
3.0 Draft EIR Errata

3.1 OVERVIEW

As is common with Draft EIR circulation and review, many of the comments submitted were general in nature, and asked questions already answered in the Draft EIR evaluations. Other commenters asked for clarification on points addressed in the environmental evaluations, while some provided suggestions on the evaluation of impacts and determination of specific mitigation measures.

Evaluation of the comments reviewed relative to the Draft EIR impact analysis determined that, in general, the comments received did not require additional evaluation or changes to the conclusions reached, or alternatives to the proposed project.

None of the changes provided in Section 3.2 of this Final EIR contain significant new information that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect. Additionally, the Final EIR does not present a feasible project alternative or mitigation measure considerably different from others previously analyzed in the Draft EIR. All of the information added to the Final EIR merely clarifies, amplifies, or makes insignificant modifications in the Draft EIR. Therefore, recirculation of the Draft EIR is not required (see Guidelines Section 15088.5).

3.2 ERRATA

Table 3.0-1, Corrections to the Draft EIR (pages 3.0-4 through 3.0-8), contains corrections and clarifications that are made to the text of the Draft EIR.

Appendix F of this Final EIR, Summary of Impacts and Mitigation Measures, contains a revised version of Draft EIR Table 2-1 in its entirety. This table contains a detailed list of the impacts, mitigation measures, and level of significance (after mitigation) for each topical area addressed in Draft EIR Chapter 4.0, Environmental Analysis. Additions to and deletions from this table are identified (with underlining and strike-outs, respectively) to aid the reviewer in understanding changes that have come about as a result of comments received on the Draft EIR.

Changes have been made in response to comments received on the Draft EIR as well as from internal staff review by Butte County. Other corrections and clarifications to the Draft EIR require some level of explanation and are included in Section 3.2.1, Applicant/Landowner, Section 3.2.2, Air Quality Corrections, and Section 3.2.3, Revised Tables and Figures.

3.2.1 Applicant/Landowner

It is clear from comments received on the Draft EIR that some clarification of responsible parties would be helpful to an understanding of the M&T Chico Ranch Mine Project.

Baldwin Contracting Company plans to operate the M&T Chico Ranch Mine in order to provide aggregate materials to support its construction operations. Baldwin Contracting Company will be the responsible agent in terms of adhering to the conditions of approval Butte County will impose if the project is approved. Baldwin is a wholly-owned subsidiary of KRC Holdings, Inc.

The landowner of record for the entire 8,000-acre M&T Chico Ranch is Pacific Realty Associates. KRC Holdings, Inc. holds a long-term lease with Pacific Realty Associates on 627 acres of this property. The 235-acre mine project site is included in this lease. The County assigned new AP numbers to the two areas of the lease area to be mined, one for the stockpile and plant area and one for the mine area. These parcel numbers are AP 039-053-020 and AP 039-053-019. Other than the lease, Pacific Realty Associates is not related in any way to KRC Holdings, Inc. or Baldwin Contracting Company. The original use permit application for the proposed mining operation was submitted to the County in 1996 by the landowner, Pacific Realty Associates. However, for the purposes of this document and future enforcement of mitigation and conditions, Baldwin Contracting Company is considered by the County to be the Applicant/Operator.

3.2.2 Air Quality Corrections

Some of the estimated daily PM₁₀ emissions from the proposed project were slightly under calculated in the Draft EIR. While this error did not affect the “less than significant” finding with regard to project-related PM₁₀ emissions, it did cause confusion for commenters who identified discrepancies in air and traffic data tables.

Emission calculations presented in Section 4.5, Air Quality, and Appendix F, Air Quality Data, of the Draft EIR were based on the number of truck trips estimated at the time of the release of the 1998 Draft EIR for this project. These estimates were subsequently revised upward and are correctly presented in the Traffic and Circulation Section of the 2002 Draft EIR. However, air emission calculations were based on the earlier truck trip estimates.

Vehicle PM₁₀ emission values shown in Draft EIR Tables 4.5-6, Existing Daily Traffic Operations on County Roads, 4.5-7, Summary of Existing Intersection Traffic Operations, and 4.5-8, Traffic Index Calculations for River Road, have been revised to reflect the current scenario with regard to truck trips. This recalculation resulted in total estimated project PM₁₀ emissions after mitigation increasing from 55 pounds per day (Draft EIR) to 65.4 pounds per day for the “Without Batch Plants Scenario.” This remains well under the Butte County Air Quality Management District’s (BCAQMD) significance Level C threshold of 137 pounds per day. Under the “With Batch Plants Scenario” (which is not proposed, but was evaluated in the Draft EIR) PM₁₀ emissions would increase from 151.5 pounds per day to 162.9 pounds per day. This impact was already identified as exceeding the significance threshold. Revised Draft EIR Tables 4.5-6, 4.5-7, and 4.5-8 are included in Section 3.2.3, Revised Tables and Figures.

Draft EIR Appendix F Tables F-9 and F-12 are also in error. Table F-9 and F-12 are reversed. While the heading to Table F-9 identifies it as emissions data calculated for the “With Batch Plants Scenario,” in reality the data are those of the “Without Batch Plants Scenario.” Likewise, Table F-12 contains data from the “With Batch Plants Scenario” even though it is identified as the “Without” scenario. Additionally, the numbers presented in the “# of trips per day” column of these two tables were the 1998 truck counts discussed above rather than the currently

estimated truck counts. The correction of these numbers in turn affects the calculated emission levels. Thus, Tables F-9 and F-12 are revised and included in their entirety in Section 3.2.3.

On the basis of corrections made to the Air Quality Tables, the text on page 4.5-21 of the Draft EIR must also be revised. The final two bullet items on that page should state:

- **Proposed Project With Batch Plants Scenario:** Sand and gravel at **26** trips per day; asphaltic concrete at **26** trips per day; and ready-mix concrete at **27** trips per day.
- **Proposed Project Without Batch Plants Scenario:** Sand and gravel at **64** trips per day to off-site batch plant facility.

3.2.3 Revised Tables and Figures

Several of the tables presented in the Draft EIR required revisions, either to correct errors or to supplement data previously presented. The revised tables are included in this section in the order they appear in the original Draft EIR. Changes to the tables are shown in italics and bold print to provide a frame of reference for the reader.

Draft EIR Figure 4.7-1, Site Habitats, has also been revised and is now entitled Revised Site Habitats and Noise Berm Location. Some commenters mentioned difficulty in interpreting the black and white version of this figure. The overlay of project disturbances was also problematic. The figure is reproduced in color here, the proposed noise berm has been added, and the project disturbance overlay has been made more readable.

**TABLE 3.0-1
CORRECTIONS TO THE DRAFT EIR**

Section/Page	¶	Original Text	Revised Text
1.0 INTRODUCTION AND SCOPE OF THE DRAFT EIR			
1.1/1-1	1	KRC Holdings, Inc., a subsidiary of Baldwin Contracting Company...	Baldwin Contracting Company, a subsidiary of KRC Holdings, Inc...
1.3/1-2	1	...site development has been delayed from fall 1996 to fall 2002. Initial production is expected to commence in Spring 2003.	...site development has been delayed from fall 1996 to summer 2003. Initial production is expected to commence later in 2003.
1.4/1-3	5	...an additional study was needed...	...additional study was needed...
1.4/1-3	6	Other commenters ask...	Other commenters asked...
1.4/1-4	1	Comments regarding the consistency of an asphalt and concrete batch plant...	Comments regarding the consistency of asphalt and concrete batch plants...
1.9/1-9	8	Then project design features...and feasible mitigation measure...	The project design features...and feasible mitigation measures...
2.0 SUMMARY			
2.5/2-4	3	The proposed project will exacerbate LOS F operating conditions in the a.m. peak hour and p.m. peak hour at the intersection of the Durham-Dayton Highway and Midway under cumulative conditions.	This text has been deleted from the Summary. This particular impact (Impact 4.6-9) was incorrectly identified as significant and unavoidable in the Draft EIR Summary. It is correctly identified as less than significant on pages 2-21 and 4.6-44 of the Draft EIR.
3.0 PROJECT DESCRIPTION			
3.3.1/3-2	1	...Operator (KRC)...	...Operator (Baldwin)...
Table 3-1/3-8		...not proposed batch plant contraction... (footnote 2)	...not propose batch plant construction...
Table 3-1/3-8		Amount will vary depending on the approval of the batch plants.	Amount will vary depending on economic conditions and demand in the market area.
Table 3-1/3-8		6:00 a.m. to 5:00p.m. Mon.-Fri. ⁸	6:00 a.m. to 5:00p.m. Mon.-Fri. ⁸
Figure 3-4/ 3-13		N (north) arrow is pointed west.	N (north) arrow should be rotated clockwise 90 degrees (It should be pointing toward the top of the page).
Figure 3-5/ 3-15		N (north) arrow is pointed west.	N (north) arrow should be rotated clockwise 90 degrees (It should be pointing toward the top of the page).
Table 3-3/3-18		Cement Storage Silo (400 tons capacity) – Storage of dried aggregate.	Cement Storage Silo (400 tons capacity) – Storage of cement.
Table 3-3/3-18		Storage Silo (160 tons capacity) – Storage of Cement	Storage Silo (160 tons capacity) – Storage of dried aggregate.
3.4.7/3-21	3	...for the aggregate processing plant. Aggregate arriving on the conveyor...	...for the aggregate processing plant. All of the aggregate will be loaded into trucks and shipped offsite in the Without Batch Plants scenario. In the With Batch Plants scenario, approximately 40 percent of the aggregate arriving on the conveyor...
3.4.8/3-22	1	...approximately 518,000 gallons.	...approximately 309,000 gallons.
3.4.13/3-30	2	...recovered from the settling ponds used as a water source for aggregate processing, will be used...	...recovered from the settling ponds will be used...
Figure 3-10/ 3-31		N (north) arrow is pointed west.	N (north) arrow should be rotated clockwise 90 degrees (It should be pointing toward the top of the page).

Section/Page	¶	Original Text	Revised Text
4.2 LAND USE			
4.2.3/4.2-9	5	This scenario will be...	The proposed project without batch plants is...
4.4 HYDROLOGY AND WATER QUALITY			
4.4.1/4.4-1	2	-	In addition, surface water hydrology analyses were performed by a subcontractor to the Draft EIR preparer, and that report "Flooding Study for Proposed Gravel Mine, M&T Ranch Mine" is included as Appendix D-2.
4.4.2/4.4-5	2	...Little Chico Creek flows through the City of Chico, and extends headward into the Sierra foothills.	... Little Chico Creek flows through the City of Chico, and extends headward into the Sierra foothills to an elevation of over 3,000 feet. The total watershed area at the project site is approximately 37 square miles. The vast majority of the watershed area lies within and above the Chico City limits. From the approximate period of 1985-1990, approximately 1.5 square miles of land on the M&T ranch within the watershed was leveled for intensive agriculture (Les Heringer, M&T Chico Ranch, April, 2003). Such agricultural practices tend to increase runoff rates. With respect to flood response on Little Chico Creek, the land leveling probably has a minor influence on flood response given the relatively small area affected in relationship to the total watershed area.
4.4.3/4.4-38	1	Other minor changes in the water balance for the site were also omitted from the effect of water use on groundwater elevations was evaluated by comparing the amount of groundwater which flows across the pit area under existing conditions with the total amount of water use during the last year of operations, which will be the period of maximum water usage.	Other minor changes in the water balance for the site were also omitted from analysis. The effect of water use on groundwater elevations was evaluated by comparing the amount of groundwater which flows across the pit area under existing conditions with the total amount of water use during the last year of operations, which will be the period of maximum water usage.
4.4.3/4.4-46	5	...would still be as described above since mining operations under this scenario would be identical to that of the With Batch Plants scenario of the proposed project....	...would be less under this scenario since there would be no ready mix plant and the 40,000 gallons per day for the ready mix plant would not be used....
4.4.3/4.4-48	2	...Although sumps which expose the water table...	...Although the mine pit which exposes the water table...
4.4.3/4.4-62	2	...(350 feet with implementation of Mitigation Measure 4-4.6a)...	...(350 feet with implementation of Mitigation Measure 4.4-6)...
4.4.3/4.4-65	4	...(Title 22 of the California State Code of Regulations) are not being met at the property boundary nearest the proposed pit in a downgradient direction due to degradation...	...(Title 22 of the California State Code of Regulations) are not being met either at the property boundary nearest the proposed pit in a downgradient direction, or at the Jones' domestic well, due to degradation...
4.4.3/4.4-65	4	...as approved by Butte County, have been implemented to prevent future degradation.	...as approved by Butte County, have been implemented to prevent future degradation. The term "caused by the project" shall be interpreted as any increase in contaminant concentrations between the upgradient baseline monitoring well above the

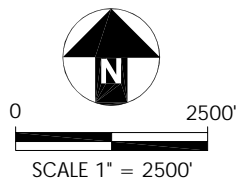
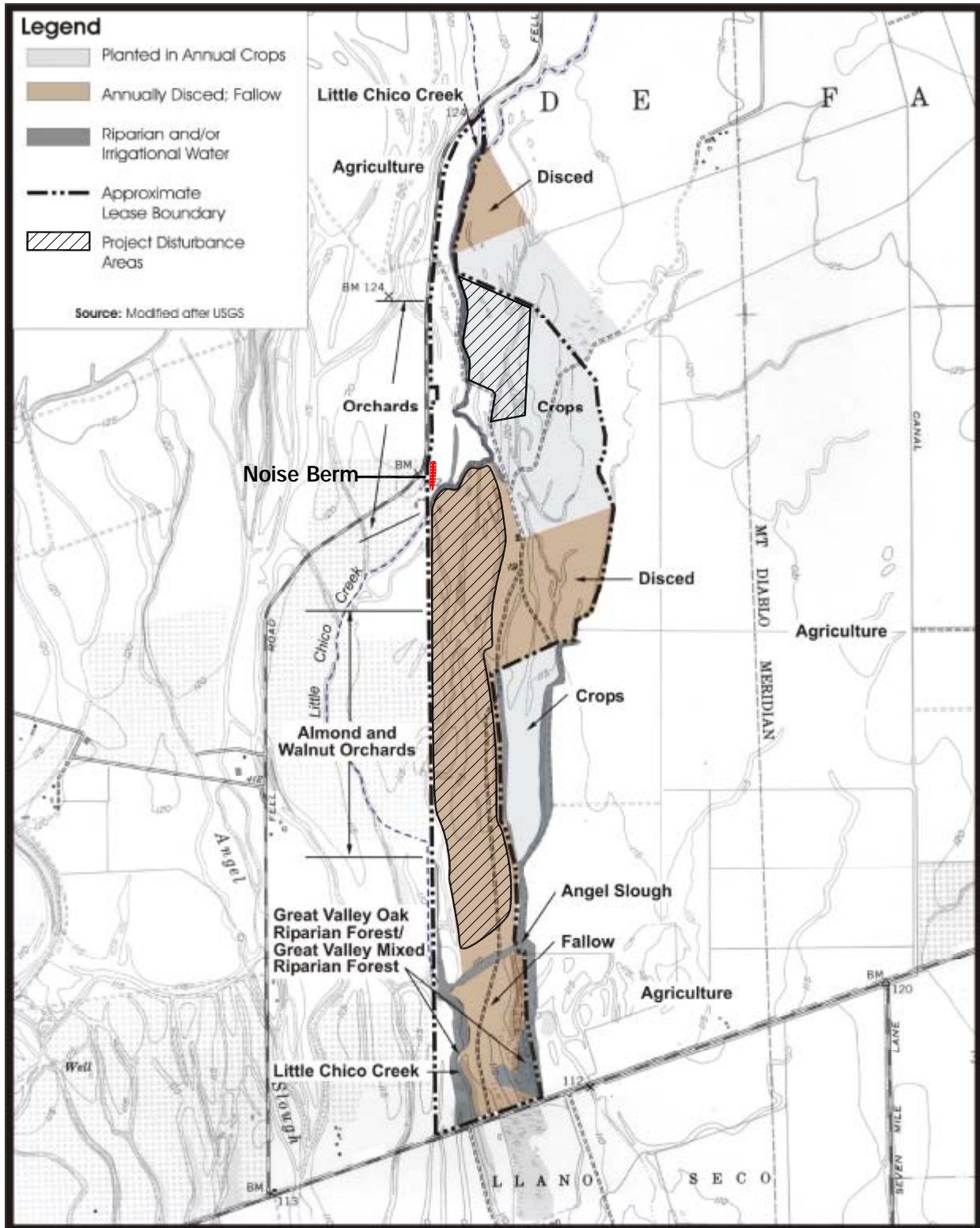
Section/Page	¶	Original Text	Revised Text
			proposed operations area and the downgradient monitoring locations which exceed drinking water standards.
4.4.3/4.4-65	5	...The wells shall be monitored every six months during the life of operations....	...The wells shall be monitored four times each year during the life of operations within the first week of April, July, August, and September....
4.4.3/4.4-66	1	...The laboratory performing the analyses shall forward results directly to Butte County and the Central Valley Regional Water Quality Control Board.	<p>...The laboratory performing the analyses shall forward results directly to Butte County and the Central Valley Regional Water Quality Control Board.</p> <p>Additionally, applicant shall monitor the domestic well on what is referred to as the Jones' parcel if the property owners grant permission for monitoring. Monitoring shall consist of drawing tapwater samples.</p> <p>Samples shall be analyzed for turbidity, fecal coliforms, benzene, and atrazine. Prior to the onset of mining, at least three samples, taken on a monthly interval, shall be taken from the Jones' domestic water supply to establish a baseline from which subsequent samples shall be compared. Following the baseline sampling, monitoring shall consist of two phases; an intensive Phase A, and a routine Phase B. During Phase A samples shall be taken weekly for 12 consecutive weeks beginning June 1. Phase A shall take place during the first irrigation season after mining operations have commenced, and, at the discretion of Butte County, the second irrigation season after mining begins. Additionally, Phase A sampling shall occur the first irrigation season following a flood where floodwaters enter the proposed pit. Phase B sampling shall take place whenever Phase A sampling is not taking place and shall consist of sampling on the first week of April, July, August, and September. Phase B monitoring will continue for at least four years after all Phase A monitoring is completed. After that, all monitoring of the Jones' parcel water supply may be discontinued if Butte County determines that contaminant concentrations at the Jones' parcel well never exceed those at the project monitoring well(s).</p> <p>In lieu of monitoring the Jones' domestic water supply as specified above, applicant may undertake one of two alternatives if requested by the Jones' parcel owners prior to discontinuing the monitoring described above. It shall be at the discretion of the Jones' parcel owners which of the two</p>

Section/Page	¶	Original Text	Revised Text
4.4 HYDROLOGY AND WATER QUALITY (continued)			
			alternatives they wish to accept, if any. The alternatives consist of either replacing the existing domestic well with a new well of equivalent capacity which draws water only from the lower aquifer, or installing a filter system capable of reliably furnishing water meeting drinking water standards. Applicant shall pay for all costs associated with replacing the existing well and increased pumping costs, or the costs of installing and maintaining, in perpetuity, a filter system.
4.4.3/4.4-73	3	No excavation or grading shall occur within 100 feet from the bank of Little Chico Creek. Mitigation wetlands within this zone may be relocated.	The mine pit excavation area shall maintain a minimum setback of 100 feet from the bank of Little Chico Creek to avoid potential lateral migration of the creek.
4.4.7/4.4-75	7	Applicant shall enter into an agreement with Butte County to either construct or fund the costs of raising the existing low water crossing on River Road near the gas well site by up to three feet and installing larger culverts.	...within three years of use permit approval. Plans shall be approved by Butte County Public Works Department prior to construction.
4.5 AIR QUALITY			
4.5.2/4.5-13	2	Monitoring stations are located through Chico and within the vicinity of the project site and are considered representative of local pollutant concentrations.	There is one monitoring station (located on Manzanita Avenue) in Chico. Data collected at this station are considered representative of local pollutant concentrations.
4.5.3/4.5-21	8	• Proposed Project With Batch Plant Scenario: Sand and gravel at 16 trips per day; asphaltic concrete at 16 trips per day and ready mix concrete at 15 trips per day.	• Proposed Project With Batch Plant Scenario: Sand and gravel at 26 trips per day; asphaltic concrete at 26 trips per day and ready mix concrete at 27 trips per day.
4.5.3/4.5-21	9	Sand and gravel at 38 trips per day.	Sand and gravel at 64 trips per day.
4.5.3/4.5-33	2	Level of Significance After Mitigation: Less than significant.	Level of Significance After Mitigation: Significant and Unavoidable
4.5.3/4.5-33	5	Level of Significance After Mitigation: Less than significant.	Level of Significance After Mitigation: Significant and Unavoidable
4.6 TRAFFIC			
4.6.2/4.6-1	2	...almost entirely dependent upon on the roadway...	...almost entirely dependent upon the roadway...
4.6.2/4.6-14	2	...Traffic Index Calculations for River Road, summaries the calculations...	...Traffic Index Calculations for River Road, summarizes the calculations...
4.6.2/4.6-15	6	The Dayton Unified School District...	The Durham Unified School District...
4.6.3/4.6-20	1	...provided by the applicant and does represent average annual conditions...	...provided by the applicant and does represent maximum annual conditions...
4.6.3/4.6-39	4	...fair share contribution to improve reconstruct...	...fair share contribution to reconstruct...
4.6.3/4.6-40	1	...cost per ton of material hauled form the project site...	...cost per ton of material hauled from the project site...
4.6.3/4.6-41	5	Less than significant	Significant, unavoidable impact

Section/Page	¶	Original Text	Revised Text
4.7 BIOLOGICAL RESOURCES			
4.7.2/4.7-1	2	...(COE) is responsible for protecting wetlands under Section 404...	...(COE) is responsible for regulating certain activities in "Waters of the United States" under Section 404...
4.7.3/4.7-32	5	...any special-status species	...any special status species found to occur on the project site.
4.7.3/4.7-32	5	...determined in consultation with CDFG.	...determined in consultation with CDFG. The pre-construction survey is required before project start-up and not subsequent to operation provided that all applicable protection measures have been implemented prior to operation."
4.7.3/4.7-35	8	...pursuant to Section 404 of the Clean Water Act.	...pursuant to Section 404 of the Clean Water Act and/or the CDFG.
4.7.3/4.7-36	2	...requirements mandated by the COE.	...requirements mandated by the regulatory agencies.
4.8 NOISE			
4.8.3/4.8-20	1	...Applicant proposes to operate a rock quarry.	...Applicant proposes to operate an aggregate mine involving the excavation of alluvial deposits.
4.8.3/4.8-24	6	...The Applicant should demonstrate through noise level measurements...	...The Applicant shall demonstrate through noise level measurements...
4.8.3/4.8-25	3	...follow-up noise level measurements should be conducted...	...follow-up noise level measurements shall be conducted...
5.0 ALTERNATIVES			
Table 5-1/5-15 through 5-19		Lower Processing Rate: Greater Impact:	Lower Processing Rate: Reduced Impact:
Table 5-1/5-21		With Batch Plant Scenario The proposed project will impact jurisdictional wetlands.	With Batch Plant Scenario The proposed project may impact jurisdictional wetlands.
Table 5-1/5-21		Without Batch Plant Scenario The proposed project will impact jurisdictional wetlands.	Without Batch Plant Scenario The proposed project may impact jurisdictional wetlands.
Table 5-1/5-21		Reduced Project Area Impacts to jurisdictional wetlands would be reduced.	Reduced Project Area Impacts to jurisdictional wetlands could be reduced.
6.0 OTHER ANALYSIS REQUIRED BY CEQA			
6.1.1/6-2	2	This project was located approximately three miles southeast of the proposed M&T Chico Ranch Mine ...	This project was located approximately three miles northwest of the proposed M&T Chico Ranch Mine ...
6.1.2/6-3	3	As described in Impact 4.4-1 ...	As described in Impact 4.5-1 ...
6.1.2/6-3	5	...except for the following locations:	...except for the following locations which will operate at LOS E or F with or without the project:
6.1.2/6-3	5	East Park Avenue between Fair Street...	East Park Avenue between Park Avenue...

Notes:

¶ Paragraph



Revised Figure 4.7-1
 Site Habitats and Noise Berm Location
 M&T CHICO RANCH MINE
 BUTTE COUNTY, CALIFORNIA

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TABLE 1-1
M&T CHICO RANCH MINE POTENTIAL PERMITS AND APPROVALS REQUIRED

Agency/Department	Permit/Approval/Process	Purpose and Project Applicability
FEDERAL AGENCIES		
U.S. Army Corps of Engineers	Clean Water Act, Section 404 permit	For fill or disturbance of wetlands and other "waters of the United States".
U.S. Fish and Wildlife Service	Federal Endangered Species Act Section 10a Permit	For incidental take of federally-listed threatened or endangered species or their habitat, if any.
Natural Resources Conservation Service (NRCS)	Wetlands Delineation Verification	For identification of areas subject to Clean Water Act, Section 404 permit requirement.
STATE AGENCIES		
California Department of Fish and Game	California Endangered Species Act Section 2081 Permit (Fish and Game Code 2081)	For incidental take of State-listed threatened/endangered species or habitat (if anticipated). May be required for project impacts, if determined, to Swainson's hawk.
	Streambed Alteration Agreement (Fish and Game Code 1603)	May be required for new and improved stream crossings.
Regional Water Quality Control Board (RWQCB)	National Pollutant Discharge Elimination System (NPDES) permit <u>or</u> Waste Discharge Requirements Permit CFR Title 40, Section 436, Subpart B	Required for on-site gravel washing and discharge of washwater to on-site settling basins
	Storm Water Pollution Prevention Plan	Must be prepared prior to construction activities used to identify potential pollutants and to eliminate or reduce the amount of pollutants entering surface waters
	General Industrial Activities Storm Water Permit	Required if there are storm water discharges to surface waters
	Review of Groundwater Monitoring Plan	The RWQCB requests a review of the Groundwater Monitoring Plan prior to approval by the County
State Water Resources Control Board	Construction Activity Storm Water Permit	Required for construction activities where clearing, grading, filling, and excavation result in a land disturbance of five acres or more
	Storm Water Pollution Prevention Plan (SWPPP)	Must be prepared prior to construction activities
	Compliance with the California Aboveground Petroleum Storage Act	Requires owners or operators of aboveground petroleum storage tanks to file a storage statement and prepare a Federal Spill Prevention and Control Countermeasure (SPCC) Plan
	Section 401 Water Quality Certification	Required for projects needing an Army Corps of Engineers 404 Permit; this certification must verify that the project does not violate State water quality standards

REVISED TABLE 1-1 (continued)

Agency/Department	Permit/Approval/Process	Purpose and Project Applicability
State Board of Reclamation	Encroachment Permit (CCR Title 23 Section 135)	Required for any encroachment that could reduce or impede flood flows, or would reclaim any of the floodplain with in Butte Basin.
BUTTE COUNTY		
Butte Planning County	Environmental Review (CEQA, PRC Section 21000 - Section 21177)	Needed for evaluating environmental impacts. Required process for project.
	Use Permit. (SMARA, PRC Section 2710 <i>et seq.</i>); and County land use ordinances	For mining construction and operations. Required for project in accordance with County ordinance.
	Reclamation Plan and Financial Assurance (PRC Section 2710 <i>et seq.</i>)	To ensure sites are returned to beneficial end uses. Financial assurances required to estimate costs of project reclamation.
	Mining Permit (Chapter 13 Butte County Code)	For mining operation. Required for project in accordance with County Code.
	The Subdivision Map Act and Butte County Code 20-48	Require filing of a Parcel Map or Subdivision Map for the lease or sale of any portion of land for mining purposes.
Butte County Environmental Health Department	Hazardous Material Release and Response Plan (Health and Safety Code 25500 <i>et seq.</i>); Business Plan	For hazardous materials inventory and emergency response planning.
Butte County Environmental Health Department	Septic/domestic water well permit	Required for waste water control for sewage disposal and provision of drinking water.
Butte County Air Quality Management District	Authority to Construct Permit to Operate	Required for construction, modification, or operation of a facility or equipment that may emit pollutants from a stationary source.

REVISED
TABLE 4.5-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards (CAAQS) ⁽¹⁾	National Standards (NAAQS) ⁽²⁾	
		Concentration ⁽³⁾	Primary ^(3,5)	Secondary ^(3,4,6)
Ozone	1 Hour	0.09 ppm (180 µg/m ³)	0.12 ppm (235 µg/m ³)	Same as Primary Standards
	8 Hour	--	0.08 ppm (157 µg/m³)	Same as Primary Standards
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	Same as Primary Standards
	8 Hour	--	0.053 ppm (100 µg/m ³)	
NO ₂	1 Hour	0.25 ppm (470 µg/m ³)	--	--
	Annual Average	--	0.053 ppm (100 µg/m ³)	
SO ₂	24 Hour	0.04 ppm (105 µg/m ³) ⁽⁸⁾	0.14 ppm (365 µg/m ³)	--
	3 Hour	--	--	0.5 ppm (1,300 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	--	--
	Annual Geometric Mean	30 µg/m ³	0.03 ppm (80 µg/m ³)	--
PM ₁₀	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary Standards
	Annual Arithmetic Mean	20 µg/m³	50 µg/m ³	
PM_{2.5}	24 Hour	No Separate State Standard	65 µg/m³	Same as Primary Standards
	Annual Arithmetic Mean	12 µg/m³	15 µg/m³	
SO ₄	24 Hour	25 µg/m ³	--	--
Pb	30 Day Average	1.5 µg/m ³	--	--
	Calendar Quarter	--	1.5 µg/m ³	Same as Primary Standards
H ₂ S	1 Hour	0.03 ppm (42 µg/m ³)	--	--
Visibility Reducing Particles ⁽⁹⁾	8 Hour (10 am to 6 pm, PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70 percent. Measurement in accordance with CARB Method V.	--	--

REVISED TABLE 4.5-1 (continued)**Notes:**

*** On June 20, 2002, the Air Resources Board approved staff's recommendation to revise the PM_{10} annual average standard to $20 \mu\text{g}/\text{m}^3$ and to establish an annual average standard to $PM_{2.5}$ of $12 \mu\text{g}/\text{m}^3$. These standards will take effect on July 5, 2003. Information regarding these revisions can be found at <http://www.arb.ca.gov/research/aaqs/std-rs/std-rs.htm>.**

1. California standards for ozone, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, and visibility reducing particles are values that are not to be equaled or exceeded (CARB, 1993).
2. National standards, other than ozone and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.
3. Equivalent units given in parentheses are based upon reference temperatures of 25°C and a reference pressure of 760 mm mercury. Measurements of air quality are corrected to a reference temperature of 25°C and a reference pressure of 760 mm mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Equivalent procedure, which can be shown to the satisfaction of CARB to provide equivalent results at or near the level of the air quality standard, may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect public health. Each state must attain the primary standards no later than 3 years after that state's implementation plan is approved by EPA.
6. National Secondary Standards: The levels of air quality necessary to protect public welfare from any known or anticipated adverse effect of a pollutant. Each state must attain the secondary standards within a "reasonable time" after the state implementation plan is approved by EPA.
7. Reference method as described by EPA. An "equivalent method" of measurement may be used, but must have a "consistent relationship to the reference method" and must be approved by EPA.
8. At locations where state standards for oxidant and/or PM₁₀ are violated. National standards apply elsewhere.
9. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range when relative humidity is less than 70 percent.

-- = No data.

Source: CARB, 1999.

REVISED
TABLE 4.5-7
SUMMARY OF ESTIMATED DAILY EMISSIONS
PROPOSED PROJECT WITHOUT BATCH PLANTS SCENARIO (LB/DAY)

Proposed Project Without Batch Plants Scenario Emission Source	Estimated Emission Rate				
	PM ₁₀	ROG	CO	NO _x	SO _x
Excavation Equipment Exhaust Emissions	7.3	11.9	62.8	74.3	9.3
Primary Aggregate Plant	6.7	---	---	---	---
Secondary Aggregate Plant	31.6	---	---	---	---
Vehicle Exhaust Emissions	0.5	4.9	38.2	7.8	---
Vehicle PM ₁₀ Emissions	26.1	---	---	---	---
Proposed Project Without Batch Plants Scenario Subtotal	65.4	16.9	101.0	82.1	9.3

Notes:

Primary Aggregate Plant Emissions are shown in Tables 4.5-6 and 4.5-7 but are not included in scenario subtotals since only one circuit of the plant will operate during the day. For worst case analysis, secondary plant emissions were included since emissions during operation of this circuit were higher than the primary circuit.

REVISED
TABLE 4.5-8
COMPARISON OF EMISSION INCREASES
TO SIGNIFICANCE THRESHOLDS DAILY EMISSIONS (LBS/DAY)

Scenario	PM ₁₀	ROG	CO	NO _x	SO _x
Existing Conditions					
Agricultural Operations	1,834.9	2.8	45.9	24.0	2.1
Ongoing Agricultural Operations (362 Acres) ¹	1,123.4	2.8	45.9	24.0	2.1
Aggregate Mining and Processing Operations					
Topsoil Removal	29.6	4.6	18.4	41.1	6.5
Proposed Project With Batch Plants Scenario	162.9	80.3	1,227.0	180.2	26.1
Proposed Project Without Batch Plants Scenario	65.4	16.9	101.0	82.1	9.3
BCAQMD Level C Significance Thresholds	137.0	137.0	NA	137.0	NA
Greater than Threshold					
Topsoil Removal: Greater than Threshold?	No	No	NA	No	NA
Proposed Project With Batch Plants Scenario: Greater than Threshold?	Yes	No	NA	Yes	NA
Proposed Project Without Batch Plants Scenario: Greater than Threshold?	No	No	NA	No	NA

Notes:

Ongoing Agricultural Operations show the reduced PM₁₀ emissions which will occur once mining activities begin and agricultural acreage is converted to mining operations.

NA - Not Applicable, BCAQMD does not have significance or Action Level Thresholds for CO and SO_x.

Ongoing agricultural operations will gradually decline with time. During Scenario 1 (Year 1), approximately 60 acres will change to mining operations. Thereafter, about six acres per year will change from agriculture to mining.

REVISED
TABLE F-9
M&T CHICO RANCH MINE FUGITIVE DUST (PM₁₀) EMISSIONS INVENTORY FROM PROCESSING DELIVERY TRUCKS DURING PROPOSED PROJECT *WITHOUT* BATCH PLANTS SCENARIO

Operation	Emission Factor	Units	Equation Variables		Emissions	
			1	2	PM ₁₀ lbs/day Unmitigated	PM ₁₀ lbs/day Mitigated
Vehicle Travel Onsite			# of trips per day	vmt		
Employee Vehicles	0.30	lbs/vmt	15	1	4.5	0.5
Aggregate Delivery Trucks	4.00	lbs/vmt	64	1	256	25.6
Concrete Delivery Trucks	2.40	lbs/vmt	0	1	0.0	0.0
Asphalt Delivery Trucks	4.00	lbs/vmt	0	1	0.0	0.0
			Total		260.5	26.1

NOTE: PM₁₀ mitigation assumed to reduce emissions 90 percent on roads.

Source: SCAQMD CEQA Air Quality Handbook, 1993.

REVISED
TABLE F-12
M&T CHICO RANCH MINE FUGITIVE DUST (PM₁₀) EMISSIONS INVENTORY FROM PROCESSING DELIVERY TRUCKS DURING PROPOSED PROJECT *WITH* BATCH PLANTS SCENARIO

Operation	Emission Factor	Units	Equation Variables		Emissions	
			1	2	PM ₁₀ lbs/day Unmitigated	PM ₁₀ lbs/day Mitigated
Vehicle Travel Onsite			# of trips per day	vmt		
Employee Vehicles	0.30	lbs/vmt	15	1	4.5	0.5
Aggregate Delivery Trucks	4.00	lbs/vmt	26	1	104	10.4
Concrete Delivery Trucks	2.40	lbs/vmt	27	1	64.8	6.4
Asphalt Delivery Trucks	4.00	lbs/vmt	26	1	106	10.4
			Total		277.3	27.7

NOTE: PM₁₀ mitigation assumed to reduce emissions 90 percent on roads.

Source: SCAQMD CEQA Air Quality Handbook, 1993.

REVISED
TABLE 4.5-2
SUMMARY OF ANNUAL AIR QUALITY DATA
CHICO AIR QUALITY MONITORING STATION

Pollutant	CAAQS	NAAQS	Year of Data					
			1995	1996	1997	1998	1999	2000
Carbon Monoxide (ppm)								
Peak 8-Hour Indicator			5.8	5.9	5.5	5.3	4.4	4.5
Maximum Concentration (1-Hour)	20 ppm	35 ppm	8.5	8.7	7.0	6.0	7.2	5.2
Maximum Concentration (8-Hour)	NA	0.053 ppm	4.8	6.1	5.1	4.5	5.4	4.0
Days Above State 8-Hour Standard	--	--	0	0	0	0	0	0
Days Above Nat. 8-Hour Standard	--	--	0	0	0	0	0	0
Ozone (ppm)								
Peak 1-Hour Indicator	0.09 ppm	0.12 ppm	0.098	0.095	0.091	0.091	0.101	0.103
National 1-Hour Design Value	--	--	0.097	0.097	0.091	0.096	0.103	0.103
National 8-Hour. Design Value	--	--	0.078	0.077	0.072	0.072	0.077	0.086
Maximum 1-Hour Concentrations	--	--	0.105	0.108	0.087	0.106	0.135	0.105
Maximum 8-Hour Concentration	--	--	0.086	0.084	0.072	0.090	0.100	0.095
Days Above State Standard	--	--	1	2	0	2	7	5
Days Above National 1-Hour Standard	--	--	0	0	0	0	1	0
Days Above National 8-Hour Standard	--	--	1	0	0	1	5	6
Particulate Matter<10 microns (µg/m³)								
Maximum 24-Hour	50 µg/m ³	150 µg/m ³	64	66	108	68	95	81
Annual Geometric Mean			25.0	22.0	21.5	19.4	26.1	24.7
			36	15	21	24	42	42
Nitrogen Dioxide (ppm)								
Peak 1-Hour Indicator	.25 ppm	--	0.077	0.074	0.072	0.068	0.074	0.077
Maximum 1-Hour Concentration	--	--	0.074	0.070	0.061	0.068	0.077	0.078
Maximum Annual Average	--	0.053 ppm	0.014	0.013	0.013	0.013	0.015	0.012

-- No standard established

Source: ARB, 2001 California Almanac of Emissions & Air Quality

REVISED
TABLE 4.5-6
SUMMARY OF ESTIMATED DAILY EMISSIONS
PROPOSED PROJECT WITH BATCH PLANTS SCENARIO (LB/DAY)

Proposed Project With Batch Plants Scenario Emission Source	Estimated Emission Rate				
	PM ₁₀	ROG	CO	NO _x	SO _x
Excavation Equipment Exhaust Emissions	7.3	11.9	62.8	74.3	9.3
Asphalt Plant	77.1	62.5	1118.5	96.6	16.8
Concrete Plant	18.8	---	---	---	---
Primary Aggregate Plant	6.7	---	---	---	---
Secondary Aggregate Plant	31.6	---	---	---	---
Vehicle Exhaust Emissions	0.6	5.9	45.7	9.3	---
Vehicle PM ₁₀ Emissions	27.7	---	---	---	---
Proposed Project With Batch Plants Scenario Subtotal	162.9	80.3	1227.0	180.2	26.1

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