The following is an introduction to the environmental analysis for the proposed White Knob/White Ridge Limestone Quarries Expansion, including a discussion of the cumulative analysis approach and general assumptions used in the environmental analysis. The reader is referred to the individual technical sections of the Draft Environmental Impact Report (Draft EIR or DEIR) (Sections 3.1 through 3.8) for further information on the specific assumptions and methodologies used in the analysis for each particular technical subject.

ANALYSIS ASSUMPTIONS USED TO EVALUATE THE IMPACTS OF THE PROPOSED WHITE KNOB/WHITE RIDGE LIMESTONE QUARRIES EXPANSION

BASELINE ENVIRONMENTAL CONDITIONS ASSUMED IN THE DRAFT EIR

This subsection identifies the actual existing physical conditions of the project site to provide a point of comparison of pre-proposed project conditions (the baseline, inclusive of the existing project) and post-proposed project conditions to ensure that changes caused by the proposed project are seen in context and significant effects can be identified accurately.

For purposes of assessing the environmental effects of a proposed project, CEQA Guidelines Section 15126.2 states, "the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published." See also CEQA Guidelines Section 15125(a). However, there is no uniform, inflexible rule regarding establishment of this "baseline," and a lead agency has discretion to decide how the existing physical conditions without the project can most realistically be measured.

For the proposed project and in this EIR, the County of San Bernardino, as the lead agency, is evaluating changes in the existing physical conditions in the affected area as they existed when the County released the Notice of Preparation (NOP) for the proposed project in June 2013. The existing quarries are currently operating and have been in operation under the current reclamation plan (RP# 86M-04) since the initial project approval in 1986. Therefore, current mining operations are part of the baseline environmental conditions for the project. In addition, surface mining operations have continued on the project site since the release of the NOP and have resulted in further surface disturbance and other changes to the physical environment. This EIR evaluates whether changes in the baseline environmental conditions of the White Knob/White Ridge Limestone Quarries and current operations that are proposed by the Amended Plan would result in significant physical effects to the environment.

At this time, Omya is in the process of acquiring the additional 70 acres of BLM land. As part of the 2011 Settlement Agreement, Omya expanded the right-of-way of the off-site haul road from 67 acres to its present 83.5 acres, which are also located on BLM land. The off-site haul road improvements and the sale of BLM land to Omya will be a part of the County's Conditions of Approval for the Amended Mine and Reclamation Plan. Thus, this EIR assumes that the federal actions associated with the improvements and land transfer are approved.

Summary of Current Operations

Current mining operations on the project site include mining at the White Knob Quarry site and Annex Quarry only as well as stockpiling at the existing Overburden Site #1 (OB-1), operation of the on-site crusher, and use of all existing internal haul roads and the primary access road. Actual mining operations at the White Ridge Quarry have not occurred, and this area is currently in its vacant natural state. The existing (under the current Reclamation Plan) surface mining

operation-related disturbance area totals approximately 138 acres, including the approximately 38 acres of the 40-acre Bureau of Land Management (BLM) haul road right-of-way.

The White Knob Quarry currently produces an average of 512,000 tons per year of excavated material, which includes 324,000 tons per year of ore to the crusher and 188,000 tons per year of overburden or non-spec rock. Of crushed ore material, 275,400 tons per year are sent to the processing plant for production and 48,600 tons per year of crusher fines are sent to the overburden stockpile.[1]

At the present time, production comes from both lower levels (5,500 foot level) and upper levels (6,200 foot level) within the White Knob Quarry. The procedure generally includes clearing of vegetation, topsoil removal and stockpiling, access road development, blast hole drilling and controlled blasting, and crushing and screening with a portable crusher. Crushed ore is then trucked to the processing plant and overburden material is sent to OB-1. During mining of the rock in the deposit at the top of the ridge and along the crest, boulders of white limestone have inadvertently rolled down the slope to the north and to the west into the West Canyon.

The White Knob Quarry operates year-round. Mining of ore grade limestone may occur throughout the year, but usually occurs about eight months a year. Overburden removal and quarry development may occur throughout the year, but usually occur for about four months per year.

STRUCTURE OF THE ENVIRONMENTAL IMPACT ANALYSIS

Sections 3.1 through 3.8 of this DEIR contain a detailed description of current setting conditions (including applicable regulatory setting), an evaluation of the direct and indirect environmental effects resulting from the implementation of the proposed project, and existing regulations that mitigate environmental effects. Furthermore, DEIR Sections 3.1 through 3.8 contain additional feasible mitigation measures and identify whether significant environmental effects of the project would remain after application of mitigation.

Section 3.9 of this DEIR contains a summary of those environmental issue areas that were determined not to be significantly affected by project implementation in the Initial Study (**EIR Appendix A**). These issue areas include the following:

- Agriculture and Forest Resources
- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing

[1] Based on a three-year baseline average. Three-year amounts are average actual production levels from 2004 to 2006.

- Public Services
- Recreation
- Transportation and Traffic

Existing Setting

This subsection includes a description of the physical setting associated with the technical area of discussion, consistent with CEQA Guidelines Section 15125. As previously identified, the existing setting is based on conditions as they existed when the NOP for the proposed project was released for circulation on June 12, 2013.

Regulatory Framework

This subsection identifies applicable federal, state, regional, and local plans, policies, laws, and regulations that apply to the technical area of discussion.

Standards of Significance

Standards of significance are identified and used to determine whether the environmental effects are considered "significant" and require the application of mitigation measures.

Methodology

The methodology of analysis for each impact area is defined in each analysis section. The various sections use methodologies specific to that impact area. For example, Air Quality uses project-specific air quality emission quantifications to determine the level of impact, while the Aesthetics methodology is subjective and is based, in part, on individual perception and visual photo simulations.

Project Impacts and Mitigation Measures

This subsection identifies direct and indirect environmental effects associated with implementation of the proposed project. Each environmental impact analysis is identified numerically (e.g., Impact 3.7.1 – Substantially Alter Drainage Pattern) and is supported by substantial evidence.

Mitigation measures for the proposed project were developed through a review of the environmental effects of the proposed project by consultants with technical expertise as well as by environmental professionals. The mitigation measures identified consist of "performance standards" that identify clear requirements that would avoid or minimize significant environmental effects (the use of performance standard mitigation is allowed under CEQA Guidelines Section 15126.4(a) and is supported by case law *Rio Vista Farm Bureau Center v. County of Solano* ([1st Dist. 1992] 5 Cal. App. 4th at pp. 371, 375–376 [7 Cal. Rptr. 2d 307]).

APPROACH TO THE CUMULATIVE IMPACT ANALYSIS

CEQA Guidelines Section 15130 requires that EIRs include an analysis of the cumulative impacts of a project when the project's effect is considered cumulatively considerable. Each technical section in the DEIR considers whether the project's effect on anticipated cumulative setting conditions is cumulatively considerable (i.e., a significant effect). "Cumulatively considerable"

means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (CEQA Guidelines Section 15065(a)(3)). The determination of whether the project's impact on cumulative conditions is considerable is based on a number of factors, including consideration of applicable public agency standards, consultation with public agencies, and expert opinion. The environmental effects of implementation of the proposed project are incorporated in the cumulative impact analysis contained in each technical section. In addition, Section 4.0, Other CEQA Analysis, provides a summary of the cumulative impacts associated with the proposed project.

Definition of Cumulative Setting

The general cumulative setting conditions considered in this Draft EIR are based on:

- **General Plans**. These are the existing land use plans that provide general growth patterns in the region, consisting of unincorporated San Bernardino County and the cities of San Bernardino, Victorville, Apple Valley, Hesperia, Big Bear Lake, Lake Arrowhead, Crestline, and Running Springs.

- **Large-Scale Surface Mining Projects**. This includes current large-scale proposed and approved surface mining projects in San Bernardino County Supervisorial District 1, which encompasses the project site (see **Table 3.0-1**). It should be noted that this list is not intended to be all-inclusive of surface mining activities in the county, but rather a general description of current surface mining activities.

Section 4.0 of the Draft EIR includes a description of the cumulative setting's geographic extent based on the characteristics of the environmental issue under consideration as set forth in Section 15130(b) of the CEQA Guidelines. The geographic scope of area and time horizon considered for each cumulative impact evaluated in the EIR is dictated by the specific type and nature of the impact being considered. For example, when considering a project's incremental contribution to cumulative air quality criteria pollutants, the geographic scope of area is the air basin in which the project is located. In contrast, geology impacts are generally site-specific and limited to the physical footprint of a project site, and water quality impacts are considered within the watershed in which the project is located. Cumulative effects are considered based on the specific geographic and temporal scopes identified on a resource-by-resource basis.

TABLE 3.0-1
PAST, PRESENT, AND FORESEEABLE PROJECTS

Project Name/ Number	Project Description	Project Location	Status of Project
Big Bear Disposal Office Addition (P201300365)	Revision to an approved action to modify the conditions of approval for an industrial park to allow the continued operation of a temporary construction demolition, debris recycling, and stockpiling operation on a portion of a 5.56-acre parcel	Big Bear City	Approved 12/22/11
Richard Woltil (P201300046)	Revision to an approved action at the Mitsubishi Cement Corporation Lucerne Valley Plant to add a 12-foot by 60-foot lime storage silo with pumps, mixing, and metering equipment to reduce emissions from kiln gases on a portion of 78 acres	Lucerne Valley	Conditionally Approved

Project Name/ Number	Project Description	Project Location	Status of Project
Miller, Linda A. Family Living Trust (P201200342)	Tentative parcel map (TPM 19413) to divide a 1-acre lot into four lots on northeast corner of Miller Lane and Mitchell Lane	Lake Erwin	Accepted
Munem Maida (P201300086)	Minor use permit to establish a 6,793-square-foot convenience store with grocery and type 21 off-site liquor sales and gas station on .89 acres	Lake Erwin	Accepted
LPA, Inc. (P201300366)	Revision to an approved action to add 10 new cabins, a new dining hall, a new maintenance shed, a new entrance gate, and a new bridge to the existing lake on portions of 130 acres	Big Bear City	Accepted
Dynamic Development (P201300122)	Minor use permit to establish a 9,026-square-foot general retail store on 1.75 acres	Lucerne Valley	Accepted
Martin, Johnny Ray (P200900099)	Parcel map exception to create four parcels and a remainder parcel on 640 acres	Rimrock	Accepted
Hadley, Paul (P201200240)	Tentative parcel map (19388) to create four parcels on 41.7 acres	Rimrock	Conditionally Approved
High Grade Materials Co. (P20120009)	Revision to a conditional use permit to expand the mining area of an existing 215-acre pit by 113 acres on a total of 328 acres	Lucerne Valley	Accepted
Twentynine Palms Mine Life Extension (AP20100087)	Revision to extend the life of an existing mining operation by 30 years to 6/30/2049	Twentynine Palms	Approved 1/8/2011
Robertson's Revision for Mine Life Extension (AP20110038)	Revision to extend the life of an existing mining operation by 30 years to 6/5/2053	Lucerne Valley	Approved
Mitsubishi Cement Corporation	A mining conditional use permit/reclamation plan to establish a new limestone quarry on 154 acres at 1.3 million tons per year production for a time frame of 120 years, south of the existing Cushenbury cement plant	State Highway 18, west side; Marble Canyon Road, approximately ¼ mile south of	EIR/EIS in process
Robertson's	Revision to extend the life of an existing mining operation by 30 years from 6/5/2023 to 6/5/2053 on 268 acres	Camp Rock Road, approximately ¼ mile west of; Highway 18, both sides	Application on hold
Searles Valley Minerals (AP20090011)	Re-establish mining reclamation plan until 1/15/2015 on 160-acre portion of 640 acres	6 miles east of Trona	Accepted
Daily Transit Mix, LLC (AP20130116)	Amendment to an existing mining and reclamation plan mine site (2001M-05) to extend the operating life by 30 years months and increase the facility from 12.2 acres to 14.5 acres	Paradise View Road and Powerline Road southeast corner .75 miles east of Fort Irwin Road	Accepted

Project Name/ Number	Project Description	Project Location	Status of Project
Hanson Aggregates, LLC (AP20120008)	Amendment to an approved mining and reclamation plan (conditional use permit) to expand by 11.72 acres an existing 365.94-acre mine site for a total of 377.66 acres within a total of 2,127.66 acres	National Trails Highway at Newberry Springs off-ramp	Approved 5/10/2012
Tetra Technologies Inc. (AP20120027)	Amendment change to an approved mining/ reclamation plan (2001M-03) to add five new production wells to increase the flow rate from 80 to 200 gallons and production to 10,000 to 12,000 liquid tons per year on a portion of 10,835 acres	Amboy Plant	Accepted
US Iron, LLC (AP20120012)	Conditional use permit for a mining and reclamation plan for the removal of iron ore tailings on 20 acres	I-15 and Cima Road, north of; Excelsior Road	Approved 8/9/2012
Dalton Trucking Inc. (AP20120002)	Mining and reclamation plan conditional use permit to establish a mine site on 160 acres; a portion of 640 acres to include a 8x30 portable scale house in section 5 18N 13 E; and 10 acres of mill sites for stock piling 80 feet in diameter and 10 feet high, to include an 8x30 office trailer on a portion of 160 acres in section 24 19N 12E for a period of 30 years	Mesquite Lake; 5 miles south of Sandy Valley, NV; northeast of Clark MTS; east of Kingston Road	Approved 2/20/2012
Sully-Miller Contracting Company (AP20110033)	Conditional use permit to revise a mining and reclamation plan based on previous mining, which expired in 2007; proposed plan proposes deletion of federal lands, changes from five phases to two phases, and increase in mining depth from 20 to 30 feet on 32 acres	National Trails Highway, north side; Goffs Road	Conditionally Approved 7/5/2012
Omya California	Revision to an approved action to add 15 acres of limestone rock storage to an existing mining operation on a portion of approximately 110 acres	Four parcels beginnings approximately 285 feet east of Crystal Creek Road, ending approximately 2,190 feet east of	Conditionally Approved
CalPortland Company (AP20120013)	Revision to an approved action for the CalPortland Cement Mining Reclamation Plan to backfill the quarry with cement kiln dust (CKD), plant waste material, and quarry waste rock upon completion of extraction operations, and identify alternative options for an end use	Slover Avenue, east of; extending between Rail Road, Access Road, and Cement Plant Road	Approved 8/1/2013
RMDG LLC (P201200293)	Certificate of land use compliance to recognize mineral resource development on 62 parcels of land in Red Mountain for a total of 705.19 acres; vested rights number: VR 2012-02 A, B & C	Approximately 23 miles north of Kramer Junction along US Route 395, Atolia and Red Mountain area	Approved
Pan American Minerals Inc. (P20120004)	Temporary use permit for 16 exploratory drilling holes	Calico Road, approximately 4,000 feet north of the turnoff	Approved 1/13/2012

Project Name/ Number	Project Description	Project Location	Status of Project
Bagdad Chase, Inc. (P201100214)	Temporary use permit for exploration for minerals at mining site	South of Highway 40, 3 miles past Ludlow	Approved 6/1/2011
Tetra Technologies (P201100481)	Temporary use permit for a salt mine to add a 1,344-square-foot office trailer on 587 acres	Saltus Road, both sides; National Trails Highway	Approved 12/9/2011
Specialties Minerals Inc. Quarries Plan of Operation (2003)	Three limestone mines	San Bernardino National Forest	US Forest Service jurisdiction
Baldwin Hard Rock Prospecting Permit	US Forest Service consent to the BLM issuing 29 permits for federal hard rock mineral prospecting will also propose to issue three special use permits needed for access and road construction	San Bernardino National Forest	US Forest Service Jurisdiction
Wildlands Conservancy	Revision to an approved action (Reclamation Plan CUP) by excluding 3.3 acres from the Cajon Pass Sand and Gravel Mine ("Cosy Dell") 51.10-acre reclamation area; areas to be excised from the boundaries of the Reclamation Plan and reclamation requirements include telecommunications equipment through long-term leases and easement, electrical power facilities through easement, access/easement roads to said facilities both on the east and west side of Interstate 15, and a historic stone wall	Interstate 15, both sides; Cleghorn Road	Approved 3/25/2013
Fig International Investment Corporation AP20140100/SMAR	Conditional Use Permit to establish a new mine operation affecting 30 acres within a 188 acre parcel area for purposes of excavating iron ore to a depth of 100 feet for a period of 15 years or until December 31, 2030. The mining operation will be conducted in two phases with the estimated completion of reclamation after the cessation of mining in December 2032.	Black Mine Rd, Johnson Valley	Accepted
Omya California AP20120022	Amended Plan of Operations and Reclamation Plan on total of 214.8 acres to extend operations until 2055.	Butterfield and Sentinel Quarries on Forest Service lands	Accepted

Source: County of San Bernardino 2014

COMMON TERMINOLOGY USED IN THE DRAFT EIR

This Draft EIR uses the following terminology to describe the environmental effects of the proposed project:

Less Than Significant Impact: A less than significant impact would cause no substantial change in the physical condition of the environment (no mitigation would be required for project effects found to be less than significant).

Significant Impact and Potentially Significant Impact: A significant impact would cause (or would potentially cause) a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects using

specified standards of significance provided in each technical section of the DEIR. Identified significant impacts are those where the project would result in an impact that can be measured or quantified, while identified potentially significant impacts are those impacts where an exact measurement of the project's effects cannot be made but substantial evidence indicates that the impact would exceed standards of significance. A potentially significant impact may also be an impact that may or may not occur and where a definite determination cannot be foreseen. Mitigation measures and/or project alternatives are identified to avoid or reduce project effects to the environment to a less than significant level.

Significant and Unavoidable Impact: A significant and unavoidable impact would result in a substantial negative change in the environment that cannot be avoided or mitigated to a less than significant level if the project is implemented. Pursuant to Section 15092(b) of the CEQA Guidelines, the County must issue a Statement of Overriding Considerations for these impacts prior to approving the project. Mitigation measures designed to minimize these impacts are described.

Less Than Cumulatively Considerable Impact: A less than cumulatively considerable impact would cause no substantial change in the physical condition of the environment under cumulative conditions.

Cumulatively Considerable Impact: A cumulatively considerable impact would result when the incremental effects of an individual project result in a significant adverse physical impact on the environment under cumulative conditions.

Standards of Significance: A set of significance criteria to determine at what level or "threshold" an impact would be considered significant. Significance criteria used in this EIR include the CEQA Guidelines; factual or scientific information; regulatory performance standards of local, state, and federal agencies; and County goals, objectives, and policies. Specified significance criteria used by the County of San Bernardino are identified at the beginning of the impact analyses in each technical section of the DEIR.

ENVIRONMENTAL IMPACT REPORTS UTILIZED IN THIS EIR

This Draft EIR utilizes technical information and analyses from previously prepared EIRs that are relevant to the consideration of environmental effects of the proposed project, which is supported by the CEQA Guidelines (see Sections 15148 [Citation] and 15150 [Incorporation by Reference]). In addition to materials cited, the following EIRs have been utilized in this Draft EIR and are incorporated by reference:

- *Final Environmental Impact Report for the Proposed White Knob-White Ridge Limestone Deposit Mining and Reclamation Plan* (State Clearinghouse No. 86050516)

- *Notice of Preparation for the Sentinel and Butterfield Quarries Expansion* (State Clearinghouse No. 2013021057)

By utilizing provisions of the CEQA Guidelines, the County, in preparing this DEIR, has been able to make maximum feasible and appropriate use of the technical information in these EIRs. These EIRs and other referenced materials are available for review on request at the County of San Bernardino Land Use Services Department at 385 N. Arrowhead Avenue, San Bernardino, CA 92415-0182.