6.0 ALTERNATIVES

CEQA Guidelines § 15126.6(a) indicates the scope of alternatives to a proposed project that must be evaluated:

> *"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."*

As discussed in Section 4.0 of this EIR, the proposed Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impacts are:

- Noise Thresholds a, c, and d: Direct and Cumulatively Considerable Significant and Unavoidable Impact. Although implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 would reduce the Project's operational-related noise impacts, a significant impact would occur during the phases of mining within the southeastern portions of the proposed Expanded Disturbance Area (EDA) when a minimum headwall of 15 feet in height cannot be maintained between mining areas and nearby residential structures located within approximately 500 feet of mining activities. During this phase of mining operations, the nearby residences located within approximately 500 feet of mining activities would be exposed to noise levels exceeding 55 dB Leq (10-min), which represents a significant and unavoidable impact of the proposed Project during the phases of mining operations that occur within the EDA and closer than 500 feet from the nearest residential structure(s).

- Transportation and Circulation Threshold a: Cumulatively Significant and Unavoidable Impact. As detailed in Table 4.9-30, *Intersection Analysis for EAPC (2016) Conditions with Improvements*, with implementation of Mitigation Measures MM TR-1 and MM TR-2, the LOS for the intersection of the I-15 Northbound ramps at Nichols Road would improve from LOS F to LOS D during the AM and PM peak hours under Year 2016 conditions. Similarly, and as shown in Table 4.9-31, *Intersection Analysis for Horizon Year (2035) Conditions With Improvements*, with implementation of Mitigation Measures MM TR-1 and MM TR-2, the LOS for the intersection of I-15 Northbound ramps at Nichols Road would operate at an acceptable LOS D with implementation of the Project under long-term (Year 2035 conditions). Thus, with improvements, the Project's cumulatively considerable impacts to the intersection of the I-15 Northbound On- and Off-Ramps under Year 2016 and Year 2035 conditions would be reduced to less-than-significant levels. However, no schedule is prescribed by the TUMF or TIF program for these improvements, and it is not practical to assume that the improvements would be installed by 2016. Improvement schedules for these

improvements are partially dependent on the pace of new development and associated pace of fee collection that occurs under the TUMF and the TIF. Under CEQA, a fair-share monetary contribution to a mitigation fund is adequate mitigation if the funds are part of a reasonable plan that the relevant agency (in this case WRCOG and the City of Lake Elsinore) is committed to implementing. As such, while the proposed Project can mitigate its cumulatively considerable contribution to these impacts through the payment of fees, the improvements would likely not be in place at their time of need (before the deficiency occurs). As such, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at these locations, which would occur until the TUMF and TIF improvements are in place.

The Project would contribute more than 50 peak hour trips to the merge/diverge ramp junction of I-15 Northbound at Nichols Road under Horizon Year (2035) conditions. Project-related traffic would contribute to, but would not directly cause, the deficient LOS at the merge/diverge ramp junction of I-15 Northbound at Nichols Road under Horizon Year (2035); accordingly, the Project's impacts to this merge/diverge ramp junction under Horizon Year (2035) conditions would be cumulatively considerable. Long-range plans by Caltrans for the I-15 Freeway include the construction of two tolled Express Lanes from Cajalco Road to Central Avenue (SR-74), which are improvements that are subject to available funding. As shown in Table 4.9-31, with construction of the planned improvements, the queuing issues at the I-15 Northbound Off-Ramp at Nichols Road would be reduced to acceptable levels. However, it is possible that queuing deficiencies may still be experienced in the interim period prior to the completion of the improvements to I-15. As such, the Project's impacts to the I-15 Freeway northbound off-ramp under Horizon Year (2035) represent a near-term significant and unavoidable impact of the proposed Project for which no feasible mitigation is available.

Under Horizon Year (2035) conditions, the Project would contribute to, but would not directly cause queuing issues during the weekday peak 95th percentile traffic flows at the I-15 Freeway Northbound Off-Ramp. The Project's contribution to this projected deficiency is a cumulatively considerable impact. As noted above, long-range plans by Caltrans for the I-15 Freeway include the construction of two tolled Express Lanes from Cajalco Road to Central Avenue (SR-74), which are improvements that are subject to available funding. As shown in Table 4.9-32, *Basic Freeway Segment Analysis for Horizon Year (2035) Conditions with Improvements*, even with the planned Express Lanes, the I-15 northbound segment at the off-ramp with Nichols Road would experience a deficient LOS E during the AM peak hour, and the southbound freeway off-ramp at Nichols Road would experience a deficient LOS E during the PM peak hour. There are no additional improvements planned along these segments of the I-15, nor are there any funding mechanisms identified by Caltrans for such cumulatively considerable impacts. However, and as noted previously, the Project would contribute fewer than 50 peak hour trips to these freeway mainline segments. As such, the Project's contribution to the projected freeway mainline deficiencies under Horizon Year (2035) conditions represents a less-than-cumulatively considerable impact of the proposed Project.

- Transportation and Circulation Threshold b: Cumulatively Significant and Unavoidable Impact. As discussed above under the discussion of Transportation and Circulation

Threshold a., the Project would result in cumulatively considerable impacts at the junction of Nichols Road and the I-15 northbound ramps; would contribute to the need for signalization of Nichols Road at the I-15 northbound ramps; would contribute to queuing issues during the weekday peak 95th percentile traffic flows at the I-15 Freeway Northbound Off-Ramp; and would contribute to, but would not cause, the projected deficiency at the freeway merge/diverge junctions of I-15 Northbound Ramps at Nichols Road. This facility is part of the CMP roadway network. Although with implementation of the improvements programmed as part of TUMF and/or TIF these impacts would be reduced to less-than-significant levels (with exception of the Project's cumulatively considerable junction merge/diverge impacts, which would remain significant and unavoidable), improvement schedules for these improvements are partially dependent on the pace of new development and associated pace of fee collection that occurs under the TUMF and the TIF. Under CEQA, a fair-share monetary contribution to a mitigation fund is adequate mitigation if the funds are part of a reasonable plan that the relevant agency (in this case WRCOG and the City of Lake Elsinore) is committed to implementing. As such, while the proposed Project can mitigate its cumulatively considerable contribution to these impacts through the payment of fees, the improvements would likely not be in place at their time of need (before the deficiency occurs). As such, this EIR recognizes a short-term and unavoidable cumulatively considerable impact at these locations, which would occur until the TUMF, TIF, and planned Caltrans improvements are in place.

6.1 ALTERNATIVES UNDER CONSIDERATION

The following scenarios are identified by the City of Lake Elsinore as potential alternatives to implementation of the proposed Project.

6.1.1 NO PROJECT ALTERNATIVE

The No Project Alternative considers no mining activities within the Expanded Disturbance Area (EDA). Mining would be permitted within the existing approved Nichols Canyon Mine Reclamation Plan limits. This alternative was selected by the Lead Agency for the purpose of conducting a comparative analysis of the environmental effects of the proposed Project to the environmental effects of the No Project alternative which would leave the EDA in its existing condition. Under existing conditions mining occurs within the existing approved Nichols Canyon Mine Reclamation Plan limits. If the proposed Project were not approved, it is reasonable to expect that the EDA's undeveloped property would remain vacant and no mining would occur within the EDA.

6.1.2 REDUCED EXPANDED DISTURBANCE AREA (REDA)

The Reduced Expanded Disturbance Area (REDA) considers a reduction in the proposed EDA from approximately 24 acres under the proposed Project to approximately 17 acres, as depicted on Figure 6-1, *Environmentally Superior Alternative*. All other components of the REDA would be the same as described for the proposed Project in EIR Section 3.0, *Project Description*. This alternative was selected by the Lead Agency to consider an alternative that would reduce to a level below significant the Project's daytime operational noise impacts to sensitive noise receptors (i.e., residential uses southeast of the EDA) that are located within 500 feet of mining operations (i.e., eight homes located east of Dexter Avenue and south of Nichols Road that would be exposed to daytime mining-related

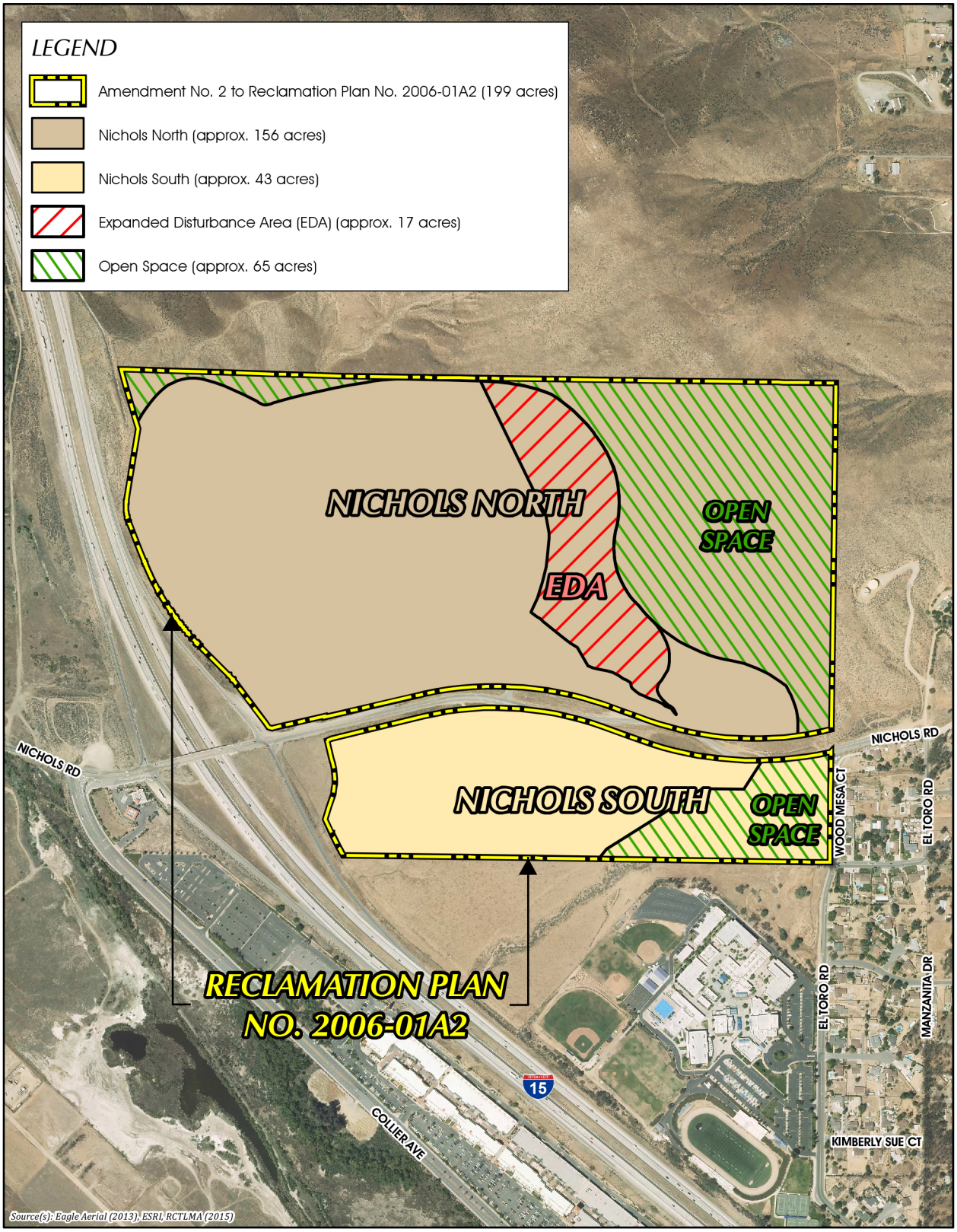

Figure 6-1

REDUCED EXPANDED DISTURBANCE AREA

noise levels exceeding 55 dB Leq (10-min) under the proposed Project). Additionally, this alternative also would reduce the Project's impacts to biological resources.

6.1.3 REDUCED TRAFFIC ALTERNATIVE (RTA)

Under near-term cumulative (Existing plus Ambient plus Project plus Cumulative [EAPC] 2016) conditions and Horizon Year (2035) conditions, the Project would contribute more than 50 peak hour trips to the intersection of Nichols Road at I-15 Northbound On- and Off-Ramps. Project-related traffic would therefore contribute to the need for improvements to the intersection under near-term conditions, and to the need for freeway improvements under long-term (2035) conditions to address freeway merge/diverge and queuing issues. While improvements are currently planned by Caltrans, the TUMF program, and/or the City's TIF program, the improvements would likely not be in place at their time of need (before the deficiency occurs). The Project Applicant has no control over the pace of Caltrans, TUMF, or TIF improvements. Thus, the only viable alternative that would reduce the Project's cumulatively considerable traffic impacts to a level below significant would be to reduce the maximum allowed daily tonnage such that the proposed Project would contribute fewer than 50 peak hour trips to the I-15 Northbound On- and Off-Ramps at Nichols Road.

Accordingly, the Reduced Traffic Alternative (RTA) considers a reduction in maximum daily tonnage at the Mine from 5,000 tons per day (tpd) to 4,578 tpd, with approximately 1,330 tpd attributable to the proposed Project and 3,248 TPD attributable to baseline operational conditions. Using the values presented in EIR Table 4.9-11, 1,330 tpd would result in approximately 223 average daily trips (ADT), with 49 AM peak hour trips and 40 trips during the PM peak hour. Due to the restriction in tpd, it is expected that this alternative would take approximately 9% longer to achieve the final grades as specified by RP 2006-01A2.

All other components of the RTA would be identical to the proposed Project. This alternative was selected to eliminate the Project's cumulatively considerable impacts to transportation and traffic, which also would reduce the Project's daily emissions of air quality pollutants and traffic-related noise.

6.2 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by CEQA Guidelines §15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the proposed Project, CEQA Guidelines §15126.6(f)(1) notes:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"*

In determining an appropriate range of alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Alternatives were

rejected because either: 1) they could not accomplish the basic objectives of the Project, 2) they would not have resulted in a reduction of significant adverse environmental impacts, or 3) they were considered infeasible to construct or operate. A summary of the alternatives that were considered but rejected are described below.

6.2.1 ALTERNATIVE SITES

CEQA does not require that an analysis of alternative sites always be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternative site then this alternative should be considered and analyzed in the EIR. In making the decision to include or exclude analysis of an alternative site, the "*key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR*" (CEQA Guidelines § 15126.6(f)(2)).

Based on a review of aerial photography, the City of Lake Elsinore General Plan Land Use Plan Map and a list of approved/pending development proposals within the City of Lake Elsinore and nearby portions of unincorporated Riverside County and the City of Wildomar which are included in the Project's Traffic Impact Analysis (EIR *Technical Appendix J*; refer to EIR Table 4.9-12 for a list of cumulative developments), there are no other available, properties under control of the Project Applicant that are designated for surface mining operations and that have the potential for expansion to encompass 24 acres of new mining area. All lands in the Project vicinity that are already being mined are under ownership of other parties and are being mined in accordance with existing vested and/or approved mining operations.

If alternative sites located within the Project vicinity not zoned for mining are considered, it is likely that the impacts of such a new mining operation on lands not previously subject to mining activities would result in increased impacts to the environment. This is because there are very few sites that are as close in proximity to regional transportation corridors (such as I-15) as the Project site. Thus, any alternative location would likely result in increased impacts to traffic and related issue areas, such as air quality, noise, and greenhouse gas emissions, as compared to the proposed Project. Furthermore, mining on alternative site locations would result in new physical impacts as compared to the proposed Project because any such site would need to include a site for aggregate processing equipment outside of the proposed mining areas. Furthermore, it would not be viable to establish a new mining operation on an alternative location that encompasses only 24 acres. Therefore, the proposed Project would result in fewer environmental impacts in the local area than would result from expanded mining activities on other active mines or on undeveloped properties in the Project vicinity.

For these reasons, an alternative sites analysis is not required for the proposed Project.

6.3 ALTERNATIVES ANALYSIS

The following discussion compares the impacts of each alternative considered by the Lead Agency with the impacts of the proposed Project, as detailed in Section 4.0, *Environmental Analysis*, of this EIR. A conclusion is provided for each impact as to whether the alternative results in one of the following: (1) reduction or elimination of the proposed Project's impact, (2) a greater impact than

would occur under the proposed Project, (3) the same impact as the proposed Project, or (4) a new impact in addition to the proposed Project's impacts. Table 6-1 at the end of this section compares the environmental hazard and resource impacts of the alternatives with those of the proposed Project and identifies the ability of the alternative to meet the basic objectives of the Project. As described in EIR Subsection 3.2, the proposed Project's specific objectives are:

A. To increase the available high-quality aggregate reserves available on the property in order to help meet the regional demand for aggregate material, to make the best use of the Mine's aggregate resources, and by revising approved Reclamation Plan 2006-01A1 to accommodate an expansion to the approved limits of aggregate mining activities.

B. To facilitate more efficient export processing of aggregate materials from the Mine site by extending the permitted operational hours for mining activities on-site.

C. To better reflect actual mining capacity for the Mine site by reducing the annual tonnage allowed to be mined and exported from the Nichols Canyon Mine site.

D. To reclaim the 199-acre Mine site to a usable condition by revising Reclamation Plan 2006-01A1 to identify ultimate site elevations in conformance with the Surface Mining and Reclamation Act of 1975 (SMARA) and the regulations and requirements of the City of Lake Elsinore.

E. To minimize environmental impacts associated with mining and reclamation activities at the Nichols Canyon Mine site in conformance with the requirements of SMARA and the City of Lake Elsinore.

F. To establish updated standards for operational mining activities at the Nichols Canyon Mine site in a manner that complies with all applicable federal, state, and local regulations and requirements.

G. To maximize the use of aggregate reserves and create the most usable space from the Mine's disturbance by designing slopes that accomplish this objective.

6.3.1 NO PROJECT ALTERNATIVE (NPA)

The No Project Alternative (NPA) allows decision-makers to compare the environmental impacts of approving the proposed Project to the environmental impacts that would occur if the Mine were to continue operating under approved Reclamation Plan RP 2006-01A1. Under this alterative, no mining would occur within the EDA. Under RP 2006-01A1, approximately 116 acres of the Mine are currently subject to mining and reclamation activities and would continue to be mined until the final grades established by RP 2006-01A1 are achieved on-site. Under this alternative, there would be no change in the Mine's annual tonnage limit of 4,000,000 tons per year (tpy), and mining, processing, and export activities on-site would continue to be limited to between 7:00 a.m. and 12:00 a.m. (Monday through Friday, excluding Federal Holidays) and between 7:00 a.m. and 7:00 p.m. (Saturdays only). For purposes of analysis herein, it is assumed that under the No Project Alternative a maximum of 3,248 tons per day (tpd) would be mined (as 1,752 tpd are assumed by this EIR to be attributable to SMP 2015-01 out of a maximum daily production average of 5,000 tpd).

A. Aesthetics

No unique or scenic vistas would be impacted by the Project or the NPA, as the Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features. Thus,

impacts to scenic vistas and unique views would be similar to the Project's less-than-significant impact to scenic vistas.

The Project site also is not visible from any State-designated scenic highways. As such, impacts to resources visible from a designated scenic highway corridor would be similar to the Project's less-than-significant impacts.

Although the proposed Project would not substantially degrade the existing visual character or quality of the site or its surrounding areas, the proposed Project would involve expanded mining operations encompassing an additional approximately 24 acres, and the expanded mining areas would be visible from off-site locations. Thus, impacts due to the degradation of the existing visual character or quality of the site or its surrounding areas would be reduced under the NPA in comparison to the Project, although in both cases impacts would be less than significant.

Under existing conditions, operational hours for mining activities are restricted to between 7:00 a.m. and 12:00 a.m. (Monday through Friday, excluding Federal Holidays) and between 7:00 a.m. and 7:00 p.m. (Saturdays only). Under the proposed Project, the time limits for both mining and asphalt batch plant operation would be extended to between 4:00 a.m. and 12:00 a.m. (Monday through Saturday, excluding Federal Holidays) for mining equipment operation and 24 hours per day (Monday through Saturdays, excluding Federal Holidays) for aggregate and asphalt batch plant export activities. Although the Project does not propose any new lighting elements on-site, lighting elements would be used during the extended nighttime hours of operation under the proposed Project. Thus, although the Project's impacts due to light and glare would be less than significant, such impacts would be reduced under the NPA.

B. Air Quality

The proposed Project is consistent both with the site's land use at the time the 2012 Air Quality Management Plan (AQMP) was adopted, and the site's "Extractive Overlay" General Plan land use designation and would therefore result in emissions "accounted for" in the AQMP based on the mining activities that occurred on-site in 2012 and the site's General Plan land use designation. With mitigation, the Project's regional NO_X emissions impact would be reduced to less than significant, and the Project would not result in any exceedances of the SCAQMD localized significance thresholds. As with the proposed Project, the NPA would be consistent with the growth forecast assumptions for the site and emissions associated with the NPA also are accounted for by the AQMP. Thus, impacts due to a conflict with the AQMP under the Project and the NPA would be similar and less than significant.

With mitigation for NO_X emissions, the proposed Project would not exceed the SCAQMD regional thresholds of significance for any criteria pollutant. Under the NPA, total daily mining-related emissions from the Project site would be reduced as compared to the proposed Project. Thus, the NPA would result in reduced impacts due to air quality emissions and violations of air quality standards as compared to the proposed Project, although both the proposed Project and the NPA would result in less-than-significant impacts.

There is no potential for the Project or the NPA to contribute to impacts associated with CO "Hot Spots," as there are no intersections within the Project site's vicinity that experience the levels of traffic needed to form a CO "Hot Spot." Implementation of the proposed Project would result in

less-than-significant impacts due to both cancer and non-cancer risks from diesel particulate matter (DPM) emissions. However, due to the reduction in the average tons per day associated with the NPA, impacts associated with DPM emissions (and associated cancer and non-cancer risks) would be reduced under the NPA as compared to the proposed Project.

Potential sources of operational odors generated by the Project and the NPA would include disposal of miscellaneous refuse. However, only a nominal increase in solid waste would occur in association with the proposed Project. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances. Consistent with City requirements, all refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Thus, impacts due to odors under both the NPA and the proposed Project would be similar and would be less than significant.

C. Biological Resources

Under the NPA, there would be no expansion into the Project's 24-acre Expanded Disturbance Area (EDA). As such, there would be no new direct or indirect impacts to sensitive animal species. As with the proposed Project, impacts to sensitive plant species would not occur under the NPA. New indirect impacts to sensitive animal species also would be avoided under the NPA. Additionally, the Project's impacts to 21.4 acres of brittlebush scrub and 2.1 acres of non-native grassland habitat also would be avoided under the NPA. Although the Project's direct and indirect impacts to sensitive animal species and sensitive habitats would be reduced to less-than-significant levels, impacts would nonetheless be avoided and reduced under the NPA.

Although there is no riparian habitat on-site, implementation of the proposed Project would result in direct impacts to 21.4 acres of brittlebush scrub and 2.1 acres of non-native grassland, which provide habitat for sensitive animal species (i.e., coastal California gnatcatcher and MBTA-protected birds and raptors). Although these impacts would be reduced to less-than-significant levels under the proposed Project, these additional impacts would be completely avoided under the NPA.

The proposed Project would impact approximately 0.05 acre of Corps non-wetland Waters of the U.S. (WUS) and 0.17 acre of California Department of Fish and Wildlife (CDFW) streambed. Although the Project proposes mitigation to reduce these impacts to less-than-significant levels, these impacts would be completely avoided by the NPA.

Neither the proposed Project nor the NPA have the potential to result in impacts to any native resident or migratory fish, established wildlife corridor, or native wildlife nursery sites. However, the proposed Project has the potential to impact native, migratory, and nesting birds protected by the MBTA that may exist within the EDA. These potential impacts would be completely avoided under the NPA.

Neither the proposed Project nor the NPA would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Although the Nichols Canyon Mine is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area, pursuant to a March 2004 Settlement Agreement and MOU signed between Riverside County and the former landowner, the 199-acre Nichols Canyon Mine site is fully exempt from the provisions and requirements of the MSHCP. Thus, no impacts due to a conflict with the MSHCP would occur under the proposed Project or the NPA. Additionally,

the Mine is located within the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan (HCP), and the proposed Project would be subject to the payment of fees in accordance with City of Lake Elsinore Municipal Code Chapter 19.04. Payment of SKR fees would not be required under the NPA. Accordingly, impacts due to a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan would not occur under the proposed Project or the NPA.

D. Cultural Resources

There are no historical resources as defined in § 15064.5 within the Nichols Canyon Mine site. Thus, there would be no impacts to historical resources under the proposed Project or the NPA, and impacts would be similar.

No archeological resources meeting the definition of § 15064.5 within the Nichols Canyon Mine site, and none are expected within the areas already disturbed by mining activities or the EDA. Accordingly, no impact to archaeological resources would occur under the NPA or the proposed Project, and impacts would be similar.

According to GPU EIR Figure 3.2-3, the Nichols Canyon Mine has a "low" and "undetermined" potential for paleontological resources to be uncovered (City of Lake Elsinore, 2011b, Figure 3.2-3). The geologic units within the bounds of the Nichols Canyon Mine are either assigned a Low Potential to yield fossiliferous materials, or are regarded as unlikely to yield fossiliferous materials on the basis of the geologic field investigation. Based on the published geologic map units within the bounds of the Nichols Canyon Mine, the lack of any known fossiliferous deposits in these units, the assignment of a Low Potential to contain significant nonrenewable paleontological resources (i.e. fossils) in the granitic and young alluvial fan sediments, and the results of the geologic field examination, the Paleontological Resource and Monitoring Assessment concludes that the likelihood of finding fossiliferous materials within the Project site during any further excavation (quarrying) and/or grading activities is low to nil. (BFSA, 2015a, p. 3) Accordingly, impacts to paleontological resources would not occur under the proposed Project or NPA, and impacts would be similar.

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site (BFSA, 2015b). Mining activities under the NPA and the proposed Project would be subject to California Health and Safety Code, § 7050.5 "Disturbance of Human Remains," which would ensure that any potential impacts to human remains, including human remains of Native American descent, would be less than significant. Accordingly, impacts to human remains would be less than significant under both the proposed Project and the NPA, and such impacts would be similar.

E. Geology and Soils

There are no known active or potentially active faults on the Mine site. Ground shaking at the Mine site would not result in mine slope failure and would therefore not expose people or structures to adverse effects involving injury or death. The potential for liquefaction and other shallow groundwater hazards within the Mine site is low. Under both the proposed Project, and the NPA, slopes would be required to be protected with berms or drainage improvements as necessary to prevent slope erosion in the areas where natural slopes drain onto the reclaimed slopes. Although the

NPA proposes mining over 24 fewer acres than would occur under the proposed Project, risks associated with seismic hazards, earthquake faults, strong seismic ground shaking, seismic-related ground failure (including liquefaction) and landslides would be similar under both the proposed Project and the NPA and would be less than significant.

Under the NPA and proposed Project, dust control would be required on all disturbed portions of the Mine. Likewise, under both the Project and the NPA, upon final reclamation the site runoff would be directed towards detention basins to control erosion. Therefore, under both the Project and the NPA, impacts due to erosion would be similar and less than significant.

Based on slope stability analyses conducted by CHJ Consultants, the whole rock strength in the proposed slope areas of the Mine is sufficient to accommodate the proposed overall slope angles. Based on the analyses, the proposed overall approximate 45-degree mine and cut-slopes up to approximately 480 feet in height are suitably stable against gross failure for the long-term conditions, including the effects of seismic shaking. (CHJ Consultants, 2015, p. 20) Thus, impacts due to on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be similar under the proposed Project and the NPA and would be less than significant.

Due to the nature of the proposed activity under both the proposed Project and NPA (i.e., surface mining), a less-than-significant impact associated with expansive soil would occur because soils would be removed during mining activities. Any future use of the Project site for other land uses would require environmental review and a separate analysis regarding potential impacts from expansive soils. Thus, the Project and NPA would have a less-than-significant impact in this regard, and impacts would be similar.

The Project and NPA do not propose the use of septic tanks or alternative waste water disposal systems. Both the Project and the NPA would utilize portable toilets, as is the case with the existing mining operation. Accordingly, no impact associated with septic tanks or alternative waste water systems would occur under either the Project or the NPA, and impacts would be similar.

F. Greenhouse Gas Emissions

As indicated in EIR Subsection 4.6, *Greenhouse Gas Emissions*, the net new Project-related GHG emissions would not exceed the SCAQMD's interim threshold of 10,000 $MTCO_2e$ per year. Notwithstanding the Project's less-than-significant Greenhouse Gas (GHG) impacts, because the NPA would result in daily mining of only 3,248 tpd, as compared to 5,000 tpd under the proposed Project, impacts due to annual GHG emissions would be reduced under the NPA as compared to the proposed Project by approximately 35%.

Based on the analysis of Threshold b. in EIR Subsection 4.6.4, the proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. It can be reasoned that the NPA also would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, based on the discussion in EIR Subsection 4.6.4. Accordingly, impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be similar under both the proposed Project and the NPA, and impacts would be less than significant.

G. Hydrology and Water Quality

Mining operations at the site would continue to be regulated by an approved Stormwater Pollution Prevention Plan (SWPPP) under both the proposed Project and the NPA, which requires the incorporation of Best Management Practices (BMPs) to preclude water quality impacts associated with mining operations. The BMPs specified in the required SWPPP would be required to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Mandatory compliance with the SWPPP would ensure that the Project and NPA would not violate any water quality standards or waste discharge requirements. In addition, pursuant to the requirements of the Santa Ana RWQCB and the City of Lake Elsinore, the Project and the NPA would be required to comply with the NPDES General Permit. An NPDES General Permit is required for all new and expanded mining facilities. In addition, both the Project and the NPA would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Because the Project and NPA would comply with mandatory SWPPP requirements and all runoff from actively mined portions of the Mine would be retained on-site during ongoing mining activities and would not affect any downstream properties or facilities, impacts would be less than significant and would be similar.

Similarly, upon completion of mining activities under both the Project and the NPA, runoff on the Nichols North site would be conveyed to a proposed sediment basin located in the southwestern portion of the Nichols North site, and eventually conveyed westerly to Stovepipe Creek beneath an existing culvert underneath I-15. Similarly, the Nichols South site also would achieve the final grades specified by the applicable reclamation plan upon completion of mining activities, and the majority of drainage from this portion of the site would be conveyed to a proposed sedimentation basin located in the northwestern portion of the Nichols South site and ultimately west beneath I-15. Runoff from the portions of the Nichols South and Nichols North sites that are not subject to mining activities would continue to be conveyed by Stovepipe Creek, located in the southeast corner of the Nichols South site, and ultimately west beneath I-15. (Bonadiman, 2015, Exhibit H) Due to the rocky nature of the Mine, the potential for sedimentation is considered low, and the proposed sedimentation basins for both the NPA and the proposed Project have been designed in accordance with Santa Ana RWQCB requirements to ensure runoff from the Mine does not result in any new violations or water quality objectives. (Bonadiman, 2015, p. 16) As such, impacts would be less than significant under both the NPA and the proposed Project, and impacts would be similar.

Neither the proposed Project nor the NPA would directly result in the depletion of groundwater supplies or groundwater recharge, as the Project site would remain undeveloped with pervious surfaces that would allow for infiltration of runoff at the site. However, under the proposed Project, water usage at the site would be reduced by 45.84% as compared to what occurs under the NPA. Because a portion of the Mine's water is obtained from groundwater resources, the NPA would result in greater impacts to groundwater levels as compared to the proposed Project, although in both cases impacts would be less than significant.

Implementation of the proposed Project would result in mining within the 24-acre EDA; however, such mining activities would not substantially change the existing drainage pattern of the site or area, because all runoff from the slopes within the EDA would ultimately be conveyed west towards Stove Pipe Creek. Accordingly, impacts due to changes to the existing drainage pattern of the site or area would be less than significant under both the proposed Project and NPA, and would be similar.

As indicated by the analysis of unit hydrograph calculations in the site-specific hydrology study and drainage analysis (see Table 14 of *Technical Appendix H)* a decrease in runoff flows would occur during the reclamation phase of the Project, and also during the reclamation phase of the NPA as the ultimate drainage conditions of the proposed Project and NPA are similar. The two sedimentation basins required under the NPA and for the proposed Project would be designed to provide the minimum required capacities as the basins are not required to reduce peak flow rates but instead are proposed to provide sediment control. Because the design features would ensure that runoff rates would be reduced compared to the existing condition, the proposed Project and NPA would not have an adverse impact on downstream properties. (Bonadiman, 2015, p. 16) Accordingly, the Project and NPA would result in less-than-significant impacts associated with an increase in the rate of surface runoff in a manner which would result in flooding on-or off-site. Thus, impacts would be less than significant under both the Project and NPA, and would be similar.

Under both the proposed Project and NPA, during on-going mining activities, all runoff within the areas subject to mining activities would be retained on-site, while areas not subject to disturbance would continue to drain via Stovepipe Creek, located in the southeastern portion of the Nichols South site. Upon final reclamation of the site, runoff that had been detained on-site would instead be conveyed to one of the two sediment basins located in Nichols North and Nichols South. Following water quality treatment, the flows would be conveyed by Stovepipe Creek via existing culverts beneath I-15 to the west. A decrease in runoff flows would occur during the reclamation phase of the Project and NPA. The two sedimentation basins required for both the NPA and proposed Project would be designed to provide the minimum required capacities as the basins are not required to reduce peak flow rates but instead are proposed to provide sediment control. Design features would ensure that runoff rates would be reduced compared to the existing condition. Runoff within the Nichols Canyon Mine also is subject to the existing SWPPP which provides BMP measures that ensures that runoff does not exceed the capacity of existing or planned storm water drainage systems, does not provide substantial, additional sources of polluted runoff, or otherwise degrade water quality. The Project and NPA would be subject to the existing or a revised SWPPP that includes BMP measures, as necessary and appropriate, to address potential water quality impacts. The proposed Project and NPA would be required to comply with the SWPPP or revised SWPPP, which identifies or would identify required BMPs to be incorporated into the Project or NPA to ensure that the proposed Project would not result in substantial amounts of polluted runoff. Thus, with mandatory compliance with the existing or revised SWPPP, the proposed Project and NPA would not create or contribute substantial additional sources of polluted runoff. Thus, impacts would be less than significant under both the Project and NPA, and impacts would be similar.

No new storm drainage facilities would be required in support of existing mining activities under the NPA or proposed mining activities under the proposed Project, as the existing basins on-site are adequately sized to detain all runoff from the mined areas (both with and without the Project). Under the proposed Project and NPA, a decrease in runoff flows is expected as a result of reclamation. The decrease in flow rate is a result of the longer path lengths which in turn reduce peak flow rates. Accordingly, reclamation under the proposed Project and NPA would result in a reduction of flow rates and neither the Project nor the NPA would require or result in the construction of new storm water drainage facilities or expansion of existing facilities. Thus, impacts would be less than significant and would be similar under the NPA and proposed Project.

There are no other conditions associated with the proposed Project or NPA that could result in the substantial degradation of water quality beyond what is discussed above and in Subsection 4.7.

The areas proposed for mining at the Nichols Canyon Mine under both the proposed Project and NPA are not located within a 100-year flood plain; thus, neither the Project nor the NPA would place housing or structures in a floodplain. Impacts would not occur and would be similar under the NPA and the proposed Project.

According to Figure 10, *Flood Hazards*, of the Riverside County General Plan's Elsinore Area Plan, the Nichols Canyon Mine is not located within a dam hazard zone related to the Railroad Canyon Dam or any other dam hazard zone. As depicted on Figure 3-2, *Vicinity Map*, the Nichols Canyon Mine is located approximately 2.0 miles north of the levee that is present in association with Lake Elsinore. Thus, due to the location of the Nichols Canyon Mine approximately 5.0 miles north of the Railroad Canyon Dam and approximately 2.0 miles north of the levee at Lake Elsinore and the direction of sheet flow, the Project and NPA would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam. Impacts would be less than significant and would be similar under both the Project and the NPA.

The Nichols Canyon Mine is located approximately 2.0 miles north of Lake Elsinore, which is the nearest body of water subject to seiches. Lake Elsinore incorporates USACE flood control devices including a berm fill at the southern end of the lake to lower the potential for a seiche to occur (Lake Elsinore, 2011b, 3.9-36). In addition, due to the site's distance from Lake Elsinore, and the elevation difference between Lake Elsinore and the Nichols Canyon Mine (i.e., the Project site occurs approximately 250 feet in elevation above Lake Elsinore), the Mine is not be subject to seiches or mudflow. Furthermore, the Nichols Canyon Mine is located approximately 25 miles from the Pacific Ocean, and has no potential to be affected by tsunamis. (Google Earth Pro, 2015) Thus, neither the Project nor the NPA would be subject to seiche, tsunami, or mudflow. No Impact would occur under either the NPA or proposed Project, and impacts would be similar.

H. Noise

Under the proposed Project, mining activities within the EDA and within 500 feet from any existing residences during daytime hours (between 7:00 am and 10:00 pm) would expose the nearest residential structures to noise levels exceeding 55 dBA Leq (109-min), with the nearest residential structure occurring approximately 414 feet from the EDA. Under the NPA, the existing mining limits at the Nichols South site occur within approximately 500 feet of the nearest residential home, which also would expose nearby residential uses to daytime noise. However, because the EDA is approximately 86 feet closer to the existing homes than the existing NPA mining limits, the proposed Project would expose approximately eight homes to daytime noise levels exceeding the City's standard of 55 dB Leq (10-min), while the NPA would only expose three homes to daytime noise levels exceeding the City's standard of 50 dB Leq (10-min). Accordingly, daytime noise levels would be reduced under the NPA as compared to the proposed Project, although noise impacts would continue to be significant and unavoidable under the NPA for the three homes located within 500 feet of the existing mining limits.

During nighttime hours (between 10:00 pm and 7:00 am), the Project would be restricted from mining within 1,250 feet of any occupied residential structure if a direct line-of-sight exists between the mining activity and the occupied structure(s) If the line-of-site is blocked, noise-generating

activities may extend to within 500 feet of occupied residential structures. Under the NPA, however, no restriction is imposed between the hours of 10:00pm and 12:00am, during which mining activities may occur as close as 800 feet from residential structures. Thus, nighttime operational noise impacts under the proposed Project would be reduced to less-than-significant levels, while under the NPA nighttime impacts would remain significant and unavoidable and increased in relation to the proposed Project.

The Project would result in a greater increase associated transportation-related noise as compared to the NPA due to the increase in 425 passenger care equivalents (PCEs) under the proposed Project, and thus the Project would result in increased transportation-related noise impacts in comparison to the NPA. However, transportation noise-related impacts under both the Project and NPA would be less than significant.

Although the NPA would introduce blasting activities and mining activities as close as 414 feet from the nearest residential home, the analysis in EIR Subsection 4.3.7 demonstrates that Project-related blasting and mining equipment would result in less-than-significant impacts associated with groundborne noise or groundborne vibration at the nearest home. Nonetheless, because the Project would introduce blasting activities within closer proximity to residential structures than the NPA, impacts associated with ground borne vibration or ground borne noise levels would increase under the proposed Project in comparison to the NPA.

Neither the proposed Project nor the NPA would be impacted by noise related to airport or private airport operations. Impacts would not occur under the Project and NPA and would be similar.

I. Transportation and Circulation

Under the No Project Alternative, no mining would occur within the EDA and no additional traffic would be generated beyond the 795 PCE ADT that occurs under baseline conditions. Thus, the following Project-related cumulatively-considerable impacts would be avoided under the NPA:

- EAPC (2016) Conditions:
    - Cumulatively considerable impact to the I-15 Northbound Ramp/Nichols Road intersection (LOS F AM peak hour; LOS E PM peak hour); and
    - Cumulatively considerable impact due to the need to signalize the I-15 Northbound Ramps/Nichols Road intersection.

- Horizon Year (2035) Conditions:
    - Cumulatively considerable impact to the I-15 Northbound Ramp/Nichols Road intersection (LOS F during both AM and PM peak hours);
    - Cumulatively considerable impact due to the projected off-ramp queueing issue at the I-15 northbound off-ramps to Nichols Road; and
    - Cumulatively considerable impact due to deficiencies at the I-15 Northbound Ramps/Nichols Road merge/diverge junction (LOS F AM Peak Hour; LOS E PM Peak Hour).

The above-listed impacts also affect I-15, a Congestion Management Plan (CMP) designated facility. Thus, impacts due to a conflict with a level of service standard established by the county congestion

management agency for designated roads or highways would be increased under the Project as compared to the NPA.

Neither the proposed Project nor the NPA would result in impacts due to a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks, and impacts would be similar under both the NPA and proposed Project.

Neither the proposed Project nor the NPA would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts under both the proposed Project and NPA would be similar, and would be less than significant.

Neither the proposed Project nor the NPA would result in inadequate emergency access. No impacts would occur under the proposed Project or the NPA, and impacts would be similar.

Based on the analysis presented in EIR Subsection 4.9.7 (refer the Threshold f.), the proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities). There are no components associated with the existing mining operations under the NPA that would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities). Accordingly, impacts under both the NPA and proposed Project would be less than significant and would be similar.

J. Utilities and Service Systems

Under existing conditions, wastewater treatment at the Nichols Canyon Mine is handled by portable toilets, which are regularly emptied by a rental service company. Waste from these portable toilets is disposed of in accordance with all applicable regulatory requirements. Portable toilets would continue to be operated on-site for the duration of mining and reclamation activities under both the proposed Project and the NPA. There are no other potential sources of wastewater associated with the proposed Project or the NPA. Therefore, implementation of the proposed Project or NPA would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Thus, impacts would be less than significant and would be identical under the NPA and proposed Project.

Although the Project would result in a net increase of two employees as compared to the NPA, such an increase is not substantial and would not have an effect on existing wastewater treatment facilities, as wastewater treatment at the Nichols Canyon Mine is handled by portable toilets, which are regularly emptied by a rental service company. Thus, impacts due to the need for construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects would not occur under either the NPA or the proposed Project, and impacts would be similar.

Under the NPA, the Nichols Canyon Mine utilizes approximately 64,000 gallons per day (gpd). SMP 2015-01 includes new watering restrictions for soil stabilization, as shown on Figure 4.10-1, *Surface Mining Permit 2015-01 Dust Control Plan*, and implementation of the proposed Project would result in a net decrease in areas subject to watering from 20.33 acres under the NPA to 11.01 acres under the proposed Project. The reduction in water usage on-site would occur because SMP

2015-01 requires the use of soil binding chemicals, pavement, and other stabilization techniques to provide for adequate dust control while resulting in a net decrease in water used at the site. In total, it can be assumed that because areas on-site that require water for dust control would be reduced by approximately 45.8% as compared to baseline conditions; therefore, it can be assumed that total water use at the mine would decrease under the proposed Project from approximately 64,000 gpd to approximately 34,660 gpd as compared to the NPA. Although approval of the Project would extend the duration of mining activities on-site as necessary to mine and reclaim the proposed Expanded Disturbance Area (EDA), the EVWMD has determined that it has sufficient supplies to meet the demand for projected normal year, singly-dry year, and multiple-dry-year supply through 2035. This determination was made by the EVWMD based on future population and employment estimates within the EVMWD service area, and accounts for on-going mining activities at the Nichols Canyon Mine. (EVMWD, 2011a, Tables ES-9, ES-10, and ES-11) Therefore, because total water usage on-site would decrease under the proposed Project as compared to the NPA, and because the EVMWD has sufficient supplies through 2035, including during dry and multiple-dry years, the Project's impacts to water supplies would be less than significant and reduced in comparison to the NPA.

Implementation of the proposed Project would result in a net decrease of 29,340 gpd as compared to the NPA. Also, the UWMP concludes that sufficient supply exists to meet the demand for projected normal year, singly-dry year, and multiple-dry-year supply through 2035. (EVMWD, 2011a, p. 10) The proposed Project has no potential to result in the construction of new or expanded water treatment facilities, and no impact would occur. In comparison to the NPA, which would also have less-than-significant impacts, impacts to water supply would be reduced under the proposed Project.

Implementation of the proposed Project would result in the net increase of two employees as compared to the NPA, and the Project is not expected to result in a substantial increase in the amount of wastewater generated at the site as compared to wastewater generated by the NPA. Furthermore, wastewater generated at the site under existing conditions is handled via portable toilets, and there would be no need for additional portable toilets as a result of the Project, nor would there be a discernible change in the number of times the service provider would need to service the Mine under the proposed Project and NPA. The wastewater haul company would dispose of all wastewater generated by the Project at permitted facilities with sufficient capacity to handle Project-generated wastewater. Neither the Project nor NPA utilize EVMWD's sewer system and there are no components of the Project or NPA that would cause or contribute to deficient wastewater treatment capacity; therefore, no impact would occur under either the proposed Project or NPA, and impacts would be similar.

There would be only nominal increase in solid waste generation at the Mine under the proposed Project as compared to the NPA, due to the expected increase of two employees under the proposed Project. Solid waste generated under the Project or NPA would be conveyed to one of several landfills (El Sobrante, Badlands, or Lamb Canyon Landfills) operated or managed by the RCWMD. These existing landfills are required to comply with federal, state, and local statutes and regulations related to solid waste. Landfills within RCWMD's jurisdiction adhere to state guidelines which specify that a minimum of 15 years of system-wide landfill capacity shall be provided. (Lake Elsinore, 2011b, p. 3-16-5). Therefore, because the Project and NPA both would be served by a landfill with sufficient permitted capacity to accommodate the Mine's solid waste, and because the Project's incremental increase in solid waste generation would be negligible, impacts would be less than significant and would be similar under both the proposed Project and NPA.

The Project and the NPA would be required to comply with City and County waste reduction programs pursuant to the State's Integrated Waste Management Act and Chapter 14.12 of the City of Lake Elsinore Municipal Code. Solid waste generated at the Mine would be conveyed to one of several landfills operated or managed by RCWMD under both the Project and the NPA. These existing landfills are required to comply with federal, state, and local statutes and regulations related to solid waste. Compliance with federal, state, and local statutes would reduce the amount of solid waste generated by the Mine and diverted to landfills which in turn will aid in the extension of the life of affected disposal sites. The Project and NPA would comply with all applicable solid waste statutes and regulations; as such, impacts would be less than significant and would be similar under both the Project and NPA.

The proposed Project and NPA would involve the continuation and expansion of an existing mining operation, and would not result in a substantial increase in daily operational characteristics at the site. All utilities needed to serve the Nichols Canyon Mine are currently in place. Specifically, electricity is provided to the site via private power poles from a connection near the Mine's southern boundary, and these existing power poles would not require expansion as a result of the Project. There are no other utilities needed in support of mining operations that would have the potential to cause significant environmental effects. Accordingly, no impact would occur under either the Project or the NPA, and impacts would be similar.

K. Conclusion

Implementation of the No Project Alternative would result in no new physical environmental impacts. Impacts to the following issue areas would be reduced under the NPA in relation to the proposed Project: aesthetics; air quality; biological resources; greenhouse gases; noise (daytime); and traffic and transportation. Impacts to cultural resources and geology/soils would be similar under the proposed Project and the NPA. Impacts to hydrology/water quality, noise (nighttime), and utilities/service systems would increase under the NPA in relation to the proposed Project, primarily because the Project would reduce water usage on-site as compared to the NPA.

Because the NPA would avoid many of the Project's significant impacts (including the Project's significant and unavoidable impacts to noise and traffic/transportation), it warrants consideration as the "environmentally superior alternative." However, pursuant to CEQA Guidelines §15126.6(e)(2), if a no project alternative is identified as the "environmentally superior alternative" then the EIR shall also identify an environmentally superior alternative among the other alternatives. The Reduced Expanded Disturbance Alternative, as described in Subsection 6.3.2, is identified as the environmentally superior alternative.

The No Project Alternative would fail to meet most of the Project's objectives. This alternative would fail to increase the available high-quality aggregate reserves available on the property in order to help meet the regional demand for aggregate material. This alternative would not allow for an expansion of operating hours, and would therefore lead to less efficient operations at the Mine as compared to the proposed Project. The NPA also would continue to allow for the export of up to 4,000,000 tpy, as compared to the 856,560 tpy that would occur under the Project. Furthermore, this alternative would not maximize the use of aggregate reserves and create the most usable space from the Mine's disturbance. This alternative would fail to establish updated standards for operational mining activities at the Nichols Canyon Mine site in a manner that complies with all applicable

federal, state, and local regulations and requirements. Moreover, selection of the No Project Alternative, while preventing mining within the EDA, would not reduce demand for aggregate materials in Riverside County and the southern California region. Therefore, the Project's impacts would likely be displaced to another property and not avoided by selection of this alternative.

6.3.2 REDUCED EXPANDED DISTURBANCE ALTERNATIVE (REDA)

As depicted previously on Figure 6-1, the Reduced Expanded Disturbance Alternative (REDA) considers a reduction in the limits of the EDA from 24 acres under the proposed Project to 17 acres under the REDA. This alternative was selected for consideration by the Lead Agency (Lake Elsinore) because it would completely avoid the Project's significant and unavoidable impact due to daytime mining-related noise within the EDA impacting existing residences located within 800 feet of the EDA. This alternative also would reduce impacts to biological resources (jurisdictional areas and sensitive habitat). All other components of the REDA, including daily and annual tonnage estimates/limits and hours of operation, would be identical to the proposed Project described in EIR Section 3.0, *Project Description*.

A. Aesthetics

No unique or scenic vistas would be impacted by the Project or the REDA, as the Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features. Thus, impacts to scenic vistas and unique views would be similar to the Project's less-than-significant impact to scenic vistas.

The Project site also is not visible from any State-designated scenic highways. As such, impacts to resources visible from a designated scenic highway corridor would be similar to the Project's less-than-significant impacts.

The proposed Project would not substantially degrade the existing visual character or quality of the site or its surrounding areas. Although the REDA proposes to reduce the areas subject to mining activities from 24 acres to 17 acres, the approximate 7-acre reduction would occur in the southeastern portions of the EDA which occur at a lower elevation than the majority of the EDA. Thus, the portion of the EDA that would not be mined under the REDA would not substantially reduce the visual effects of mining as visible from off-site locations. Nonetheless, the reduction in the EDA would slightly reduce visual effects as compared to the proposed Project. Impacts to the existing visual character or quality of the site or its surrounding areas would be less than significant under both the REDA and proposed Project would be less than significant, but would be slightly reduced under the REDA.

Both the proposed Project and the REDA would include the expansion of mining hours. Although no new lighting elements would be introduced to the Project site, the increased hours of operation would extend the length of time lighting is used on-site. As discussed in EIR Section 4.1, impacts due to lighting would be less than significant under the proposed Project and the REDA, and would be similar.

B. Air Quality

The proposed Project is consistent both with the site's land use at the time the 2012 Air Quality Management Plan (AQMP) was adopted, and the site's "Extractive Overlay" General Plan land use

designation and would therefore result in emissions "accounted for" in the AQMP based on the mining activities that occurred on-site in 2012 and the site's General Plan land use designation. With mitigation, the Project's regional NO_X emissions impact would be reduced to less than significant, and the Project would not result in any exceedances of the SCAQMD localized significance thresholds. As with the proposed Project, the REDA would be consistent with the growth forecast assumptions for the site and emissions associated with the REDA also are accounted for by the AQMP. Thus, impacts due to a conflict with the AQMP under the Project and the NPA would be similar and less than significant.

With mitigation for NO_X emissions, the proposed Project and REDA would not exceed the SCAQMD regional thresholds of significance for any criteria pollutant. Under the REDA, total daily mining-related emissions from the Project site would be identical to the proposed Project. Thus, impacts due to the emissions of criteria pollutants would be less than significant under the proposed Project and REDA with mitigation incorporated.

There is no potential for the Project or the REDA to contribute to impacts associated with CO "Hot Spots," as there are no intersections within the Project site's vicinity that experience the levels of traffic needed to form a CO "Hot Spot." Implementation of the proposed Project would result in less-than-significant impacts due to both cancer and non-cancer risks from diesel particulate matter (DPM) emissions. Given that average daily operating characteristics would not change under the REDA as compared to the proposed Project, impacts due to DPM emissions under both the Project and REDA would be less than significant and would be similar.

Potential sources of operational odors generated by the Project and the REDA would include disposal of miscellaneous refuse. However, only a nominal increase in solid waste would occur in association with either the proposed Project. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances. Consistent with City requirements, all refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Thus, impacts due to odors under both the REDA and the proposed Project would be similar and would be less than significant.

C. Biological Resources

Under the REDA, the Project's 24-acre Expanded Disturbance Area (EDA) would be reduced to 17 acres. As such, this alternative would reduce the Project's significant but mitigable impacts to the coastal California gnatcatcher and nesting birds and raptors protected by the MBTA. Additionally, the Project's impacts to 21.4 acres of brittlebush scrub and 2.1 acres of non-native grassland habitat would be reduced to 15.5 acres of brittlebush scrub and 1.5 acres of non-native grassland habitat. Although direct and indirect impacts to sensitive animal species and sensitive habitats would be reduced to less-than-significant levels through mitigation under both the proposed Project and REDA, impacts (and required mitigation) would nonetheless be reduced under the REDA due to the reduction of the EDA by seven acres.

Although there is no riparian habitat on-site, implementation of the proposed Project would result in direct impacts to 21.4 acres of brittlebush scrub and 2.1 acres of non-native grassland, which provide habitat for sensitive animal species (i.e., coastal California gnatcatcher and MBTA-protected birds and raptors). Under the REDA, these impacts would be reduced to 15.5 acres of brittlebush scrub and 1.5 acres of non-native grassland habitat. Although both the Project and the REDA would require mitigation to reduce these impacts to less-than-significant levels, impacts (and required

mitigation) would nonetheless be reduced under the REDA due to the reduction of the EDA by seven acres.

The proposed Project would impact approximately 0.05 acre of Corps non-wetland Waters of the U.S. (WUS) and 0.17 acre of California Department of Fish and Wildlife (CDFW) streambed. Under the REDA, impacts to 0.05 acre of Corps non-wetland WUS would be the same, although the REDA would affect only approximately 1,327 linear feet of Corps non-wetland WUS as compared to 1,627 linear feet under the proposed Project. Additionally, impacts to CDFW jurisdictional features (streambed) would be reduced to 0.15 acre, and would include of 1,327 linear feet of CDFW streambed, which is a reduction from the 1,627 linear feet that would be impacted by the proposed Project. Although impacts would be mitigated to below a level of significant under both the proposed Project and the REDA, impacts under the REDA would nonetheless be reduced under the REDA due to the reduction of the EDA by approximately seven acres.

Neither the proposed Project nor the REDA have the potential to result in impacts to any native resident or migratory fish, established wildlife corridor, or native wildlife nursery sites. However, both the proposed Project and the REDA have the potential to impact native, migratory, and nesting birds protected by the MBTA that may exist within the EDA. Although mitigation would reduce impacts to below significant under the proposed Project and REDA, impacts would nonetheless be reduced under the REDA due to the reduction of the EDA by seven acres.

Neither the proposed Project nor the REDA would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Although the Nichols Canyon Mine is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area, pursuant to a March 2004 Settlement Agreement and MOU signed between Riverside County and the former landowner, the 199-acre Nichols Canyon Mine site is fully exempt from the provisions and requirements of the MSHCP. Thus, no impacts due to a conflict with the MSHCP would occur under the proposed Project or the REDA. Additionally, the Mine is located within the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan (HCP), and the proposed Project and the REDA would be subject to the payment of fees in accordance with City of Lake Elsinore Municipal Code Chapter 19.04. Accordingly, impacts due to a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan would not occur under the proposed Project or the REDA and would be similar.

D. Cultural Resources

There are no historical resources as defined in § 15064.5 within the Nichols Canyon Mine site. Thus, there would be no impacts to historical resources under the proposed Project or the REDA, and impacts would be similar.

No archeological resources meeting the definition of § 15064.5 within the Nichols Canyon Mine site, and none are expected within the areas already disturbed by mining activities or the EDA. Accordingly, no impact to archaeological resources would occur under the REDA or the proposed Project, and impacts would be similar.

According to GPU EIR Figure 3.2-3, the Nichols Canyon Mine has a "low" and "undetermined" potential for paleontological resources to be uncovered (City of Lake Elsinore, 2011b, Figure 3.2-3). The geologic units within the bounds of the Nichols Canyon Mine are either assigned a Low Potential to yield fossiliferous materials, or are regarded as unlikely to yield fossiliferous materials on the basis of the geologic field investigation. Based on the published geologic map units within the bounds of the Nichols Canyon Mine, the lack of any known fossiliferous deposits in these units, the assignment of a Low Potential to contain significant nonrenewable paleontological resources (i.e. fossils) in the granitic and young alluvial fan sediments, and the results of the geologic field examination, the Paleontological Resource and Monitoring Assessment concludes that the likelihood of finding fossiliferous materials within the Project site during any further excavation (quarrying) and/or grading activities is low to nil. (BFSA, 2015a, p. 3) Accordingly, impacts to paleontological resources would not occur under the proposed Project or REDA, and impacts would be similar.

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site (BFSA, 2015b). Mining activities under the REDA and the proposed Project would be subject to California Health and Safety Code, § 7050.5 "Disturbance of Human Remains," which would ensure that any potential impacts to human remains, including human remains of Native American descent, would be less than significant. Accordingly, impacts to human remains would be less than significant under both the proposed Project and the NPA, and such impacts would be similar.

E. Geology and Soils

There are no known active or potentially active faults on the Mine site. Ground shaking at the Mine site would not result in mine slope failure and would therefore not expose people or structures to adverse effects involving injury or death. The potential for liquefaction and other shallow groundwater hazards within the Mine site is low. Under both the proposed Project and the REDA, slopes would be required to be protected with berms or drainage improvements as necessary to prevent slope erosion in the areas where natural slopes drain onto the reclaimed slopes. Although the REDA proposes mining over seven fewer acres than would occur under the proposed Project, risks associated with seismic hazards, earthquake faults, strong seismic ground shaking, seismic-related ground failure (including liquefaction) and landslides would be similar under both the proposed Project and the REDA and would be less than significant.

Under the REDA and proposed Project, dust control would be required on all disturbed portions of the Mine. Likewise, under both the Project and the NPA, upon final reclamation the site runoff would be directed towards detention basins to control erosion. Therefore, under both the Project and the REDA, impacts due to erosion would be similar and less than significant.

Based on slope stability analyses conducted by CHJ Consultants, the whole rock strength in the proposed slope areas of the Mine is sufficient to accommodate the proposed overall slope angles. Based on the analyses, the proposed overall approximate 45-degree mine and cut-slopes up to approximately 480 feet in height are suitably stable against gross failure for the long-term conditions, including the effects of seismic shaking. (CHJ Consultants, 2015, p. 20) Thus, impacts due to on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be similar under the proposed Project and the REDA and would be less than significant.

Due to the nature of the proposed activity under both the proposed Project and REDA (i.e., surface mining), a less-than-significant impact associated with expansive soil would occur because soils would be removed during mining activities. Any future use of the Project site for other land uses would require environmental review and a separate analysis regarding potential impacts from expansive soils. Thus, the Project and REDA would have a less-than-significant impact in this regard, and impacts would be similar.

The Project and REDA do not propose the use of septic tanks or alternative waste water disposal systems. Both the Project and the REDA would utilize portable toilets, as is the case with the existing mining operation. Accordingly, no impact associated with septic tanks or alternative waste water systems would occur under either the Project or the NPA, and impacts would be similar.

F. Greenhouse Gas Emissions

As indicated in EIR Subsection 4.6, *Greenhouse Gas Emissions*, the net new Project-related Greenhouse Gas (GHG) emissions would not exceed the SCAQMD's interim threshold of 10,000 $MTCO_2e$ per year. Because daily and annual operational characteristics of the REDA would be identical to the proposed Project, the REDA also would result in similar less-than-significant GHG impacts.

Based on the analysis of Threshold b. in EIR Subsection 4.6.4, the proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. It can be reasoned that the REDA also would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, based on the discussion in EIR Subsection 4.6.4. Accordingly, impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be similar under both the proposed Project and the REDA, and impacts would be less than significant.

G. Hydrology and Water Quality

Mining operations at the site would continue to be regulated by an approved Stormwater Pollution Prevention Plan (SWPPP) under both the proposed Project and the REDA, which requires the incorporation of Best Management Practices (BMPs) to preclude water quality impacts associated with mining operations. The BMPs specified in the required SWPPP would be required to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Mandatory compliance with the SWPPP would ensure that the Project and REDA would not violate any water quality standards or waste discharge requirements. In addition, pursuant to the requirements of the Santa Ana RWQCB and the City of Lake Elsinore, the Project and the REDA would be required to comply with the NPDES General Permit. An NPDES General Permit is required for all new and expanded mining facilities. In addition, both the Project and the REDA would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Because the Project and REDA would comply with mandatory SWPPP requirements and all runoff from actively mined portions of the Mine would be retained on-site during ongoing mining activities and would not affect any downstream properties or facilities, impacts would be less than significant and would be similar.

Similarly, upon completion of mining activities under both the Project and the REDA, runoff on the Nichols North site would be conveyed to a proposed sediment basin located in the southwestern portion of the Nichols North site, and eventually conveyed westerly to Stovepipe Creek beneath an existing culvert underneath I-15. Similarly, the Nichols South site also would achieve the final grades specified by the applicable reclamation plan upon completion of mining activities, and the majority of drainage from this portion of the site would be conveyed to a proposed sedimentation basin located in the northwestern portion of the Nichols South site and ultimately west beneath I-15. Runoff from the portions of the Nichols South and Nichols North sites that are not subject to mining activities would continue to be conveyed by Stovepipe Creek, located in the southeast corner of the Nichols South site, and ultimately west beneath I-15. (Bonadiman, 2015, Exhibit H) Due to the rocky nature of the Mine, the potential for sedimentation is considered low, and the proposed sedimentation basins for both the REDA and the proposed Project have been designed in accordance with Santa Ana RWQCB requirements to ensure runoff from the Mine does not result in any new violations or water quality objectives. (Bonadiman, 2015, p. 16) As such, impacts would be less than significant under both the REDA and the proposed Project, and impacts would be similar.

Neither the proposed Project nor the REDA would directly result in the depletion of groundwater supplies or groundwater recharge, as the Project site would remain undeveloped with pervious surfaces that would allow for infiltration of runoff at the site. As with the proposed Project, water usage at the site would be reduced by 45.84% as compared to what occurs under historic baseline conditions. Thus, the REDA would have similar less-than-significant impacts to groundwater levels.

Implementation of the proposed Project would result in mining within the 24-acre EDA, while the REDA would result in a reduced EDA comprising 17 acres in size. Interim and ultimate drainage patterns associated with both the proposed Project and the REDA would be similar, and all runoff from the slopes within the EDA would ultimately be conveyed west towards Stove Pipe Creek. Accordingly, impacts due to changes to the existing drainage pattern of the site or area would be less than significant under both the proposed Project and REDA, and would be similar.

As indicated by the analysis of unit hydrograph calculations in the site-specific hydrology study and drainage analysis (see Table 14 of *Technical Appendix H)* a decrease in runoff flows would occur during the reclamation phase of the Project, and also during the reclamation phase of the REDA as the ultimate drainage conditions of the proposed Project and REDA are similar. The two sedimentation basins required under the REDA and for the proposed Project would be designed to provide the minimum required capacities as the basins are not required to reduce peak flow rates but instead are proposed to provide sediment control. Because the design features would ensure that runoff rates would be reduced compared to the existing condition, the proposed Project and REDA would not have an adverse impact on downstream properties. (Bonadiman, 2015, p. 16) Accordingly, the Project and REDA would result in similar less-than-significant impacts associated with an increase in the rate of surface runoff in a manner which would result in flooding on-or off-site.

Under both the proposed Project and REDA, during on-going mining activities, all runoff within the areas subject to mining activities would be retained on-site, while areas not subject to disturbance would continue to drain via Stovepipe Creek, located in the southeastern portion of the Nichols South site. Upon final reclamation of the site, runoff that had been detained on-site would instead be conveyed to one of the two sediment basins located in Nichols North and Nichols South. Following

water quality treatment, the flows would be conveyed by Stovepipe Creek via existing culverts beneath I-15 to the west. A decrease in runoff flows would occur during the reclamation phase of the Project and REDA. The two sedimentation basins required for both the REDA and proposed Project would be designed to provide the minimum required capacities as the basins are not required to reduce peak flow rates but instead are proposed to provide sediment control. Design features would ensure that runoff rates would be reduced compared to the existing condition. Runoff within the Nichols Canyon Mine also is subject to the existing SWPPP which provides BMP measures that ensures that runoff does not exceed the capacity of existing or planned storm water drainage systems, does not provide substantial, additional sources of polluted runoff, or otherwise degrade water quality. The Project and REDA would be subject to a revised SWPPP that includes BMP measures, as necessary and appropriate, to address potential water quality impacts. The proposed Project and REDA would be required to comply with a revised SWPPP, which identifies or would identify required BMPs to be incorporated into the Project or REDA to ensure that the proposed Project would not result in substantial amounts of polluted runoff. Thus, with mandatory compliance with the existing or revised SWPPP, the proposed Project and REDA would not create or contribute substantial additional sources of polluted runoff. Thus, impacts would be less than significant under both the Project and REDA, and impacts would be similar.

No new storm drainage facilities would be required in support of mining activities under the REDA or the proposed Project, as the existing basins on-site are adequately sized to detain all runoff from the mined areas (both with and without the Project). Under the proposed Project and REDA, a decrease in runoff flows is expected as a result of reclamation. The decrease in flow rate is a result of the longer path lengths which in turn reduce peak flow rates. Accordingly, reclamation under the proposed Project and REDA would result in a reduction of flow rates and neither the Project nor the REDA would require or result in the construction of new storm water drainage facilities or expansion of existing facilities. Thus, impacts would be less than significant and would be similar under the REDA and proposed Project.

There are no other conditions associated with the proposed Project or REDA that could result in the substantial degradation of water quality beyond what is discussed above and in Subsection 4.7.

The areas proposed for mining at the Nichols Canyon Mine under both the proposed Project and REDA are not located within a 100-year flood plain; thus, neither the Project nor the REDA would place housing or structures in a floodplain. Impacts would not occur and would be similar under the REDA and the proposed Project.

According to Figure 10, *Flood Hazards*, of the Riverside County General Plan's Elsinore Area Plan, the Nichols Canyon Mine is not located within a dam hazard zone related to the Railroad Canyon Dam or any other dam hazard zone. As depicted on Figure 3-2, *Vicinity Map*, the Nichols Canyon Mine is located approximately 2.0 miles north of the levee that is present in association with Lake Elsinore. Thus, due to the location of the Nichols Canyon Mine approximately 5.0 miles north of the Railroad Canyon Dam and approximately 2.0 miles north of the levee at Lake Elsinore and the direction of sheet flow, the Project and REDA would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam. Impacts would be less than significant and would be similar under both the Project and the REDA.

The Nichols Canyon Mine is located approximately 2.0 miles north of Lake Elsinore, which is the nearest body of water subject to seiches. Lake Elsinore incorporates USACE flood control devices including a berm fill at the southern end of the lake to lower the potential for a seiche to occur (Lake Elsinore, 2011b, 3.9-36). In addition, due to the site's distance from Lake Elsinore, and the elevation difference between Lake Elsinore and the Nichols Canyon Mine (i.e., the Project site occurs approximately 250 feet in elevation above Lake Elsinore), the Mine is not be subject to seiches or mudflow. Furthermore, the Nichols Canyon Mine is located approximately 25 miles from the Pacific Ocean, and has no potential to be affected by tsunamis. (Google Earth Pro, 2015) Thus, neither the Project nor the REDA would be subject to seiche, tsunami, or mudflow. No Impact would occur under either the REDA or proposed Project, and impacts would be similar.

H. Noise

Under the proposed Project, mining activities within the EDA and within 500 feet from any existing residences during daytime hours (between 7:00 am and 10:00 pm) would expose the nearest residential structures to noise levels exceeding 55 dB Leq (10-min), with the nearest residential structure occurring approximately 414 feet from the EDA. Under the REDA, the EDA would be reduced from 24 acres to 17 acres in size. The limits of the REDA's mining limits have been designed to ensure that no mining activities would occur within 500 feet from any existing residences during daytime hours (between 7:00 am and 10:00 pm), and would thereby avoid the Project's significant and unavoidable operational noise impact.

Pursuant to the mitigation measures included in EIR Subsection 4.8, *Noise*, during nighttime hours (between 10:00 pm and 7:00 am), the Project and the REDA would be restricted from mining within 1,250 feet of any occupied residential structure if a direct line-of-sight exists between the mining activity and the occupied structure(s) If the line-of-site is blocked, noise-generating activities may extend to within 500 feet of occupied residential structures. Thus, nighttime operational noise impacts under the proposed Project and REDA would be reduced to less-than-significant levels, and impacts would be similar.

There would be no changes to operational characteristics under the REDA as compared to the proposed Project. Thus, both he proposed Project and REDA would result in an increase in 425 passenger care equivalents (PCEs). For the reasons discussed in EIR Subsection 4.8, *Noise*, transportation-related noise would be less than significant under the REDA and proposed Project, and impacts would be similar.

Although the NPA would introduce blasting activities and mining activities as close as 414 feet from the nearest residential home, the analysis in EIR Subsection 4.3.7 demonstrates that Project-related blasting and mining equipment would result in less-than-significant impacts associated with groundborne noise or groundborne vibration at the nearest home. Under the REDA, the distance between the disturbance limits and the nearest home would increase to approximately 975 feet. Thus, impacts due to groundborne vibration or groundborne noise would be reduced under the REDA, although impacts would be less than significant under both the proposed Project and the REDA.

Neither the proposed Project nor the REDA would be impacted by noise related to airport or private airport operations. Impacts would not occur under the Project and REDA and would be similar.

I. Transportation and Circulation

Under the REDA, daily operational characteristics would be identical to the proposed Project. Thus, both the REDA and the proposed Project would result in the generation of 425 new PCE trips from the site. As with the proposed Project, cumulatively considerable and unavoidable impacts would occur to the following facilities under the REDA:

- EAPC (2016) Conditions:
  - Cumulatively considerable impact to the I-15 Northbound Ramp/Nichols Road intersection (LOS F AM peak hour; LOS E PM peak hour); and
  - Cumulatively considerable impact due to the need to signalize the I-15 Northbound Ramps/Nichols Road intersection.

- Horizon Year (2035) Conditions:
  - Cumulatively considerable impact to the I-15 Northbound Ramp/Nichols Road intersection (LOS F during both AM and PM peak hours);
  - Cumulatively considerable impact due to the projected off-ramp queueing issue at the I-15 northbound off-ramps to Nichols Road; and
  - Cumulatively considerable impact due to deficiencies at the I-15 Northbound Ramps/Nichols Road merge/diverge junction (LOS F AM Peak Hour; LOS E PM Peak Hour).

The above-listed impacts also affect I-15, a Congestion Management Plan (CMP) designated facility. Thus, impacts due to a conflict with a level of service standard established by the county congestion management agency for designated roads or highways would be similar under the proposed Project and the REDA, and impacts would be cumulatively considerable and unavoidable.

Neither the proposed Project nor the REDA would result in impacts due to a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks, and impacts would be similar under both the REDA and proposed Project.

Neither the proposed Project nor the REDA would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts under both the proposed Project and NPA would be similar, and would be less than significant.

Neither the proposed Project nor the REDA would result in inadequate emergency access. No impacts would occur under the proposed Project or the REDA, and impacts would be similar.

Based on the analysis presented in EIR Subsection 4.9.7 (refer the Threshold f.), the proposed Project and the REDA would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities). Accordingly, impacts under both the NPA and proposed Project would be less than significant and would be similar.

J. Utilities and Service Systems

Under existing conditions, wastewater treatment at the Nichols Canyon Mine is handled by portable toilets, which are regularly emptied by a rental service company. Waste from these portable toilets is disposed of in accordance with all applicable regulatory requirements. Portable toilets would continue to be operated on-site for the duration of mining and reclamation activities under both the proposed Project and the REDA. There are no other potential sources of wastewater associated with the proposed Project or the REDA. Therefore, implementation of the proposed Project or REDA would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Thus, impacts would be less than significant and would be identical under the REDA and proposed Project.

Both the proposed Project and the REDA would result in a net increase of two employees as compared to historic baseline conditions; however, such an increase is not substantial and would not have an effect on existing wastewater treatment facilities, as wastewater treatment at the Nichols Canyon Mine is handled by portable toilets, which are regularly emptied by a rental service company. Thus, impacts due to the need for construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects would not occur under either the REDA or the proposed Project, and impacts would be similar.

Under historic baseline conditions, the Nichols Canyon Mine utilized approximately 64,000 gallons per day (gpd) for dust suppression. SMP 2015-01 includes new watering restrictions for soil stabilization, as shown on Figure 4.10-1, *Surface Mining Permit 2015-01 Dust Control Plan*, and implementation of the proposed Project and REDA would result in a net decrease in areas subject to watering as compared to historic baseline conditions. The reduction in water usage on-site would occur because SMP 2015-01 requires the use of soil binding chemicals, pavement, and other stabilization techniques to provide for adequate dust control while resulting in a net decrease in water used at the site. In total, it can be assumed that because areas on-site that require water for dust control would be reduced by approximately 45.8% as compared to baseline conditions; therefore, it can be assumed that total water use at the mine would decrease under the proposed Project and REDA from approximately 64,000 gpd to approximately 34,660 gpd as compared to baseline conditions. Although approval of the Project or the REDA would extend the duration of mining activities on-site as necessary to mine and reclaim the site, the EVWMD has determined that it has sufficient supplies to meet the demand for projected normal year, singly-dry year, and multiple-dry-year supply through 2035. This determination was made by the EVWMD based on future population and employment estimates within the EVMWD service area, and accounts for on-going mining activities at the Nichols Canyon Mine. (EVMWD, 2011a, Tables ES-9, ES-10, and ES-11) Therefore, because total water usage on-site would decrease under the proposed Project as compared to baseline conditions, and because the EVMWD has sufficient supplies through 2035, including during dry and multiple-dry years, the REDA's impacts to water supplies would be less than significant and identical to the proposed Project.

Implementation of the proposed Project or REDA would result in a net decrease of 29,340 gpd as compared to baseline. Also, the UWMP concludes that sufficient supply exists to meet the demand for projected normal year, singly-dry year, and multiple-dry-year supply through 2035. (EVMWD, 2011a, p. 10) The proposed Project and REDA have no potential to result in the construction of new or expanded water treatment facilities, and no impact would occur.

Implementation of the proposed Project or REDA would result in the net increase of two employees as compared to baseline conditions, and the Project is not expected to result in a substantial increase in the amount of wastewater generated at the site as compared to wastewater generated under baseline conditions. Furthermore, wastewater generated at the site under existing conditions is handled via portable toilets, and there would be no need for additional portable toilets as a result of the Project or the REDA, nor would there be a discernible change in the number of times the service provider would need to service the Mine under the proposed Project and REDA. The wastewater haul company would dispose of all wastewater generated by the Project at permitted facilities with sufficient capacity to handle Project-generated wastewater. Neither the Project nor REDA utilize EVMWD's sewer system and there are no components of the Project or REDA that would cause or contribute to deficient wastewater treatment capacity; therefore, no impact would occur under either the proposed Project or REDA, and impacts would be similar.

There would be only nominal increase in solid waste generation at the Mine under the proposed Project and REDA, due to the expected increase of two employees. Solid waste generated under the Project or REDA would be conveyed to one of several landfills (El Sobrante, Badlands, or Lamb Canyon Landfills) operated or managed by the RCWMD. These existing landfills are required to comply with federal, state, and local statutes and regulations related to solid waste. Landfills within RCWMD's jurisdiction adhere to state guidelines which specify that a minimum of 15 years of system-wide landfill capacity shall be provided. (Lake Elsinore, 2011b, p. 3-16-5). Therefore, because the Project and REDA both would be served by a landfill with sufficient permitted capacity to accommodate the Mine's solid waste, and because the Project's and the REDA's incremental increase in solid waste generation would be negligible, impacts would be less than significant and would be similar.

The Project and the REDA would be required to comply with City and County waste reduction programs pursuant to the State's Integrated Waste Management Act and Chapter 14.12 of the City of Lake Elsinore Municipal Code. Solid waste generated at the Mine would be conveyed to one of several landfills operated or managed by RCWMD under both the Project and the REDA. These existing landfills are required to comply with federal, state, and local statutes and regulations related to solid waste. Compliance with federal, state, and local statutes would reduce the amount of solid waste generated by the Mine and diverted to landfills which in turn will aid in the extension of the life of affected disposal sites. The Project and REDA would comply with all applicable solid waste statutes and regulations; as such, impacts would be less than significant and would be similar under both the Project and REDA.

The proposed Project and REDA would involve the continuation and expansion of an existing mining operation, and would not result in a substantial increase in daily operational characteristics at the site. All utilities needed to serve the Nichols Canyon Mine are currently in place. Specifically, electricity is provided to the site via private power poles from a connection near the Mine's southern boundary, and these existing power poles would not require expansion as a result of the Project. There are no other utilities needed in support of mining operations that would have the potential to cause significant environmental effects. Accordingly, no impact would occur under either the Project or the RDA, and impacts would be similar.

K. Conclusion

Implementation of the Reduced Expanded Disturbance Area and the proposed Project would result in a reduction in areas subject to physical impacts by the Project from approximately 24 acres to 17 acres. All other characteristics of the REDA would be identical to the proposed Project. Impacts to the following issue areas would be reduced under the REDA in relation to the proposed Project: aesthetics; biological resources; noise. All other impacts would be the same under the REDA and the proposed Project.

The REDA would meet all of the Project's objectives although it would meet two objectives to a lesser extent than the proposed Project. The REDA would increase the available high-quality aggregate reserves available on the property, although by seven fewer acres than the proposed Project. Additionally, the REDA would be less effective at making the most usable space from the Mine's disturbance limits. The REDA would meet the Project's remaining objectives.

6.3.3 REDUCED TRAFFIC ALTERNATIVE (RTA)

The Reduced Traffic Alternative (RTA) considers implementation of the Project as proposed, but with a restriction on daily tonnage from the mine from 5,000 tpd under the proposed Project to 4,578 tpd, of which 1,330 tpd would be attributable to the RTA and 3,248 tpd attributable to existing baseline operations. Using the values presented in EIR Table 4.9-11, 1,330 tpd would result in approximately 223 average daily trips (ADT), with 49 AM peak hour trips and 40 trips during the PM peak hour. Due to the restriction in tpd, it is expected that this alternative would take approximately 9% longer to achieve the final grades as specified by RP 2006-01A2.

Under the RTA, the proposed increase in daily operations over baseline conditions would produce fewer than 50 peak hour trips at all study area intersections. As a result, this alternative would avoid the following near-term cumulatively-considerable impacts of the proposed Project:

- EAPC (2016) Conditions:
    - Cumulatively considerable impact to the I-15 Northbound Ramps/Nichols Road intersection (LOS F AM peak hour; LOS E PM peak hour); and
    - Cumulatively considerable impact due to the need to signalize the I-15 Northbound Ramps/Nichols Road intersection.

- Horizon Year (2035) Conditions:
    - Cumulatively considerable impact to the I-15 Northbound Ramp/Nichols Road intersection;
    - Cumulatively considerable impact due to the need to signalize the I-15 Northbound Ramps/Nichols Road intersection.
    - Cumulatively considerable impact due to the projected off-ramp queueing issue at the I-15 northbound off-ramps to Nichols Road; and
    - Cumulatively considerable impact due to deficiencies at the I-15 Northbound Ramps/Nichols Road merge/diverge junction.

All other components of the RTA would be identical to the proposed Project. This alternative was selected to eliminate the Project's cumulatively considerable impacts to transportation and traffic, which also would reduce the Project's daily emissions of air quality pollutants and traffic-related noise.

A. Aesthetics

No unique or scenic vistas would be impacted by the Project or the RTA, as the Project site does not contain any scenic vistas, nor does it offer unique views of any visually prominent features. Additionally, areas subject to mining activities would be identical to the proposed Project. Thus, impacts to scenic vistas and unique views would be similar to the Project's less-than-significant impact to scenic vistas.

The Mine also is not visible from any State-designated scenic highways. As such, impacts to resources visible from a designated scenic highway corridor would be similar to the Project's less-than-significant impacts.

Areas planned for mining disturbance would be identical under the RTA and the proposed Project. Thus, impacts due to the degradation of the existing visual character or quality of the site or its surrounding areas would be identical under the RTA in comparison to the Project, and in both cases impacts would be less than significant.

Under the proposed Project and the RTA, the time limits for both mining and asphalt batch plant operation would be extended to between 4:00 a.m. and 12:00 a.m. (Monday through Saturday, excluding Federal Holidays) for mining equipment operation and 24 hours per day (Monday through Saturdays, excluding Federal Holidays) for aggregate and asphalt batch plant export activities. Neither the Project nor the RTA proposes any new lighting elements on-site. Thus, impacts due to light and glare would identical under the RTA and the proposed Project, and such impacts would be less than significant.

B. Air Quality

The proposed Project is consistent both with the site's land use at the time the 2012 Air Quality Management Plan (AQMP) was adopted, and the site's "Extractive Overlay" General Plan land use designation and would therefore result in emissions "accounted for" in the AQMP based on the mining activities that occurred on-site in 2012 and the site's General Plan land use designation. With mitigation, the Project's regional NO_X emissions impact would be reduced to less than significant, and the Project would not result in any exceedances of the SCAQMD localized significance thresholds. As with the proposed Project, the RTA would be consistent with the growth forecast assumptions for the site and emissions associated with the RTA also are accounted for by the AQMP. Thus, impacts due to a conflict with the AQMP under the Project and the RTA would be similar and less than significant.

With mitigation for NO_X emissions, the proposed Project would not exceed the SCAQMD regional thresholds of significance for any criteria pollutant. Under the RTA, total daily mining-related emissions from the Project site would be reduced as compared to the proposed Project due to the restriction on allowable daily tonnage. Thus, the RTA would result in reduced impacts due to air

quality emissions and violations of air quality standards as compared to the proposed Project, although both the proposed Project and the RTA would result in less-than-significant impacts.

There is no potential for the Project or the RTA to contribute to impacts associated with CO "Hot Spots," as there are no intersections within the Project site's vicinity that experience the levels of traffic needed to form a CO "Hot Spot." Implementation of the proposed Project would result in less-than-significant impacts due to both cancer and non-cancer risks from diesel particulate matter (DPM) emissions. However, due to the reduction in the average tons per day associated with the RTA, impacts associated with DPM emissions (and associated cancer and non-cancer risks) would be reduced under the RTA as compared to the proposed Project.

Potential sources of operational odors generated by the Project and the RTA would include disposal of miscellaneous refuse. However, only a nominal increase in solid waste would occur in association with the proposed Project or the RTA. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances. Consistent with City requirements, all refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Thus, impacts due to odors under both the RTA and the proposed Project would be similar and would be less than significant.

C. Biological Resources

Under the RTA, the Expanded Disturbance Area (EDA) would be identical to the Project. As with the proposed Project, impacts to sensitive plant species would not occur under the RTA. As with the proposed Project, new indirect impacts to sensitive animal species also would occur under the RTA. Additionally, the Project's impacts to 21.4 acres of brittlebush scrub and 2.1 acres of non-native grassland habitat also would be impacted under the RTA. Thus, the RTA would have impacts that are identical to the Project's direct and indirect impacts to sensitive animal species and sensitive habitats. With mitigation, impacts would be reduced to less-than-significant levels.

Although there is no riparian habitat on-site, implementation of the proposed Project and RTA would result in direct impacts to 21.4 acres of brittlebush scrub and 2.1 acres of non-native grassland, which provide habitat for sensitive animal species (i.e., coastal California gnatcatcher and MBTA-protected birds and raptors). These impacts would be reduced to less-than-significant levels with the incorporation of mitigation, and following mitigation impacts would be identical under the proposed Project and the RTA.

The proposed Project and the RTA would impact approximately 0.05 acre of Corps non-wetland WUS and 0.17 acre of CDFW streambed. Mitigation would be required under both the Project and the RTA to reduce these impacts to less-than-significant levels.

Neither the proposed Project nor the RTA have the potential to result in impacts to any native resident or migratory fish, established wildlife corridor, or native wildlife nursery sites. However, the proposed Project and the RTA both have the potential to impact native, migratory, and nesting birds protected by the MBTA that may exist within the EDA. These potential impacts would be identical under the Project and the RTA.

Neither the proposed Project nor the RTA would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Although the Nichols Canyon Mine is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area, pursuant to a March 2004 Settlement Agreement and MOU signed between Riverside County and the former landowner, the 199-acre Nichols Canyon Mine site is fully exempt from the provisions and requirements of the MSHCP. Thus, no impacts due to a conflict with the MSHCP would occur under the proposed Project or the RTA. Additionally, the Mine is located within the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan (HCP), and the proposed Project would be subject to the payment of fees in accordance with City of Lake Elsinore Municipal Code Chapter 19.04. Payment of SKR fees also would be required under the RTA. Accordingly, impacts due to a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan would not occur under the proposed Project or the RTA.

D. Cultural Resources

There are no historical resources as defined in § 15064.5 within the Nichols Canyon Mine site. Thus, there would be no impacts to historical resources under the proposed Project or the RTA, and impacts would be similar.

No archeological resources meeting the definition of § 15064.5 within the Nichols Canyon Mine site, and none are expected within the areas already disturbed by mining activities or the EDA. Accordingly, no impact to archaeological resources would occur under the RTA or the proposed Project, and impacts would be similar.

According to GPU EIR Figure 3.2-3, the Nichols Canyon Mine has a "low" and "undetermined" potential for paleontological resources to be uncovered (City of Lake Elsinore, 2011b, Figure 3.2-3). The geologic units within the bounds of the Nichols Canyon Mine are either assigned a Low Potential to yield fossiliferous materials, or are regarded as unlikely to yield fossiliferous materials on the basis of the geologic field investigation. Based on the published geologic map units within the bounds of the Nichols Canyon Mine, the lack of any known fossiliferous deposits in these units, the assignment of a Low Potential to contain significant nonrenewable paleontological resources (i.e. fossils) in the granitic and young alluvial fan sediments, and the results of the geologic field examination, the Paleontological Resource and Monitoring Assessment concludes that the likelihood of finding fossiliferous materials within the Project site during any further excavation (quarrying) and/or grading activities is low to nil. (BFSA, 2015a, p. 3) Accordingly, impacts to paleontological resources would not occur under the proposed Project or RTA, and impacts would be similar.

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site (BFSA, 2015b). Mining activities under the RTA and the proposed Project would be subject to California Health and Safety Code, § 7050.5 "Disturbance of Human Remains," which would ensure that any potential impacts to human remains, including human remains of Native American descent, would be less than significant. Accordingly, impacts to human remains would be less than significant under both the proposed Project and the RTA, and such impacts would be similar.

E. Geology and Soils

There are no known active or potentially active faults on the Mine site. Ground shaking at the Mine site would not result in mine slope failure and would therefore not expose people or structures to adverse effects involving injury or death. The potential for liquefaction and other shallow groundwater hazards within the Mine site is low. Under both the proposed Project and the RTA, slopes would be required to be protected with berms or drainage improvements as necessary to prevent slope erosion in the areas where natural slopes drain onto the reclaimed slopes. Risks associated with seismic hazards, earthquake faults, strong seismic ground shaking, seismic-related ground failure (including liquefaction) and landslides would be similar under both the proposed Project and the RTA and would be less than significant.

Under the RTA and proposed Project, dust control would be required on all disturbed portions of the Mine. Likewise, under both the Project and the RTA, upon final reclamation the site runoff would be directed towards detention basins to control erosion. Therefore, under both the Project and the RTA, impacts due to erosion would be similar and less than significant.

Based on slope stability analyses conducted by CHJ Consultants, the whole rock strength in the proposed slope areas of the Mine is sufficient to accommodate the proposed overall slope angles. Based on the analyses, the proposed overall approximate 45-degree mine and cut-slopes up to approximately 480 feet in height are suitably stable against gross failure for the long-term conditions, including the effects of seismic shaking. (CHJ Consultants, 2015, p. 20) Thus, impacts due to on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be similar under the proposed Project and the RTA and would be less than significant.

Due to the nature of the proposed activity under both the proposed Project and RTA (i.e., surface mining), a less-than-significant impact associated with expansive soil would occur because soils would be removed during mining activities. Any future use of the Project site for other land uses would require environmental review and a separate analysis regarding potential impacts from expansive soils. Thus, the Project and RTA would have a less-than-significant impact in this regard, and impacts would be similar.

The Project and RTA do not propose the use of septic tanks or alternative waste water disposal systems. Both the Project and the RTA would utilize portable toilets, as is the case with the existing mining operation. Accordingly, no impact associated with septic tanks or alternative waste water systems would occur under either the Project or the RTA, and impacts would be similar.

F. Greenhouse Gas Emissions

As indicated in EIR Subsection 4.6, *Greenhouse Gas Emissions*, the net new Project-related GHG emissions would not exceed the SCAQMD's interim threshold of 10,000 $MTCO_2e$ per year. Although under the RTA the daily maximum tonnage, and thus, the daily GHG emissions would be reduced, it can reasonably be concluded that the annual tonnage under the RTA would be identical to the proposed Project. Thus, the RTA also would result in less-than-significant impacts due to GHG emissions, and impacts would be similar under the RTA and proposed Project on an annual basis.

Based on the analysis of Threshold b. in EIR Subsection 4.6.4, the proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the

emissions of greenhouse gases. It can be reasoned that the RTA also would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, based on the discussion in EIR Subsection 4.6.4. Accordingly, impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be similar under both the proposed Project and the RTA, and impacts would be less than significant.

G. Hydrology and Water Quality

Mining operations at the site would continue to be regulated by an approved Stormwater Pollution Prevention Plan (SWPPP) under both the proposed Project and the RTA, which requires the incorporation of Best Management Practices (BMPs) to preclude water quality impacts associated with mining operations. The BMPs specified in the required SWPPP would be required to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Mandatory compliance with the SWPPP would ensure that the Project and RTA would not violate any water quality standards or waste discharge requirements. In addition, pursuant to the requirements of the Santa Ana RWQCB and the City of Lake Elsinore, the Project and the RTA would be required to comply with the NPDES General Permit. An NPDES General Permit is required for all new and expanded mining facilities. In addition, both the Project and the RTA would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Because the Project and RTA would comply with mandatory SWPPP requirements and all runoff from actively mined portions of the Mine would be retained on-site during ongoing mining activities and would not affect any downstream properties or facilities, impacts would be less than significant and would be similar.

Similarly, upon completion of mining activities under both the Project and the RTA, runoff on the Nichols North site would be conveyed to a proposed sediment basin located in the southwestern portion of the Nichols North site, and eventually conveyed westerly to Stovepipe Creek beneath an existing culvert underneath I-15. Similarly, the Nichols South site also would achieve the final grades specified by the applicable reclamation plan upon completion of mining activities, and the majority of drainage from this portion of the site would be conveyed to a proposed sedimentation basin located in the northwestern portion of the Nichols South site and ultimately west beneath I-15. Runoff from the portions of the Nichols South and Nichols North sites that are not subject to mining activities would continue to be conveyed by Stovepipe Creek, located in the southeast corner of the Nichols South site, and ultimately west beneath I-15. (Bonadiman, 2015, Exhibit H) Due to the rocky nature of the Mine, the potential for sedimentation is considered low, and the proposed sedimentation basins for both the RTA and the proposed Project have been designed in accordance with Santa Ana RWQCB requirements to ensure runoff from the Mine does not result in any new violations or water quality objectives. (Bonadiman, 2015, p. 16) As such, impacts would be less than significant under both the RTA and the proposed Project, and impacts would be similar.

Neither the proposed Project nor the RTA would directly result in the depletion of groundwater supplies or groundwater recharge, as the Project site would remain undeveloped with pervious surfaces that would allow for infiltration of runoff at the site. Under both the proposed Project and the RTA, water usage at the site would be reduced by 45.84% as compared to what occurs under baseline conditions; however, watering at the site would likely be required over a greater duration of time under the RTA. Nonetheless, implementation of the RTA would result in similar impacts to

groundwater levels as compared to the proposed Project, and in both cases impacts would be less than significant.

Implementation of the proposed Project and the RTA would result in mining within the 24-acre EDA; however, such mining activities would not substantially change the existing drainage pattern of the site or area, because all runoff from the slopes within the EDA would ultimately be conveyed west towards Stove Pipe Creek. Accordingly, impacts due to changes to the existing drainage pattern of the site or area would be less than significant under both the proposed Project and RTA, and would be similar.

As indicated by the analysis of unit hydrograph calculations in the site-specific hydrology study and drainage analysis (see Table 14 of *Technical Appendix H)* a decrease in runoff flows would occur during the reclamation phase of the Project, and also during the reclamation phase of the RTA as the ultimate drainage conditions of the proposed Project and RTA are identical. The two sedimentation basins required under the RTA and for the proposed Project would be designed to provide the minimum required capacities as the basins are not required to reduce peak flow rates but instead are proposed to provide sediment control. Because the design features would ensure that runoff rates would be reduced compared to the existing condition, the proposed Project and RTA would not have an adverse impact on downstream properties. (Bonadiman, 2015, p. 16) Accordingly, the Project and RTA would result in less-than-significant impacts associated with an increase in the rate of surface runoff in a manner which would result in flooding on-or off-site. Thus, impacts would be less than significant under both the Project and RTA, and would be similar.

Under both the proposed Project and RTA, during on-going mining activities, all runoff within the areas subject to mining activities would be retained on-site, while areas not subject to disturbance would continue to drain via Stovepipe Creek, located in the southeastern portion of the Nichols South site. Upon final reclamation of the site, runoff that had been detained on-site would instead be conveyed to one of the two sediment basins located in Nichols North and Nichols South. Following water quality treatment, the flows would be conveyed by Stovepipe Creek via existing culverts beneath I-15 to the west. A decrease in runoff flows would occur during the reclamation phase of the Project and RTA. The two sedimentation basins required for both the RTA and proposed Project would be designed to provide the minimum required capacities as the basins are not required to reduce peak flow rates but instead are proposed to provide sediment control. Design features would ensure that runoff rates would be reduced compared to the existing condition. Runoff within the Nichols Canyon Mine also is subject to the existing SWPPP which provides BMP measures that ensures that runoff does not exceed the capacity of existing or planned storm water drainage systems, does not provide substantial, additional sources of polluted runoff, or otherwise degrade water quality. The Project and RTA would be subject to a revised SWPPP that includes BMP measures, as necessary and appropriate, to address potential water quality impacts. The proposed Project and RTA would be required to comply with the revised SWPPP, which identifies or would identify required BMPs to be incorporated into the Project or RTA to ensure that the proposed Project would not result in substantial amounts of polluted runoff. Thus, with mandatory compliance with the existing or revised SWPPP, the proposed Project and RTA would not create or contribute substantial additional sources of polluted runoff. Thus, impacts would be less than significant under both the Project and RTA, and impacts would be similar.

No new storm drainage facilities would be required in support of existing mining activities under the RTA or proposed mining activities under the proposed Project, as the existing basins on-site are adequately sized to detain all runoff from the mined areas (both with and without the Project). Under the proposed Project and RTA, a decrease in runoff flows is expected as a result of reclamation. The decrease in flow rate is a result of the longer path lengths which in turn reduce peak flow rates. Accordingly, reclamation under the proposed Project and RTA would result in a reduction of flow rates and neither the Project nor the RTA would require or result in the construction of new storm water drainage facilities or expansion of existing facilities. Thus, impacts would be less than significant and would be similar under the RTA and proposed Project.

There are no other conditions associated with the proposed Project or RTA that could result in the substantial degradation of water quality beyond what is discussed above and in Subsection 4.7.

The areas proposed for mining at the Nichols Canyon Mine under both the proposed Project and RTA are not located within a 100-year flood plain; thus, neither the Project nor the RTA would place housing or structures in a floodplain. Impacts would not occur and would be similar under the RTA and the proposed Project.

According to Figure 10, *Flood Hazards*, of the Riverside County General Plan's Elsinore Area Plan, the Nichols Canyon Mine is not located within a dam hazard zone related to the Railroad Canyon Dam or any other dam hazard zone. As depicted on Figure 3-2, *Vicinity Map*, the Nichols Canyon Mine is located approximately 2.0 miles north of the levee that is present in association with Lake Elsinore. Thus, due to the location of the Nichols Canyon Mine approximately 5.0 miles north of the Railroad Canyon Dam and approximately 2.0 miles north of the levee at Lake Elsinore and the direction of sheet flow, the Project and RTA would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam. Impacts would be less than significant and would be similar under both the Project and the RTA.

The Nichols Canyon Mine is located approximately 2.0 miles north of Lake Elsinore, which is the nearest body of water subject to seiches. Lake Elsinore incorporates USACE flood control devices including a berm fill at the southern end of the lake to lower the potential for a seiche to occur (Lake Elsinore, 2011b, 3.9-36). In addition, due to the site's distance from Lake Elsinore, and the elevation difference between Lake Elsinore and the Nichols Canyon Mine (i.e., the Project site occurs approximately 250 feet in elevation above Lake Elsinore), the Mine is not be subject to seiches or mudflow. Furthermore, the Nichols Canyon Mine is located approximately 25 miles from the Pacific Ocean, and has no potential to be affected by tsunamis. (Google Earth Pro, 2015) Thus, neither the Project nor the RTA would be subject to seiche, tsunami, or mudflow. No Impact would occur under either the RTA or proposed Project, and impacts would be similar.

H. Noise

Under the proposed Project and the RTA, mining activities within the EDA and within 500 feet from any existing residences during daytime hours (between 7:00 am and 10:00 pm) would expose the nearest residential structures to noise levels exceeding 55 dB Leq (10-min), with the nearest residential structure occurring approximately 414 feet from the EDA. Under the RTA, the duration of these noise impacts on a given day would be reduced, although the RTA would extend mining activities over a greater length of time overall as compared to the Project; thus, noise impacts under

the RTA and the Project would be similar, and would be significant and unavoidable for homes within 500 feet of the EDA.

During nighttime hours (between 10:00 pm and 7:00 am), the Project and the RTA would be restricted from mining within 1,250 feet of any occupied residential structure if a direct line-of-sight exists between the mining activity and the occupied structure(s) If the line-of-site is blocked, noise-generating activities may extend to within 500 feet of occupied residential structures. Thus, nighttime operational noise impacts under the proposed Project and the RTA would be reduced to less-than-significant levels, and impacts would be similar.

The Project would result in a greater increase associated transportation-related noise as compared to the RTA due to the increase in 425 passenger care equivalents (PCEs) under the proposed Project as compared to 322 PCE per day under the RTA; thus the Project would result in increased transportation-related noise impacts in comparison to the RTA. However, transportation noise-related impacts under both the Project and RTA would be less than significant.

Although the Project and the RTA would introduce blasting activities and mining activities as close as 414 feet from the nearest residential home, the analysis in EIR Subsection 4.3.7 demonstrates that Project-related blasting and mining equipment would result in less-than-significant impacts associated with groundborne noise or groundborne vibration at the nearest home. Blasting-related impacts would be similar under the RTA and the proposed Project.

Neither the proposed Project nor the RTA would be impacted by noise related to airport or private airport operations. Impacts would not occur under the Project and RTA and would be similar.

I. Transportation and Circulation

Under the RTA, the total daily tonnage at the Mine would be restricted to 4,578 tpd as compared to 5,000 tpd under the proposed Project. Average Daily Traffic (ADT) attributable to the RTA would be reduced from 1,752 ADT under the proposed Project to 1,330 ADT under the RTA. As a result, the RTA would result in approximately 49 AM PCE peak hour trips and 40 PM peak hour trips. As a result, the RTA would not send more than 50 peak hour trips to any study area intersection, and the following Project-related cumulatively-considerable impacts would be avoided under the RTA:

- EAPC (2016) Conditions:
    - Cumulatively considerable impact to the I-15 Northbound Ramp/Nichols Road intersection (LOS F AM peak hour; LOS E PM peak hour); and
    - Cumulatively considerable impact due to the need to signalize the I-15 Northbound Ramps/Nichols Road intersection.

- Horizon Year (2035) Conditions:
    - Cumulatively considerable impact to the I-15 Northbound Ramp/Nichols Road intersection (LOS F during both AM and PM peak hours);
    - Cumulatively considerable impact due to the projected off-ramp queueing issue at the I-15 northbound off-ramps to Nichols Road; and
    - Cumulatively considerable impact due to deficiencies at the I-15 Northbound Ramps/Nichols Road merge/diverge junction (LOS F AM Peak Hour; LOS E PM Peak Hour).

The above-listed impacts also affect I-15, a Congestion Management Plan (CMP) designated facility. Thus, impacts due to a conflict with a level of service standard established by the county congestion management agency for designated roads or highways would be increased under the Project as compared to the RTA.

Neither the proposed Project nor the RTA would result in impacts due to a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks, and impacts would be similar under both the RTA and proposed Project.

Neither the proposed Project nor the RTA would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts under both the proposed Project and RTA would be similar, and would be less than significant.

Neither the proposed Project nor the RTA would result in inadequate emergency access. No impacts would occur under the proposed Project or the RTA, and impacts would be similar.

Based on the analysis presented in EIR Subsection 4.9.7 (refer the Threshold f.), the proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities). There are no components associated with the RTA that would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities). Accordingly, impacts under both the RTA and proposed Project would be less than significant and would be similar.

J. Utilities and Service Systems

Under existing conditions, wastewater treatment at the Nichols Canyon Mine is handled by portable toilets, which are regularly emptied by a rental service company. Waste from these portable toilets is disposed of in accordance with all applicable regulatory requirements. Portable toilets would continue to be operated on-site for the duration of mining and reclamation activities under both the proposed Project and the RTA. There are no other potential sources of wastewater associated with the proposed Project or the RTA. Therefore, implementation of the proposed Project or RTA would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Thus, impacts would be less than significant and would be identical under the RTA and proposed Project.

Both the Project the proposed Project and the RTA would result in a net increase of two employees as compared to baseline conditions. However, such an increase is not substantial and would not have an effect on existing wastewater treatment facilities, as wastewater treatment at the Nichols Canyon Mine is handled by portable toilets, which are regularly emptied by a rental service company. Thus, impacts due to the need for construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects would not occur under either the RTA or the proposed Project, and impacts would be similar.

As shown on Figure 4.10-1, *RP 2006-01A2 Dust Control Plan*, under both the RTA and the proposed Project, areas subject to watering would be decreased from 20.33 acres under historical baseline

conditions to 11.01 acres. The reduction in water usage on-site would occur because both the RTA and proposed Project would require the use of soil binding chemicals, pavement, and other stabilization techniques to provide for adequate dust control while resulting in a net decrease in water used at the site. In total, it can be assumed that because areas on-site that require water for dust control would be reduced by approximately 45.8% as compared to baseline conditions; therefore, it can be assumed that total water use at the mine would decrease under the proposed Project and RTA from approximately 64,000 gpd to approximately 34,660 gpd as compared to historical baseline conditions. Although approval of the Project would extend the duration of mining activities on-site as necessary to mine and reclaim the proposed EDA, the EVWMD has determined that it has sufficient supplies to meet the demand for projected normal year, singly-dry year, and multiple-dry-year supply through 2035. This determination was made by the EVWMD based on future population and employment estimates within the EVMWD service area, and accounts for on-going mining activities at the Nichols Canyon Mine. (EVMWD, 2011a, Tables ES-9, ES-10, and ES-11) Therefore, because total water usage on-site would decrease under the proposed Project and the RTA as compared to historical baseline conditions, and because the EVMWD has sufficient supplies through 2035, including during dry and multiple-dry years, the Project's impacts to water supplies would be less than significant and similar under the proposed Project and the RTA.

Implementation of the proposed Project and the RTA would result in a net decrease of 29,340 gpd as compared to historical baseline conditions. Also, the UWMP concludes that sufficient supply exists to meet the demand for projected normal year, singly-dry year, and multiple-dry-year supply through 2035. (EVMWD, 2011a, p. 10) The proposed Project and the RTA have no potential to result in the construction of new or expanded water treatment facilities, and no impact would occur. Impacts would be similar under the proposed Project and the RTA.

Implementation of the proposed Project and the RTA would result in the net increase of two employees as compared to historical baseline conditions, and neither the RTA nor the Project would result in a substantial increase in the amount of wastewater generated at the site as compared to wastewater generated under historic baseline conditions. Furthermore, wastewater generated at the site under existing conditions is handled via portable toilets, and there would be no need for additional portable toilets as a result of the Project or the RTA, nor would there be a discernible change in the number of times the service provider would need to service the Mine under the proposed Project and RTA. The wastewater haul company would dispose of all wastewater generated by the Project at permitted facilities with sufficient capacity to handle Project-generated wastewater. Neither the Project nor RTA utilize EVMWD's sewer system and there are no components of the Project or RTA that would cause or contribute to deficient wastewater treatment capacity; therefore, no impact would occur under either the proposed Project or RTA, and impacts would be similar.

There would be only nominal increase in solid waste generation at the Mine under the proposed Project and RTA as compared to historical baseline conditions, due to the expected increase of two employees under the proposed Project and RTA. Solid waste generated under the Project or RTA would be conveyed to one of several landfills (El Sobrante, Badlands, or Lamb Canyon Landfills) operated or managed by the RCWMD. These existing landfills are required to comply with federal, state, and local statutes and regulations related to solid waste. Landfills within RCWMD's jurisdiction adhere to state guidelines which specify that a minimum of 15 years of system-wide landfill capacity shall be provided. (Lake Elsinore, 2011b, p. 3-16-5). Therefore, because the Project

and RTA both would be served by a landfill with sufficient permitted capacity to accommodate the Mine's solid waste, and because the incremental increase in solid waste generation under the proposed Project and RTA would be negligible, impacts would be less than significant and would be similar under both the proposed Project and RTA.

The Project and the RTA would be required to comply with City and County waste reduction programs pursuant to the State's Integrated Waste Management Act and Chapter 14.12 of the City of Lake Elsinore Municipal Code. Solid waste generated at the Mine would be conveyed to one of several landfills operated or managed by RCWMD under both the Project and the RTA. These existing landfills are required to comply with federal, state, and local statutes and regulations related to solid waste. Compliance with federal, state, and local statutes would reduce the amount of solid waste generated by the Mine and diverted to landfills which in turn will aid in the extension of the life of affected disposal sites. The Project and RTA would comply with all applicable solid waste statutes and regulations; as such, impacts would be less than significant and would be similar under both the Project and RTA.

The proposed Project and RTA would involve the continuation and expansion of an existing mining operation, and would not result in a substantial increase in daily operational characteristics at the site. All utilities needed to serve the Nichols Canyon Mine are currently in place. Specifically, electricity is provided to the site via private power poles from a connection near the Mine's southern boundary, and these existing power poles would not require expansion as a result of the Project. There are no other utilities needed in support of mining operations that would have the potential to cause significant environmental effects. Accordingly, no impact would occur under either the Project or the RTA, and impacts would be similar.

K. Conclusion

Implementation of the Reduced Traffic Alternative and the proposed Project would result in identical areas of physical environmental impacts, although under the RTA the maximum amount of tonnage at the site would be restricted, from 5,000 tpd (total) under the proposed Project to 4,578 tpd under the RTA. Impacts to the following issue areas would be reduced under the RTA in relation to the proposed Project: air quality; noise (transportation-related only); and traffic and transportation. Impacts to aesthetics; biological resources; cultural resources; geology and soils; greenhouse gases; hydrology and water quality; operational (non-transportation) related noise; and utilities and service systems would be similar under the proposed Project and the RTA. There would be no environmental effects that would increase in relation to the Project under the RTA.

The RTA would meet all of the Project's objectives. The RTA would increase the available high-quality aggregate reserves available on the property; expand the hours of operation at the mine; reduce the annual tonnage; revise the approved reclamation plan; minimize environmental impacts; and make the most usable space from the Mine's disturbance limits. However it should be noted that although the RTA would eliminate the Project's cumulatively considerable traffic and circulation impacts, the RTA would result in the generation of traffic over a longer duration as compared to the proposed Project. Thus, although daily traffic would improve under the RTA in relation to the proposed Project, the RTA would contribute traffic to the intersection of I-15 and the Northbound On- and Off-Ramps over a longer duration than the Project. Although the RTA would produce fewer than 50 PCE peak hour trips and would reduce daily air quality emissions, the RTA would contribute traffic to the deficient facilities for a longer duration as compared to the proposed Project and would

generate air quality pollutants over a longer duration than the proposed Project. Additionally, the RTA would fail to reduce or eliminate the Project's daytime operational noise impacts affecting nearby residences.

6.4 COMPARISON OF PROJECT ALTERNATIVES TO THE PROPOSED PROJECT

In conformance with CEQA Guidelines § 15126.6(d), Table 6-1, *Alternatives to the Proposed Project – Comparison of Environmental Impacts*, provides a summary comparison of impacts that would occur under the proposed Project and each of the Project's three alternatives (NPA, REDA, and RTA). Additionally, Table 6-1 provides a summary comparison of the degree to which each alternative would achieve the Project's objectives.

Table 6-1 Alternatives to the Proposed Project – Comparison of Environmental Impacts

ENVIRONMENTAL TOPIC	PROPOSED PROJECT SIGNIFICANCE OF IMPACTS AFTER MITIGATION	LEVEL OF IMPACT COMPARED TO THE PROPOSED PROJECT		
		NO PROJECT ALTERNATIVE	REDUCED EXPANDED DISTURBANCE ALTERNATIVE	REDUCED TRAFFIC ALTERNATIVE
Aesthetics	Less-than-Significant	Increased	Reduced	Similar
Air Quality	Less-than-Significant	Reduced	Similar	Reduced
Biological Resources	Less-than-Significant	Reduced	Reduced	Similar
Cultural Resources	Less-than-Significant	Similar	Similar	Similar
Geology and Soils	Less-than-Significant	Similar	Similar	Similar
Greenhouse Gas Emissions	Less-than-Significant	Reduced	Similar	Similar
Hydrology and Water Quality	Less-than-Significant	Increased	Similar	Similar
Noise	Significant and Unavoidable*	Daytime: Reduced but not Avoided* Nighttime: Increased	Reduced and Avoided	Traffic-Related Noise: Reduced Operational Noise: Similar and Not Avoided*
Transportation/ Circulation	Cumulatively Significant and Unavoidable*	Reduced and Avoided	Similar*	Reduced and Avoided
Utilities /Service Systems	Less-than-Significant	Increased	Similar	Similar
Project Objectives[1]		**Achieved?**	**Achieved?**	**Achieved?**
Objective A:		No	Yes, but to a lesser degree	Yes
Objective B:		No	Yes	Yes
Objective C:		No	Yes	Yes
Objective D:		No	Yes	Yes
Objective E:		No	Yes	Yes
Objective F:		No	Yes	Yes
Objective G:		No	Yes, but to a lesser degree	Yes

1. Refer to EIR Subsection 3.2 for a list of the proposed Project's specific objectives.