*, 50 Cal.App.5th at 518-525; *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92-95.

The court in *Golden Door* concluded that the GHG offset mitigation measure in that case violated CEQA because it improperly deferred development of the mitigation until after project approval, leaving it for County officials to later determine whether particular offsets met the criteria for the mitigation measure. 50 Cal.App.5th at 518-25. The court found that the mitigation measure lacked adequate performance standards to guide the exercise of the County's discretion in approving these deferred GHG offsets. *Id.* The mitigation measure allowed County officials to determine whether any particular offset program was acceptable based on subjective criteria, including that offsets located geographically closer to the County were not "available" or "financially feasible," and that the offset registry must be "reputable." *Id.* at 520-22.

Here, Measure 4.3-7(b) similarly defers the County's determination as to whether GHG offsets are adequate until after Project approval. DEIR at 4.3-98 to 4.3-99. The measure's "Reporting and Enforcement Standards" require that "[p]rior to issuance of requested grading permits, Rise [Gold] shall submit a report to the County that identifies the quantity of emission reductions required by this mitigation measure, as well as the carbon offsets to be retired to achieve compliance with this measure." *Id.* at 4.3-98. The County will then review the report and determine whether the project's carbon offsets meet the requirements of the mitigation measure. *Id.* at 4.3-98 to 4.3-99. Grading permits may be issued once the County approves the use of the offsets as mitigation. *Id.*

Like the measure invalidated in *Golden Door*, Measure 4.3-7(b) fails to provide specific, objective performance standards to ensure that the GHG offsets will effectively mitigate Project impacts. The measure requires that "[e]ach carbon offset used to reduce GHG emissions shall achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions." *Id.* at 4.3-97. However, the mitigation measure fails to adequately ensure that these criteria will be met, as discussed above in Section II.C.6(a). Measure 4.3-7(b) provides that the "protocols and methodologies that define the eligibility of carbon offset projects and set forth standards for the estimation, monitoring and verification of GHG reductions" from those offsets "shall . . . [b]e developed by the registries" and must "[a]dhere to the principles set forth in the program manuals of each of the aforementioned registries." *Id.* at 4.3-97. The DEIR thus delegates the task of developing appropriate protocols for the mitigation offsets to the third-party registries. The measure asserts that the registries' protocols require carbon offset projects to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions. *Id.* at 4.3-98. Again, there is no guarantee that the registry's protocols will achieve these standards.

As discussed above in Section II.E.6(a), Measure 4.3-7(b)'s mandate that offset protocols be CARB-approved and compliant with Cal. Code Regs., tit. 17, § 95972 is *not* a sufficient basis

to conclude that the GHG offsets used by the mitigation measure will adequately mitigate Project impacts. The GHG mitigation measure invalidated in *Golden Door* called for the use of CARB-approved offset registries and required offsets to be “consistent” with Health & Safety Code § 38562(d)(2). 50 Cal.App.5th at 518. The court nevertheless found the measure improperly deferred because it relied on “unspecified and undefined offset protocols, occurring in unspecified locations.” *Id.* at 520.

The same is true here: Measure 4.3-7(b) does not specify what offset protocols must be used, or where offsets must occur, and requiring CARB approval of offset protocols does not cure this defect. Asserted compliance with regulatory standards is not a sufficient ground to conclude that a project’s impacts would be less than significant. *Californians for Alternatives to Toxics v. Dept. of Food & Agriculture* (2005) 136 Cal.App.4th 1, 15-17. And requiring approval from responsible regulatory agencies cannot make up for a lack of performance standards in a deferred mitigation measure. *County of Merced*, 149 Cal.App.4th at 669-70 (mitigation measure for mining project impermissibly deferred despite requiring “concurrence of applicable regulatory agencies”).

The DEIR also violates CEQA by failing to demonstrate why it is “impractical or infeasible” to identify the mitigation offset protocols or offsets that will be used prior to Project approval. Measure 4.3-7(b) is also improperly deferred for this reason. *See* CEQA Guidelines § 15126.4(a)(1)(B). Measure 4.3-7(b) must be revised to identify which offset protocols will be used, and where offset projects will be located.

(i) Measure 4.3-7(B) Improperly Allows Offsets Based on “Forecasted” Emissions Reductions.

Measure 4.3-7(b) is also inadequate because it allows offsets based on “forecasted” emissions reductions. *See* DEIR at 4.3-97 (“any carbon offset used to reduce the project’s GHG emissions shall be a carbon offset that represents the past *or forecasted* reduction or sequestration of one MT of CO₂e”) (emphasis added). Reliance on “forecasted” reductions that have not yet occurred would allow the adverse impacts of GHG emissions to persist, potentially for many years, before being mitigated. CEQA does not permit an agency to defer implementation of mitigation measures until after significant impacts occur. *King & Gardiner Farms*, 45 Cal.App.5th at 860. Rather, “[o]nce the project reaches the point where activity will have a significant adverse effect on the environment, the mitigation measures must be in place.” *POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 738.

Measure 4.3-7(b)’s reliance on future “forecasted” reductions to mitigate present GHG emissions fails to address the Project’s immediate climate impacts. Delaying implementation of climate mitigation has a real, adverse effect on warming; although CO₂ persists in the atmosphere for centuries, the maximum warming effect of a pulse of CO₂ emissions occurs

within a relatively short time frame. *See* Katharine L. Ricke & Ken Caldeira, Maximum warming occurs about one decade after a carbon dioxide emission, 2014 Environ. Res. Lett. 9 124002, attached as Exhibit L. Accordingly, even if a “forecasted” reduction eventually occurs, the Project’s emissions will be in the atmosphere at least until that time, exacerbating climate impacts.¹² Measure 4.3-7(b)’s use of “forecasted” emissions reductions would allow the Project’s GHG impacts to occur before they are mitigated, violating CEQA. *King & Gardiner Farms*, 45 Cal.App.5th at 860.

The registries relied on by Measure 4.3-7(b) acknowledge this time lag in emissions reductions. The Program Manual for Climate Action Reserve’s “Climate Forward” program states that project emissions may occur well in advance of “forecasted reductions.” The manual explains the difference between offsets (which represent emissions reductions verified to have already occurred) and “forecasted mitigation units” (or “FMUs”) that might occur in the future. Climate Forward Program Manual, March 2020, attached as Exhibit M, at 6-7. The manual explicitly acknowledges “that there could be a time period, or a temporal disconnect, between the occurrence of the emissions and the occurrence of reduction or sequestration represented by” Climate Forward projects; “[t]hat is, the emission reductions expected to be generated might occur after the actual emissions from the new initiative.” *Id.* at 7. Climate Action Reserve thus advises developers to ensure that credits based on “forecasted” emissions will be accepted for CEQA purposes before purchase. *Id.* at 6. The “temporal disconnect” between emissions and reductions is incompatible with CEQA’s standards. The DEIR should be revised to remove all references suggesting the Project may rely for mitigation on “forecasted” emissions reductions.

(ii) There Is No Way for the County to Enforce Offsets After Grading Permits Are Issued.

Once grading permits for the Project are issued, the County will effectively lose its ability to enforce the DEIR’s GHG offset mitigation. If the County later determines that previously retired offset credits no longer meet standards, its only recourse is to “cease permitting activities.” DEIR at 4.3-99. Measure 4.3-7(b) provides that “[T]he County may issue a notice of non-consistency and cease permitting activities in the event that the County determines the carbon offsets provided to reduce project GHG emissions are not compliant with the aforementioned standards. In the event of such an occurrence, project permitting activities shall not resume until Rise has demonstrated that the previously provided carbon offsets are compliant

¹² Even if instruments promising forecasted reductions have been secured before Project construction occurs, the “offsets” themselves—i.e., the actual reductions necessary to offset Project emissions—may not occur until well after emissions are generated by the Project.

with the standards herein or have provided substitute carbon offsets achieving the standards of this mitigation measure in the quantity needed to achieve the required emission reduction.” *Id.*

However, this provision does nothing to address the scenario in which the County approves the GHG offsets, issues all applicable permits for the Project, and then later discovers that the offset protocol is not being followed. This is especially problematic because Measure 4.3-7(b) allows offsets based on “forecasted” emissions reductions that have not yet occurred at the time the offset is retired and permits are issued. *See* DEIR at 4.3-97. If permits already have been issued, not “resuming” permitting activities is an empty gesture. Like the measure invalidated in *Golden Door*, Measure 4.3-7(b) relies almost entirely on third party registries and project developers over whom the County has no direct enforcement authority. Measure 4.3-7(b) therefore fails to provide enforceable mitigation as required by CEQA. CEQA Guidelines § 15126.4(a)(2).

(c) The EIR Fails to Evaluate the Foreseeable Environmental Impacts of Offset Projects.

CEQA requires an EIR to address the potentially significant environmental impacts of proposed mitigation measures. CEQA Guidelines § 15126.4(a)(1)(D). Here, the DEIR fails to consider whether the GHG offsets used as mitigation may cause significant and adverse environmental effects. GHG offset projects may have significant environmental impacts. Just by way of example, the protocols may contemplate construction of organic waste digesters and gas recovery units; changes in forest, wetlands, and rangelands management; construction of carbon capture and storage facilities; installation of landfill gas projects; and construction of new cogeneration facilities. Any one of these activities may have foreseeable direct and indirect environmental impacts. Because the DEIR has identified a set of registries that will generate eligible offset credits (DEIR at 4.3-96), the County cannot claim the environmental impacts of reliance on those registries’ offset projects are entirely speculative. The EIR’s failure to consider the environmental impacts associated with Measure 4.3-7(b) violates CEQA’s standards.

(d) The DEIR Fails to Analyze Additional Feasible On-Site Mitigation for GHG Emissions.

The EIR fails to ensure that GHG reductions are achieved from on-site mitigation measures to the maximum extent feasible before offsets are purchased. CEQA provides that “public agencies should not approve projects as proposed if there are . . . feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” Pub. Resources Code § 21002; *see id.*, § 21002.1(b) (agencies must mitigate significant effects of projects they approve “whenever it is feasible to do so”); CEQA Guidelines § 15126.4(a)(1) (“An EIR shall describe feasible measures which could minimize significant adverse impacts.”). Because of the known problems with enforcement and additionality of offsets, agencies typically strictly limit the use of offsets as part of an overall emissions reduction

program. CARB's 2017 Climate Change Scoping Plan Update cautions that reliance on offset credits is appropriate only where further on-site reductions and direct local investments "are infeasible or not proven to be effective." *See* CARB 2017 Climate Change Scoping Plan Update, attached as Exhibit J, at 102. California's cap and trade program currently allows regulated emitters to use GHG offsets to fulfill no more than four percent of their GHG reduction obligations, and at least half of the offsets used must "provide direct environmental benefits in state." Health & Saf. Code § 38562(c)(2)(E).

Here, by contrast, *100 percent* of the mitigation for the Project's construction-related GHG emissions will rely on offsets, and there is no requirement that those offsets be located in California. *See* DEIR at 4.3-96.¹³ The DEIR's excessive reliance on GHG offsets to mitigate all of the Project's construction emissions conflicts with established state policy, which limits offset use. The DEIR fails to adequately consider alternative mitigation measures.

The DEIR includes another mitigation measure for construction-related GHG emissions, Mitigation Measure 4.3-7(a), which calls for electric-powered or non-diesel construction equipment where feasible, carpooling for construction workers, and the use of locally sourced or recycled construction materials. *Id.* at 4.3-95 to 4.3-96. However, these measures lack any specificity or enforceability and the DEIR makes no attempt to quantify that measure's effect on emissions. *Id.* Mitigation Measure 4.3-7(a) calls for construction emissions to be reduced to the DEIR's chosen significance threshold of 1,100 MT CO_{2e} using GHG offsets, but does not mandate any reduction below that level. *Id.* at 4.3-96.

The DEIR does not explain why it is infeasible to require that all GHG offsets used by the Project be located in California. The DEIR also fails to show that further on-site GHG mitigation measures for construction emissions are infeasible or ineffective. For example, the DEIR does not consider whether more of the existing vegetation on the site could be preserved rather than removed. Nor does it consider whether any of the Project's electricity demand during construction could be met via the use of solar-powered equipment (e.g. portable solar-powered lighting). The DEIR also fails to require vehicle electrification of the mine's truck fleet as well as the trucks that serve the mine. The DEIR must be revised to consider additional feasible on-site measures to reduce the Project's GHG emissions.

F. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Energy Use.

The DEIR's analysis of Project energy use suffers from several flaws. First, the DEIR fails to analyze the Centennial cleanup's energy use, or additional energy consumption by the

¹³ As noted above, the DEIR should use a no net increase threshold to determine whether the Project will have significant GHG emissions and should require mitigation for all of the Project's GHG emissions, not just a portion of them.

IMM Project if the Centennial cleanup does not occur. Second, the DEIR's analysis of energy use from Project construction assumes a construction timeline that contradicts the Project description. Finally, the DEIR improperly relies on assumed mitigation measures for energy impacts, failing to acknowledge those measures as mitigation. The DEIR must be revised to address these deficiencies.

1. The DEIR Fails to Analyze the Centennial RAP's Energy Usage.

The DEIR must include the Centennial RAP as part of the Project, and must analyze all of the environmental impacts resulting from the RAP, as discussed in Sections I.C, II.D.1 and II.E.1, *supra*. Accordingly, the DEIR must evaluate the Centennial cleanup's energy usage. The Centennial RAP would involve cement mixing, excavation and grading of 36.7 acres of land, and the use of backhoes and other heavy equipment. Exhibit G (MND) at 3-4; Exhibit E (RAP) at 44. The DEIR improperly fails to disclose or analyze the impacts of these RAP activities on energy use. DEIR at 4.3-66 to 4.3-102. The DEIR's omission of these impacts prevents informed analysis and violates CEQA. *See County of Inyo*, 172 Cal.App.3d at 165-66; *Nelson*, 190 Cal.App.4th at 271.

2. The DEIR Fails to Analyze Energy Use that May Result from the IMM Project if the Centennial Cleanup Does *Not* Occur.

The DEIR also fails evaluate additional energy use that would result from the Project if the Centennial cleanup does not occur. The DEIR acknowledges that the Centennial Site might never be remediated during the 80-year term of the mine permit, which would require trucking an additional 1.6 million tons of mine waste to offsite locations after the Brunswick Site is full. DEIR at 1-3, 3-32 to 3-33, 3-26. The DEIR must evaluate the energy usage (e.g. fuel consumption) associated with that additional offsite trucking, but fails to do so. Instead, the DEIR simply assumes that the Centennial RAP will be completed and that fill dumping at the Centennial site will occur in the first five years of Project operations. *See id.* at 4.3-50, 4.3-53 to 4.3-54, 4.3-67 to 4.3-68. As discussed in Sections I.B, II.D.2 and II.E.2, *supra*, the DEIR must consider the possibility that the RAP may never occur and analyze the impacts that would result in that scenario. If the Centennial RAP is never completed and no fill is ever placed at the Centennial site, that fill must be trucked offsite for an additional five years, resulting in additional fuel consumption. The DEIR's failure to disclose or analyze this impact deprives the public and decision-makers of essential information in violation of CEQA. *See Banning Ranch*, 2 Cal.5th at 941-42.

3. The DEIR's Analysis of Construction Energy Use Contradicts the Project Description.

The DEIR's analysis of energy use from Project construction is unsupported because its assumptions regarding the duration of construction contradict the Project description. The

DEIR's project description states that Project construction would last for 18 months. DEIR at 3-37. By contrast, the DEIR's energy analysis assumes that Project construction would last for only 12 months, and bases its impact evaluation on that assumption. DEIR at 4.3-44 to 4.3-46. The DEIR is therefore internally contradictory. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee*, 210 Cal.App.4th at 284. The DEIR asserts that "the construction scenario assessed herein is the worst-case, because if the same construction activities were to be spread over a longer period (i.e., a period in excess of 12 months), the amount of overlap of equipment usage would be reduced." *Id.* at 4.3-44. The DEIR fails to consider whether an 18-month construction period could result in greater total energy use than a 12-month construction period. The DEIR's energy analysis must be revised to assume the same construction duration as the Project description.

4. The DEIR Improperly Relies on Assumed Energy Use Mitigation Measures, Preventing Informed Impact Analysis.

As discussed above, the DEIR lists several "applicant-proposed emissions reduction measures" which it does not classify as mitigation, and simply assumes that those measures would be implemented when conducting impact analysis. DEIR at 4.3-65; *see* Sections II.D.4 and II.E.4, *supra*. The APMs were not identified as Project features in the Project description, and there is no assurance that these measures will be implemented as a part of the Project. *See* Exhibit A (Baseline Report) at 14. These "applicant-proposed" measures are in reality mitigation measures, which the DEIR improperly fails to recognize as such. As explained above, this approach violates CEQA. *Lotus*, 223 Cal.App.4th at 656. A project's significant impacts must be determined first, and then the CEQA document must identify enforceable mitigation and evaluate its effectiveness in addressing project impacts. *Id.* at 656, 658.

This error invalidates the DEIR's analysis of energy usage, just as it does for the air quality and GHG analyses. In addition to requiring Tier 4 engines, applicant-proposed measure APM-AQ-1 (Exhaust Emission Controls) requires that "[u]nnecessary construction vehicle idling time shall be minimized" and that "[a]ll off-road equipment shall be maintained in accordance with manufacturer's specifications." DEIR at 4.3-65. APM-AQ-1 thus seeks to reduce the Project's energy consumption as well as its air quality and GHG impacts. *Id.* at 4.3-87 (concluding that APM-AQ-1 would "avoid inefficient energy consumption in several ways"). These measures are vague and unenforceable and cannot be relied upon to demonstrate any reductions in the Project's air quality, GHG, or energy impacts.

Even if APM-AQ-1 were specific and enforceable, it is a de facto mitigation measure. *See* CEQA Guidelines §15370. The DEIR's analysis of the Project's energy usage impermissibly assumes that APM-AQ-1 has been implemented *before* evaluating the significance of impacts or considering mitigation. DEIR at 4.3-65, 4.3-87 to 4.3-88, 4.3-102. The DEIR makes no attempt to calculate what the Project's energy usage would be without APM-AQ-1, and does not

separately quantify the emission reductions that would result from that “applicant proposed” measure. This approach prevents informed analysis of Project impacts, violating CEQA. *Lotus*, 223 Cal.App.4th at 656. The DEIR must be revised to classify the APMs as mitigation measures, and must evaluate their effectiveness in reducing energy usage.

G. The DEIR’s Analysis of Project Alternatives Is Inadequate.

Under CEQA, a proper analysis of alternatives is essential to comply with the Act’s mandate that significant environmental damage be avoided or substantially lessened where feasible. Pub. Resources Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 443-45. As stated in *Laurel Heights I*, “[w]ithout meaningful analysis of alternatives in the DEIR, neither the courts nor the public can fulfill their proper roles in the CEQA process. . . . [Courts will not] countenance a result that would require blind trust by the public, especially in light of CEQA’s fundamental goal that the public be fully informed as to the consequences of action by their public officials.” 47 Cal.3d at 404.

Critically, an EIR must consider a “reasonable range” of alternatives “that will foster informed decision-making and public participation.” CEQA Guidelines § 15126.6(a); *Laurel Heights I*, 47 Cal.3d at 404 (“An EIR’s discussion of alternatives must contain analysis sufficient to allow informed decision-making.”). The discussion of alternatives must focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. CEQA Guidelines § 15126.6(b). The DEIR for the Project fails to heed these basic mandates.

1. The DEIR Fails to Include a Reasonable Range of Alternatives.

As described throughout this letter, the DEIR fails to adequately describe the Project and fails to reveal the severity and extent of numerous environmental impacts. In many instances, the DEIR incorrectly determines that impacts would be less than significant. As we explained, the DEIR incorrectly found the Project’s impacts to air quality, GHG emissions, energy, hazards, hazardous materials, hydrology, water quality, noise, and vibration to be less than significant. Had the DEIR conducted a proper impact analysis, it should have recognized that numerous, if not all of these impacts would be significant and unavoidable. In this case, the DEIR would have been obligated to identify and evaluate alternatives to the Project capable of reducing those impacts. CEQA Guidelines § 15126.6 (b). Thus, the DEIR must be recirculated to analyze the Project’s full environmental impacts and identify mitigation measures or alternatives that could feasibly avoid or minimize those impacts.

However, even for those significant impacts that the DEIR does acknowledge, the document’s analysis of alternatives is deficient. The DEIR determines that the Project would

result in significant and unavoidable impacts relating to aesthetics, noise, and transportation. DEIR at 6-7, 6-8. Yet, except for the “No Project” alternative, which “would not meet any of the project objectives,” none of the examined alternatives would reduce the Project’s impacts on aesthetics, noise, and transportation to a less than significant level. *See* DEIR at 6-44. In fact, in certain instances, the Project’s alternatives would result in similar or even greater impacts than the proposed Project. *Id.*

While there is no “magic number” for how many alternatives an EIR should examine to present a “reasonable range,” at a minimum CEQA requires an agency to examine at least potentially feasible alternatives to try to avoid or substantially lessen significant environmental impacts that are central to a project. *See Watsonville Pilots Assn. v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1089-90 (EIR was deficient for failing to include reduced development alternative that would avoid or substantially lessen the project’s primary growth-related significant impacts); *Habitat and Watershed Caretakers v. City of Santa Cruz* (2013) 213 Cal.App.4th 1277, 1285, 1305 (invalidating EIR that failed to discuss any feasible alternative addressing the project’s primary water supply impact). Furthermore, with the inherent dangers and environmental harms associated with underground mining activities that will impact the environment for a minimum of 80 years, in close proximity to existing residential and other land uses, the DEIR should evaluate multiple alternatives in order to help inform the decisionmakers and the public of the environmental consequences of this Project.

Other than the “No-Project” alternative, the DEIR identifies only three alternatives: Alternative 2: the Elimination of Centennial Industrial Site and Expansion of Brunswick Fill Pile; Alternative 3: Expansion of Centennial Engineered Fill Pile and Elimination of Brunswick Engineered Fill Pile; and Alternative 4: Reduced Throughput. Again, by the DEIR’s own admission, each of these alternatives would result in significant and unavoidable impacts relating to aesthetics, noise, and transportation. DEIR at 6-44.

2. The DEIR Does Not Provide a Meaningful Comparison of the Project and the Alternatives.

The Project’s objectives are defined so narrowly that they essentially call for the Project itself. An EIR cannot provide a meaningful comparison between a proposed project and various alternatives unless the project’s objectives are defined broadly enough to make such options at least potentially possible. *See Kings County Farm Bureau*, 221 Cal.App.3d at 735-37; *City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1455. Here, the DEIR calls for the construction of an underground gold mine operation that will produce 1,000 tons per day (365,000 tons per year) of gold mineralization on property that Rise Grass Valley, Inc. owns. DEIR at 3-11. This is tantamount to saying that the objective of the Project is to implement the Project. Narrowing the Project’s goals in this way tilts the analysis of alternatives unavoidably—and illegitimately—toward the Project as proposed. Rather than providing the required reasoned,

objective analysis, the DEIR has become “nothing more than [a] post hoc rationalization[]” for a decision already made. *Laurel Heights I*, 47 Cal.3d at 394.

3. All of the Project Alternatives Incorrectly Assume the Remediation of the Centennial Site.

All three of the Project alternatives assume the remediation of the Centennial Site. As we explain throughout this letter, DTSC has not yet approved the Centennial Site cleanup, which is currently undergoing a separate CEQA review. Because DTSC might not approve the cleanup, and Rise Gold might not complete it, the DEIR’s use of a hypothetical post-remediation baseline in its alternatives analysis is inappropriate. The revised DEIR’s alternatives analysis must evaluate the impacts of each alternative assuming the remediation is not completed.

4. The Revised EIR Should Evaluate Alternatives that Avoid the Project’s Significant Environmental Impacts and that Would Be Consistent with the County’s and the City’s General Plans.

The revised DEIR must examine feasible Project alternatives that could reduce the Project’s significant environmental impacts. CEA explicitly requested that the DEIR analyze alternative locations for the dumping of waste rock and tailings from the mine. The DEIR fails to consider this alternative.

Moreover, the DEIR errs because it does not seriously consider an alternative industrial use that would be consistent with the Industrial designation on the Brunswick site and the Industrial /Urban Medium Density designation on the Centennial site.¹⁴ While the DEIR did discuss alternative uses under the No Project alternative (*see* DEIR at pp 6-11 through 6-13), it rejects such an alternative from further consideration claiming that such a use would be more intensive than the proposed Project. *Id.* Yet, the DEIR certainly could have considered a less intensive alternative use than that proposed by the No Project alternative. For example, a mixed use employment center not requiring a use permit would be more in keeping with the aesthetics of this entry point to the City. To the extent the County would argue that it need not consider

¹⁴ The County’s General Plan designates the Centennial site as “Industrial” whereas the City of Grass Valley designates the Centennial site as “Urban Medium Density.” If approved, the Project would violate the County’s General Plan policy calling for its land use designations to be consistent with the City’s designations: Nevada County General Plan Land Use Policy 1.8.3: *Within the City/Town spheres of influence, the Nevada County General Plan Land Use Maps will generally reflect the City’s/Town’s General Plan land use mapping. In some instances, the County may provide for a less intensive land use due to infrastructure capability, environmental constraints or effect on land use and development patterns outside the city’s sphere. However, the County’s Plan will not preclude implementation of the City’s/Town’s Plan by providing for a significantly more intensive land use than the City’s/Town’s Plan.*

alternatives that do not meet the Project's objectives, this argument would have no merit. An EIR cannot provide a meaningful comparison between a proposed project and various alternatives unless the project's objectives are defined broadly enough to make such options at least potentially possible. *Kings County Farm Bureau*, 221 Cal. App. 3d at 735-37; *City of Santee v. County of San Diego* 214 Cal. App. 3d 1438, 1455 (1989). Here, the DEIR states that a gold mine operation must be built as planned by the proposed Project. DEIR at 6-2. This is tantamount to saying that the objective of the Project is to implement the Project. Narrowing the Project's goals in this way tilts the analysis of alternatives unavoidably—and illegitimately—toward the IMM Project as proposed. Rather than providing the required reasoned, objective analysis, the DEIR has become “nothing more than [a] post hoc rationalization[]” for a decision already made. *Laurel Heights I*, 47 Cal. 3d at 394. CEQA forbids the use of this sort of circular logic to justify a project. Accordingly, the revised DEIR must consider a less intensive alternative use alternative, and one that is consistent with the County's and the City's General Plans.

5. The County May Not Approve the Project if a Feasible Alternative Exists that Would Meet the Project's Objectives and Would Diminish Its Significant Environmental Impacts.

Under CEQA, an agency may not approve a proposed project if a feasible alternative exists that would meet a project's objectives and would diminish or avoid its significant environmental impacts. Pub. Res. Code § 21002; *Kings County Farm Bureau*, 221 Cal.App.3d at 731; *see also* CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth*, 198 Cal.App.3d at 443-45. An alternative need not meet every Project objective or be the least costly in order to be feasible. *See* CEQA Guidelines § 15126.6(b).

The DEIR readily admits that Alternative 2: Elimination of Centennial Industrial Site and Expansion of Brunswick Fill Pile is the environmentally superior alternative. DEIR at 6-42. It further acknowledges that this alternative would further nearly all of the Project objectives. *Id.* at 6-42, 6-43. Consequently, approval of the Project, or any alternative project with greater impacts than Alternative 2 would violate CEQA.

III. The DEIR Must Be Recirculated.

Under California law, this DEIR cannot properly form the basis of a final EIR. CEQA and the CEQA Guidelines describe the circumstances that require recirculation of a draft EIR. Such circumstances include: (1) the addition of significant new information to the EIR after public notice is given of the availability of the DEIR but before certification, or (2) the draft EIR is so “fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” CEQA Guidelines § 15088.5.

Here, both circumstances apply. Decisionmakers and the public cannot possibly assess the Project's impacts, or even its feasibility, through the present DEIR, which is riddled with errors. Among other fundamental deficiencies, the DEIR repeatedly understates the Project's significant environmental impacts and concludes incorrectly that these impacts would be less than significant. It also assumes that unformulated or clearly useless mitigation measures will effectively reduce these impacts. And the DEIR's Project Description is so unstable and uncertain that meaningful review of the Project's environmental impacts is essentially impossible. In order to resolve these issues, the County must prepare a revised EIR that would necessarily include substantial new information.

Conclusion

As set forth above, the DEIR suffers from numerous deficiencies, many of which would independently render it inadequate under CEQA. Taken as a whole, the deficiencies of the DEIR necessitate extensive revision of the document and recirculation for public comment.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Ellison Folk

cc: Ralph Silberstein, Community Environmental Advocates Foundation

Exhibits:

Exhibit A: Baseline Environmental Consulting Report, February 15, 2022.

Exhibit B: Salter Report, March 9, 2022.

Exhibit C: Draft Final Remedial Action Plan for Centennial M-1 Property, January 25, 2021.

- Exhibit D: Email from Dean Wright, Project Manager, DTSC, to Ralph Silberstein, February 4, 2022.
- Exhibit E: Central Valley Regional Water Quality Control Board, Review of Draft Final Remedial Action Plan Centennial M-1 Property, Nevada County, September 24, 2021.
- Exhibit F: Department of Toxic Substances Control, Voluntary Cleanup Agreement for Centennial M-1 Property, September 3, 2019.
- Exhibit G: Initial Study/Mitigated Negative Declaration for Remedial Action Plan for the Centennial M-1 Property, July 23, 2021.
- Exhibit H: Safeguards for Well Owners and the Idaho-Maryland Mine, CEA Foundation, December 1, 2021.
- Exhibit I: Intergovernmental Panel on Climate Change, Climate Change 2021: The Physical Science Basis, Summary for Policymakers, October 2021.
- Exhibit J: CARB 2017 Climate Change Scoping Plan Update.
- Exhibit K: Comments of Barbara Haya, Ph.D. in Response to Additional Information Regarding Carbon Offset Protocols for Greenhouse Gas Emission Reduction, Sept. 17, 2020.
- Exhibit L: Katharine L. Ricke & Ken Caldeira, *Maximum warming occurs about one decade after a carbon dioxide emission*, 2014 Environ. Res. Lett. 9 124002.
- Exhibit M: Climate Action Reserve, Climate Forward Program Manual, March 2020.