

4 INTRODUCTION TO THE ANALYSIS

INTRODUCTION

The project proposes various amendments to the CEMEX Mining and Reclamation project approved in 1996 and operating continuously under several ownerships since that time. The project was originally analyzed in the Solano Long-Term Off-Channel Mining Permit Application FEIR (SCH #96012034) certified November 25, 1996 (Yolo County Board of Supervisors Resolution No. 96-201) which can be reviewed at the following website:

<http://www.yolocounty.org/government/general-government-departments/community-services/natural-resources/mining-projects-permits/cemex-cache-creek-zf-95-093>

The subject document is a Subsequent EIR prepared pursuant to Section 15162 of the CEQA Guidelines. For projects involving a previously-certified EIR, Section 15162 states that a Subsequent EIR (SEIR) should be prepared in specified circumstances, including when substantial changes are proposed to a project, or the circumstances under which the project will be undertaken have substantially changed, which will require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Further, a SEIR should be prepared where new information becomes available following the certification of the previous EIR that shows: a) the project will have significant effects not discussed in the previous EIR; b) effects discussed in the previous EIR will be substantially more severe than previously shown; c) mitigation measures or alternatives previously found infeasible are in fact feasible but the project proponent declines to adopt them; or d) considerably different mitigation measures or alternatives would substantially reduce significant effects but the project proponents decline to adopt them.

Also, as allowed under Sections 15152 and 15168 of the CEQA Guidelines, this Draft SEIR tiers from earlier relevant EIRs as follows:

- The 1996 EIR described and referenced above; and
- The CCAP Update FEIR (SCH #2017052069), particularly as related to impacts of the CCAP as a program, some setting information, programmatic growth inducement, programmatic cumulative impacts, and programmatic alternatives. The CCAP Update EIR can be reviewed at the following website:

<https://www.yolocounty.org/government/general-government-departments/county-administrator/county-administrator-divisions/natural-resources/cache-creek-area-plan-ccap/cache-creek-area-plan-20-year-update-eir>

This chapter contains an analysis of each potentially significant environmental issue that has been identified for the proposed project. The information below describes: 1) how a determination of significance is made; 2) the approach to analysis, when supplemental environmental analysis is triggered based on relevant substantial changes in the project and/or the circumstances under which the project will be undertaken, and/or new information as defined by CEQA Guidelines

Section 15162; 3) the environmental issues/topic areas addressed in sections in this chapter; and 4) the format of the sections in this chapter.

DETERMINATION OF SIGNIFICANCE

Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment. The CEQA Guidelines direct that this determination be based on scientific and factual data. The impact evaluation in the topical sections of this chapter is prefaced by standards of significance, which are the thresholds for determining whether an impact is significant. Revisions to the standards of significance since release of the 1996 EIR are identified within each topical section.

Subsequent to certification of the 1996 EIR, the CEQA Guidelines were amended to add several topical sections not previously addressed, including climate change and greenhouse gas emissions; energy; tribal cultural resources; and wildfire. These four impact topics were not considered in the 1996 EIR and are addressed herein. In addition, substantive changes have been made to the criteria for topics that were covered in the 1996 EIR. Specifically, the current CEQA Guidelines recommend the evaluation of toxic air contaminants (TACs) in the air quality section, and vehicle miles traveled (VMT) in the transportation and circulation section. TACs and VMT were not considered in the 1996 EIR and are addressed herein.

Impacts are categorized by level of significance before and after mitigation, as follows: Less than Significant (LTS), Significant (S), and Significant and Unavoidable (SU). The description of each determination is as follows:

Less than Significant. The impact would not cause significant adverse physical changes in the existing or projected future environment; therefore, mitigation is not required. Or, while some impact may be associated with the project, it is not significant or is acceptable based on the applicable thresholds of significance.

Significant. Under CEQA, a significant impact is defined as a substantial, or potentially substantial, adverse physical change in the environment. CEQA Guidelines Section 15064 states that the determination is to be made by the lead agency based on scientific and factual data, to the extent possible.

Significant and Unavoidable. An impact is considered significant and unavoidable when the result is a substantial effect on the environment for which mitigation has not been identified as feasible to reduce the impact to a less-than-significant level, or mitigation is identified but would not fully mitigate the impact to acceptable levels. Mitigation may be required to reduce the impact as much as possible, even if the impact would remain significant and unavoidable.

A cumulative discussion of the impacts of the proposed project in conjunction with other development in the region is included in Section 5.4 of Chapter 5, Cumulative Impacts and Other CEQA Sections, of this EIR.

ANALYSIS APPROACH

For some resource topics, either no impact would occur related to the modifications associated with the proposed project or the 1996 EIR adequately and sufficiently describes potential impacts. This is further described in each section of this chapter. The 1996 EIR was a comprehensive EIR analyzing all topics required under CEQA at the time with the exception of population and housing; energy and mineral resources; and public services and utilities – which were identified in the 1996 Initial Study as being unaffected by the project.

Pursuant to PRC Section 21166 and CEQA Guidelines Section 15162(a), the CEQA analysis will focus on whether the proposed modifications to the project would result in any of the following:

- 1) Substantial changes in the project, subject to a two-part test (Section 15162(a)(1)):
 - a. Result in new significant effects, or result in substantial increase in severity of previously identified significant effects, that
 - b. Result in major revisions of the previous EIRs.
- 2) Substantial changes in the circumstances under which the project will be undertaken, subject to a two-part test (Section 15162(a)(2)):
 - a. Result in new significant effects, or result in substantial increase in severity of previously identified significant effects, that
 - b. Result in major revisions of the previous EIRs.
- 3) New information, subject to the following multi-part test (Section 15162(a)(3)):
 - a. The new information is of substantial importance, and
 - b. It was not known and could not have been known (with the exercise of reasonable diligence) at the time of the previous EIRs, and
 - c. The new information shows any of the following:
 - i. The project will have one or more significant effects not discussed in the previous EIRs, or
 - ii. Significant effects examined in the previous EIRs will be substantially more severe, or
 - iii. Mitigation measures or alternatives previously found not be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the applicant has declined to adopt them, or

- iv. Mitigation measures or alternatives considerably different from those analyzed in the prior EIRs would substantially reduce one or more significant effects but the applicant has declined to adopt them.

The following proposed physical changes in the project could result in changes to previously identified impacts and mitigation measures:

- Mine for a longer period of time (20 additional years).
- Mine a larger total tonnage than originally analyzed (21,336,426 additional tons mined; 19,936,119 additional tons sold)¹.
- Disturb a larger area at one time during mining and reclamation operations (167 to 285 acres at a time compared to the 126 acres as assumed in the 1996 EIR).
- Use of a larger area for processing (eastern 31.9 acres of Phase 2 and all 100 acres of Phase 3, in addition to 30-acre plant site).
- Delay reclamation of some areas (up to 36 years) and completion of final reclamation later (20 additional years) than originally analyzed.
- Modify phase boundaries and eliminate Phase 7 located on the west side of I-505.
- Reclamation of an additional 100 disturbed acres not previously identified.
- Less reclamation to agriculture (57 fewer acres).
- More reclamation to open water lake (51 additional acres) with different configuration that separates approximately 2,340 linear feet of the reclaimed lake from restored riparian habitat along the creek.
- More reclamation to habitat (8 additional acres).²
- Less reclamation to tree crops (138 fewer acres) and more reclamation to row crops (111 additional acres).
- Other specific changes to reclamation design such as steeper transition slopes and more limited reclaimed habitat diversity and type.

¹ The operation is approved to mine a total of 32,170,000 tons and the project would increase that total to 53,536,426 tons resulting in a difference of 21,366,426 tons mined. The operation is approved to sell a total of 26,700,000 tons and the project would increase that total is 46,636,119 tons resulting in a difference of 19,936,119 tons sold. See Table 3-10.

² Approved reclamation plans include 61 acres of habitat; approved Habitat Restoration Plan (HRP) includes 166 acres of habitat. This difference is resolved with the proposed project which would incorporate all acreage requiring reclamation into the approved reclamation plans. The proposed reclamation plans and proposed HRP both include 174 acres of habitat. This reflects an increase of 113 acres on the reclamation plan sheets but an actual increase of 8 acres (5%) of habitat.

The following changes in circumstances under which the project has been undertaken could result in changes to previously identified impacts and mitigation measures:

- The County completed a mandatory update of the CCAP (including related County regulations) in December of 2019 (CCAP Update FEIR SCH #2017052069). The Update was comprised of an integrated set of modifications to the CCAP and the ordinances that implement it, to reflect changing conditions in the creek, analysis of monitoring data collected as a part of the program, new regulatory requirements, and clarifications and corrections. The proposed changes fall into three categories: 1) updates to include history and context for what has occurred under the program since 1996, including updates related to the regulatory framework and corrections of errata; 2) clarifications that better describe the intent of the program relative to the text included in the original documents; and 3) other changes to the program. Key proposed changes included: 1) increase of the in-channel material removal limit from 210,000 tons to 690,800 tons annually; 2) identification of an additional 1,188 acres within the planning area to be rezoned to add the Sand and Gravel Reserve Overlay (SGRO) zone, which allows for future possible aggregate mining; and 3) extension of the plan horizon year to 2068.
- Changes in General Plan policy.
- Effects on identified special status species not previously considered.
- Inconsistency with County requirements, and underperforming design and maintenance, related to hedgerows.
- Changes in the conditions in the creek channel over time, including erosion and installation of rock riprap to protect mining facilities.
- The applicant has determined there will not be enough topsoil and overburden to undertake the amount of reclaimed agriculture originally approved.
- Reclamation of early phases to productive agriculture as mining has progressed has not occurred.
 - The 1996 project description assumed reclamation would occur as each phase is mined (DEIR p. 3-17 to 3-19).
 - The 1996 EIR assumed a maximum of 126 acres out of production in any given year (DEIR 4.5-14).
 - The 2081 MOU (executed in September 1997) assumed maximum disturbance in any one year of 120 acres (see Section 4.1 of that permit).
 - In 2022, the County determined that approximately 510 acres of the 600-acre mining site was disturbed and/or being mined.
 - Overmining and mining inconsistent with the approved reclamation plans has resulted

in more area disturbed at one time than assumed originally and encroachment into the minimum 200-foot creek setback area.

- Without the requested 20-year extension the applicant would be unable to mine available deposits.

The following new information has emerged since project approval that could result in change to previously identified impacts and mitigation measures:

- Effects of climate change and greenhouse gas emissions
- Effects on tribal cultural resources
- Effects from wildfire
- Effects on energy
- Effects of toxic air contaminants (TACs)
- Effects on vehicle miles traveled (VMT)

Each topical section in this chapter presents the conclusions of the 1996 EIR impact analysis regarding resource impacts and includes an evaluation of whether proposed changes in the project, the circumstances under which the project will be undertaken, and/or new information are substantial and would result in new significant effects or a substantial increase in the severity of previously identified significant effects.

Environment and regulatory setting information that is applicable to the proposed project or has changed since the 1996 EIR is provided. Potential impacts are quantified where needed to determine whether new or substantially more severe significant impacts could occur. The impact conclusions from the 1996 EIR and the proposed project are compared to determine if the proposed project could result in a new or substantially more severe potentially significant impact. Applicable mitigation measures from the 1996 EIR are summarized, and modified or new mitigation measures are identified, where feasible, to reduce new or substantially more severe potentially significant impacts to acceptable levels. In some instances, new mitigation measures are identified, based on new guidance from regulatory agencies, to update prior mitigation measures from the 1996 EIR.

Mitigation for project impacts can include avoiding the impact (not taking certain actions), minimizing the impact (limiting the magnitude), rectifying the impact (through repair, rehabilitation, or restoration), reducing the impact over time (through operations during the project), and compensating for the impact (by replacing or providing substitute resources or environments). See CEQA Guidelines Section 15370.

ENVIRONMENTAL ISSUES ADDRESSED IN THIS DRAFT SEIR

Sections 4.1 through 4.8 of this chapter are provided to substantiate the determination to prepare this Draft SEIR, pursuant to Section 15162 of the CEQA Guidelines:

- 4.1 Agricultural and Forestry Resources
- 4.2 Air Quality, Greenhouse Gases and Energy
- 4.3 Biological Resources
- 4.4 Cultural Resources and Tribal Cultural Resources
- 4.5 Geology and Soils, Mineral Resources, and Paleontological Resources
- 4.6 Hydrology and Water Quality
- 4.7 Noise and Vibration
- 4.8 Transportation and Circulation

For each topic and potential impact, the relevant proposed changes to the project, changes in the circumstances under which the project would be carried out, and new information is discussed, potential new or more severe impacts are identified, and revised or new mitigation measures are proposed, as necessary, to reduce potential impacts, where appropriate. Section 4.9 of the Draft SEIR provides a discussion for the CEQA topics determined to have no impact or a less-than-significant impact with continued implementation of required conditions of approval and mitigation measures.

FORMAT OF ISSUE SECTIONS

The topical sections are comprised of four primary parts: (1) Introduction, (2) Existing Environmental Setting, (3) Regulatory Context, and (4) Impacts and Mitigation Measures. An overview of the general organization and the information provided in the two parts is provided below:

Introduction. The Introduction describes the purpose of the section, provides a list of project-specific reports used in the analyses, and identifies any comments made in response to the March 2021 Notice of Preparation (NOP) for the project. The NOP for the proposed project, which was released in March 2021, is contained in Appendix A, and comments on the NOP are contained in Appendix B of this Draft SEIR.

Existing Environmental Setting. The Existing Environmental Setting section for each environmental topic generally provides a description of the applicable physical setting (e.g., existing land uses, existing traffic conditions) for the project site and its surroundings. An overview of regulatory considerations that are applicable to each specific environmental topic is also provided. Where appropriate, the 1996 EIR environmental setting information has been supplemented and updated per current conditions.

CEQA Guidelines Section 15125 states: “An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives.”

Section 15125 also provides: “Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and

regional perspective.” The NOP for the proposed Project was published in March 2021. Unless otherwise stated, each of the topical sections in this chapter includes a discussion of physical conditions in the vicinity of the project site on or around March 2021.

Regulatory Context. The Regulatory Context section for each topic provides the relevant federal, State and local regulations relevant to each environmental topic. The section focuses on those regulations that are new, revised or significantly updated since publication of the 1996 EIR.

Impacts and Mitigation Measures. The Impacts and Mitigation Measures section for each topic presents a discussion of the impacts that could result from implementation of the proposed project. The section identifies and compares the current County standards of significance to the 1996 EIR standards for the impact topic; identifies the 1996 EIR impacts, mitigation measures and subsequent conditions of approval and provides a discussion of the current project compliance with the conditions of approval; and evaluates whether proposed changes in the project, the circumstances under which the project will be undertaken, and/or new information are substantial and would result in new significant effects or a substantial increase in the severity of previously identified significant effects. Applicable mitigation measures from the 1996 EIR are summarized, and modified or new mitigation measures are identified, where feasible, to reduce new or substantially more severe potentially significant impacts to acceptable levels. In some instances, new mitigation measures are identified, based on new guidance from regulatory agencies, to update prior mitigation measures from the 1996 EIR.

Impacts are numbered and shown in bold type, and the corresponding mitigation measures are numbered and indented following the same format as the 1996 EIR. Impacts and mitigation measures are numbered consecutively. A statement of the level of significance of impact prior to mitigation is included at the end of each impact discussion. If an impact is determined to be significant, mitigation is included in order to reduce the specific impact to the extent feasible.

As noted above, each mitigation measure adopted as a part of the certified Final 1996 EIR became conditions of approval. The appropriate condition number, wording, and current status are identified in this Draft SEIR.