Initial Study & Environmental Analysis
For:

Energy Source Mineral ATLiS Project

Prepared By:

COUNTY OF IMPERIAL
Planning & Development Services Department
801 Main Street
El Centro, CA 92243
(442) 265-1736
www.icpds.com

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SECTION 1
INTRODUCTION

A. PURPOSE

This document is a ☐ policy-level, ☒ project level Initial Study for evaluation of potential environmental impacts resulting with the proposed Energy Source Mineral ATLiS Facility (Refer to Figure 1 & 2).

B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REQUIREMENTS AND THE IMPERIAL COUNTY'S GUIDELINES FOR IMPLEMENTING CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's "CEQA Regulations Guidelines for the Implementation of CEQA, as amended", an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

☒ According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.

☐ According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not result in any significant effect on the environment.

☐ According to Section 15070(b), a **Mitigated Negative Declaration** is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed applications will result in potentially significant environmental impacts and therefore, an Environmental Impact Report is deemed as the appropriate document to provide necessary environmental evaluations and clearance as identified hereinafter.

This Initial Study (IS) is prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State & County of Imperial's Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial Guidelines for Implementing CEQA, depending on the project scope, the County of Imperial Board of Supervisors, Planning Commission and/or Planning Director is designated the Lead Agency,

in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

C. INTENDED USES OF INITIAL STUDY AND NOTICE OF PREPARATION

This IS and Notice of Preparation (NOP) are informational documents which are intended to inform County decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals. The IS and NOP prepared for the Project will be circulated for a period of 35 days for public and agency review and comments.

D. CONTENTS OF INITIAL STUDY

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

SECTION 1

I. INTRODUCTION presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

SECTION 2

II. ENVIRONMENTAL CHECKLIST FORM contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

PROJECT SUMMARY, LOCATION AND EVIRONMENTAL SETTINGS describes the proposed project entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

ENVIRONMENTAL ANALYSIS evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

SECTION 3

III. MANDATORY FINDINGS presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

IV. PERSONS AND ORGANIZATIONS CONSULTED identifies those persons consulted and involved in preparation of this Initial Study and Negative Declaration.

V. REFERENCES lists bibliographical materials used in preparation of this document.

E. SCOPE OF ENVIRONMENTAL ANALYSIS

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. **No Impact:** A "No Impact" response is adequately supported if the impact simply does not apply to the proposed applications.

2. **Less Than Significant Impact:** The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.

3. **Less Than Significant With Mitigation Incorporated:** This applies where incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact".

4. **Potentially Significant Impact:** The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

F. POLICY-LEVEL or PROJECT LEVEL ENVIRONMENTAL ANALYSIS

This Initial Study will be conducted under a ☐ policy-level, ☒ project level analysis. Regarding mitigation measures, it is not the intent of this document to "overlap" or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County's jurisdiction, are also not considered mitigation measures and therefore, will not be identified in this document.

G. TIERED DOCUMENTS AND INCORPORATION BY REFERENCE

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

1. Tiered Documents

As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

"Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."

Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

"Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

(1) Were not examined as significant effects on the environment in the prior EIR; or

(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

2. Incorporation By Reference

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly-drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]). This document incorporates by reference appropriate information from the "Final Environmental Impact Report and Environmental Assessment for the "County of Imperial General Plan EIR" prepared by Brian F. Mooney Associates in 1993 and updates.

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR and updates are available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.

- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.

- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.

- These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the County of Imperial General Plan EIR is SCH #93011023.

- The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f]). This has been previously discussed in this document.

II. Environmental Checklist

1. **Project Title**: Energy Source Mineral ATLiS Project
2. **Lead Agency**: Imperial County Planning & Development Services Department
3. **Contact person and phone number**: David Black, Planner IV, (442) 265-1736, ext. 1746
4. **Address**: 801 Main Street, El Centro CA, 92243
5. **E-mail**: davidblack@co.imperial.ca.us
6. **Project location**: The Project's lithium hydroxide production plant and facilities will be located at 477 West McDonald Road, Calipatria, California which is approximately 3.8 miles southwest of the community of Niland on three parcels privately owned by Hudson Ranch Power I LLC in the County: APNs 020-100-025, 020-100-044, 020-100-046. Currently, the HR1 power plant exists within the northeast corner of the 65.12-acre parcel, APN 020-100-044. The Project's plant facilities would be built on an approximately 37-acre area that would be subdivided out of the existing 65.12 acres. An additional 15 acres of the Project site located on the northwestern parcel APN 020-100-025 and approximately 40 acres of the Project site located on the southeast parcel APN 020-100-046 will be added to the 37-acres through a subdivision map application to form the new parcel for the Project.
7. **Project sponsor's name and address**: Energy-Source Mineral, LLC
8. **General Plan designation**: Medium Industrial
9. **Zoning**: M-2-G-PE (Medium Industrial/Geothermal Overlay Zone/Pre-existing Overlay Zone

10. **Description of project**: Energy-Source Minerals LLC is proposing to construct and operate a commercial lithium hydroxide production plant within the Salton Sea geothermal field in Imperial County, California (Project). The facility will process geothermal brine from the neighboring Hudson Ranch Power I Geothermal Plant (HR1) to produce lithium hydroxide, as well as zinc and manganese products which would be sold commercially.

11. **Surrounding land uses and setting**: To the west of the Project site is generally Imperial Irrigation District (IID)-owned vacant marsh land adjoining to the Salton Sea. To the north of the Project site is vacant land that now is mostly used for duck hunting clubs and is the location of the production and injection wells for HR1. To the south is vacant land that has never been in any production and is also the site of numerous "mud-pots". There are no residential uses within at least two miles of the Project site.

12. **Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement.):

- Caltrans – Encroachment Permit
- California Department of Toxic Substances/Certified Unified Program Agency (CUPA) – Hazardous Materials / Environmental Protection Agency Approvals and Permits
- Regional Water Quality Control Board – Water Discharge Requirement
- Imperial Irrigation District – Encroachment Permit
- Imperial County Air Pollution Control District – Permit to Construct and Permit to Operate
- Environmental Health Departments for HR1 – Potable Water Treatment Modified Permit
- Imperial County Public Works
- Imperial County Fire Department and Office of Emergency Services

13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures

regarding confidentially, etc.?

In accordance with California Assembly Bill (AB) 52, Native American tribes with potential resources in the area were notified of the Project on November 6, 2020 and offered the opportunity for consultation. As of November 20, 2020, the Quechan Tribe has requested consultation for the Project. Any other results regarding consultation will be outlined in the Cultural Resources Report being prepared for the Project.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code, Section 21080.3.2). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code, Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code, Section 21082.3 (c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☒	Energy
☒	Geology /Soils	☒	Greenhouse Gas Emissions	☒	Hazards & Hazardous Materials
☒	Hydrology / Water Quality	☐	Land Use / Planning	☐	Mineral Resources
☒	Noise	☐	Population / Housing	☐	Public Services
☐	Recreation	☒	Transportation	☒	Tribal Cultural Resources
☒	Utilities/Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

ENVIRONMENTAL EVALUATION COMMITTEE (EEC) DETERMINATION

After Review of the Initial Study, the Environmental Evaluation Committee has:

☐ Found that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ Found that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ Found that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ Found that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE DE MINIMIS IMPACT FINDING: ☐ Yes ☒ No

EEC VOTES	YES	NO	ABSENT
PUBLIC WORKS	☐	☐	☐
ENVIRONMENTAL HEALTH SVCS	☐	☐	☐
OFFICE EMERGENCY SERVICES	☐	☐	☐
APCD	☐	☐	☐
AG	☐	☐	☐
SHERIFF DEPARTMENT	☐	☐	☐
ICPDS	☐	☐	☐

Jim Minnick, Director of Planning/EEC Chairman Date:

PROJECT SUMMARY

Energy-Source Minerals LLC (Applicant) is proposing to construct and operate a commercial lithium hydroxide production plant within the Salton Sea geothermal field in Imperial County (County), California. The facility (ALTiS Plant) will process geothermal brine from the neighboring Hudson Ranch Power I Geothermal Plant (HR1) to produce lithium hydroxide, as well as zinc and manganese products which would be sold commercially.

A. Project Location:

The Project's production plant and facilities will be located at 477 West McDonald Road, Calipatria, California which is approximately 3.8 miles southwest of the community of Niland on three parcels privately owned by Hudson Ranch Power I (HR1) LLC in the County: APNs 020-100-025, 020-100-044, 020-100-046 (Project site; Figure 1). Currently, the HR1 power plant exists within the northeast corner of the 65.12-acre parcel, APN 020-100-044. The Project's plant facilities would be built on an approximately 37-acre area that would be subdivided out of the existing 65.12 acres. An additional 15 acres of the Project site located on the northwestern parcel APN 020-100-025 and approximately 40 acres of the Project site located on the southeast parcel APN 020-100-046 will be added to the 37-acres through a subdivision map application to form the new parcel for the Project. The layout of the Project is shown in the Project Site Plan (Figure 2).

All parcels that make up the Project site are zoned medium industrial (M-2) and are located within the geothermal overlay zone (G) and pre-existing allowed/restricted overlay zone (PE). The M-2 zone is to designate areas for wholesale commercial, storage, trucking, assembly type manufacturing, general manufacturing, research and development, medium intensity fabrication and other similar medium intensity processing facilities. Land in the PE overlay zone is also classified in another "base" zone, and is intended to allow an existing base zoned use to continue with its current use, even though through the strict interpretation of the County General Plan and Zoning Ordinances, such use is a pre-existing, non-conforming use. Additionally, the geothermal overlay zone designates the area for geothermal energy extraction and associated activities. The Project is located entirely within the Salton Sea Geothermal Overlay Zone.

Two primary entry driveways that serve as the access to the Project site will be constructed from McDonald Road. A secondary access entrance to the Project site will serve as an emergency only access point and will be constructed off Davis Road. Primary highway access to the proposed Project site will be via State Highway (HWY) 111. The Applicant will obtain encroachment permits from the County Department of Public Works for the driveway access. The unpaved portion of McDonald Road between Highway 111 and English Road will be paved.

The western portion of the Project site is located within the Federal Emergency Management Agency (FEMA) "Zone A" flood zone, in which there is a one percent annual chance of flooding. However, to comply with FEMA regulations, during the construction of Hudson Ranch I a berm was installed along the exterior boundary to eliminate possible flooding.

B. Current Use of the Project Site and Surrounding Areas

Currently, the location of the proposed Project is partially on the existing HR1 site, which was previously permitted for the geothermal plant. In addition to the actual power plant, the rest of the land has been used for laydown areas, storage areas, and stormwater management. The additional land that will be included is an approximately 15-acre parcel, APN 020-100-025, located at the southeast corner of Davis Road and McDonald Road. This 15-acre site has been vacant for several decades and was previously used for geothermal testing. Also added to the Project site is an approximate 40-acre portion of APN 020-100-046, directly south of the HR1 plant site.

To the west of the Project site (on the west side of Davis Road) is generally Imperial Irrigation District (IID)-owned

vacant marsh land adjoining to the Salton Sea. To the north of the Project site is vacant land that now is mostly used for duck hunting clubs and the location of the production and injection wells for HR1. To the south is vacant land that has never been in any production and is also the site of numerous "mud-pots". There are no residential uses within at least two miles of the Project site.

C. Project Summary:

The Project would consist of the following activities:

- Construction and operation of a plant to extract lithium, manganese, zinc, and other commercially viable substances from geothermal brine and process the extracted substances to produce commercial quantities of lithium, and to the extent possible, manganese and zinc products and other products;
- Construction and operation of brine supply and return pipelines and other associated interconnection facilities with the HR1 power plant;
- Construction of a primary access road from McDonald Road (approximately 500 feet west of the HR 1 entrance),a second primary access about 800 feet west, and an emergency access entrance only from Davis Road;
- Paving of McDonald Road from Highway 111 to English Road (approximately 3 miles);
- Construction of a power interconnection line from the IID and HR1 switchyard located at the northeast corner of the HR1 site;
- Construction of associated facilities between HR1 and the Project site to facilitate the movement of brine and other services;
- Construction of a laydown yard that will also support temporary offices during construction as well as serving as a truck management yard during operations; and
- Construction of offices, repair facilities, shipping and receiving facilities and other infrastructure components.

Structures

The Project site will include construction of the following buildings and structures:

- Plant offices (which will house offices and meeting rooms);
- Operations and employee facilities (which will house offices for supervisors, meeting rooms, breakroom/lunch room, lockers/shower rooms);
- Maintenance shop, materials warehouse (which will house plant maintenance equipment and supplies, and shops such as machine, paint, welding, and electronic);
- Materials warehouse (which will store equipment, reagents, etc.);
- Electrical building(s) (which will house motor control centers, electric power switchgear and metering to provide power for plant operations);
- Emergency generator building;
- Two reagent storage and preparation buildings;
- Chemical laboratory building (which will contain a wet chemistry laboratory and analytical instruments for analysis of in-process and finished products);
- Filter press sheds (which will house filter presses);
- Lithium product production building (which will house the proprietary technology for manufacturing the lithium carbonate and lithium hydroxide products);
- Lithium product handling, packaging, and warehouse buildings (which will house the filtration and drying equipment for the lithium products and bagging and palletizing of finished products);
- Manganese product handling, production, and warehouse building (which will house the filtration and drying equipment for the manganese product and bagging and palletizing of finished products);
- Zinc product handling, production, and warehouse building (which will house the filtration and drying equipment for the zinc product and bagging, palletizing and storage of finished products);
- Calcium oxide silo and slacker;
- Limestone stockpile and solution tanks;

- Hydrogen chloride offloading and storage tank(s);
- Gate guard house; and
- Cooling tower.

The product production, handling, and warehouse buildings will be about 80 feet tall, and the various other components of the plant may be as high as 100 feet tall.

The sewage from the Project will be processed by the HR1 sewer treatment plant, hence no further permitting for solid waste is required. Potable water will be provided from the HR1 permitted water treatment plant via an agreement between HR1 and the ATLiS Plant. An application to modify the HR1 water treatment plant by using both the existing approved plant and the former Simbol plant will be made to EHS to HR1.

Impurity Removal and Production Extraction Facilities

The impurity removal and the product extraction process areas will be constructed within designated areas of the plant site on concrete pads with a containment curb. These process areas may not be located within a building but will consist of a series of interconnected tanks and pipelines. The arrangement of these facilities is part of the Applicant's proprietary technology.

Product Production Facilities

Product production facilities consisting of a series of interconnected tanks and pipelines will also be constructed on the site. The processing facilities will also be erected within designated portions of the plant site on concrete pads with a concrete containment curb or in designated buildings. The arrangement of these facilities is also part of the Applicant's proprietary technology.

Pipe Rack and Process Pipelines

A pipe rack will be constructed from the Project's process area to the HR1 site. A post clarifier brine delivery pipeline from HR1 to the Project's process area and a depleted brine return pipeline from the process area to HR1 will be constructed on one or more pipe racks. A steam/steam condensate delivery pipeline will also be constructed on the pipe rack. The Project will be responsible for returning the depleted barren brine to the HR1 site. Additional delivery or return pipelines may also be constructed onto the pipe rack as needed to handle the different fluids transported. The delivery and return pipelines will be constructed with minimal usage of flanged connections to reduce the potential for pipe leaks. Automatic valves will be integrated into the pipeline system which would close quickly in the event of a pipe rupture to minimize the size of any potential spill. An Emergency Response Plan will be prepared and implemented should a fluid spill event occur.

Fire Water and Freshwater Pond

The Project will share with HR1 the fire suppression system, and the freshwater storage containment pond. The fire suppression system will be re-designed to accommodate the overall fire protection obligation to both plants along with the necessary controls. The raw water storage pond currently located on the east side of the HR1 plant will continue to receive canal water from the IID "O" lateral. However, a backup delivery line will also be installed from the "N" lateral located about ¼ mile south of the plant. This redundancy is necessary for two reasons, first when IID does maintenance work on canals they can be out of service for several days and second in the event of a natural interruption such as an earthquake that may render the "O" lateral out of service. The Imperial County Fire Department will be consulted as appropriate to review and approve the proposed fire water and freshwater pond facilities. A 500,000-gallon above-ground water tank will be constructed to serve as the primary water supply for the joint fire suppression system for the HR1 and ATLiS sites.

Stormwater Retention Basin

The Project may share the HR1 stormwater retention basin. The retention basin will be engineered and constructed to contain the combined stormwater storage requirements of both the HR1 and Project plant sites. If a shared facility cannot be done for technical, legal or other reasons then the Project will construct its own basin on the far south side of the parcel. The current HR 1 Plant site was constructed to eliminate any off-site discharge and this site will be designed in the same manner.

Security Fence and Landscaping

A nominal six-foot-high chain-link security fence, which may be topped with three-strand barbed wire, will be constructed around the Project plant site. The fence will be constructed to meet County standards for obscured fencing around processing areas. Due to security levels required for the HR1 power plant and because of the interconnectivity between HR1 and the Project, security protocols for both HR1 and the Project will be similar in nature.

Substation and Power Line Facilities

Up to 8 MW of electrical power will be needed for the Project operations. The power will be purchased from the IID. The Project will construct an electrical substation on the Project site. An emergency 600 HP diesel generator(s) will be used to keep vital Project plant systems operating during power outages.

Road Improvements

At the junction of McDonald Road and HWY 111, improvements will also be constructed to meet the requirements of the County and the California Department of Transportation (Caltrans). As currently planned these improvements will include:

- Relocation of the IID drain exit structure on the west side of HWY 111
- Relocation of the IID canal gates on the west side of HWY 111
- Northbound left turn lane on HWY 111 (or as required by an approved Traffic Study)
- Southbound right turn lane on HWY 111 (or as required by an approved Traffic Study)

A short power line will be constructed between the current IID/HR1 switchyard and the plant site along McDonald Road to the Project site.

D. PROJECT CONSTRUCTION

Construction will include light grading of approximately 30 acres of land that will include the Project site, new entry road off of McDonald Road, an emergency access road off of Davis Road, and a connection to the IID/HR1 electric substation. The Project site driveway, parking, and maneuvering areas will be constructed to County standards (generally a minimum of three inches of asphaltic concrete paving or higher quality material).

The Project will either be constructed to an elevation above the Imperial County designated special flood hazard for lands near the Salton Sea, or have the existing berm extended to the outer perimeter of the site. The Project will be constructed so that no off-site discharge of any waters will be allowed and all of the runoff or discharge will be managed on site.

It is estimated that on average 20-25 trucks per day will travel in and out of the Project site during construction except during grading when about 50-60 trucks will be traveling in and out of the Project site. An average of 100 workers will commute to the Project site during construction.

Construction Work Force and Schedule

Project construction would begin when all necessary permits are obtained, expected to be Quarter Three (Q3) of 2021. Construction is expected to be complete Quarter Two (Q2) of 2023. All work would occur in one phase, with approximately 90% of work occurring during daylight hours over 5 or 6 days per week over an intermittent 24-month period. The remaining 10% of work would occur during nighttime hours to avoid extreme summer temperatures. Approximately 200 to 250 workers are anticipated at peak periods. Construction workers will commute to the site and there will be no onsite housing of workers. Construction parking will be in the 15 acre laydown area, which will be located at the southeast corner of Davis Road and McDonald Road on what is currently APN 020-100-025.

Construction Equipment

Below is a list of construction equipment anticipated to be required for the Project:

- Off-highway trucks
- Rollers
- Crawler tractors
- Excavators
- Graders
- Water trucks
- Compactors
- Rubber tired loaders
- Scrapers
- Cranes
- Generator sets
- Concrete pump
- Plate compactors
- Rough terrain forklifts
- Skid steer loaders
- Tractor/Loader/Backhoe
- Aerial lifts
- Welders
- Air compressors
- Pavers
- Paving equipment

Construction Water Supply Source and Requirements

It is estimated that up to 50,000 gallons per day of water will be needed during Project construction for fugitive dust control during Project site grading and construction activities. This water will be purchased from the IID and will be transported to the site via temporary pipeline or via water truck. A Water Supply Assessment is being prepared for the Project to analyze the impacts associated with the Project's construction and operational water requirements.

E. PROJECT OPERATIONS

The Project's plant will utilize post-secondary clarifier brine produced from the geothermal fluid management activities on the neighboring HR1 power plant site as the resource process stream for the commercial production of lithium hydroxide monohydrate (LIOH), and zinc and manganese products. The production operations will consist of the following general processing steps:

1. Impurity removal
2. Lithium extraction as Lithium Chloride (LiCl)
3. Conversion and processing of LiCl to Lithium products
4. Drying and packaging of lithium products
5. Zinc extraction and processing to Zinc products
6. Manganese extraction and processing to manganese products
7. Offsite product shipping

The production processing steps may be altered over time as production methods and efficiencies evolve and new or revised product lines are developed at the facility. The arrangement of the processing equipment is part of the proprietary technology developed for the Project.

Impurity Removal

Post heat extraction geothermal brine from the secondary clarifier of the HR1 power plant site will be transported via pipeline to the impurity removal process area on the ATLiS plant site. A nominal 7,000 gallons per minute (gpm) of the brine will be processed by the facility. This projected process rate is used as the basis for the estimate provided throughout this Project description, but the actual rate of brine eventually processed on the site will be optimized to take advantage of the available facilities on the HR1 and ATLiS plant sites.

Iron (Fe) and silica (SiO2) will be removed from the brine followed by the removal of the manganese (Mn) and zinc (Zn) in a two-stage process. The separated Fe-SiO2 material, and the Mn-Zn material will be dewatered in the Filter Press sheds. The mineral depleted brine will then be transported via pipeline to the Lithium (Li) Extraction process area.

The separated Fe- SiO2 material will be initially managed as a waste stream. The waste material will be collected and analyzed in conformance with appropriate laboratory testing protocols to ensure that it is handled and disposed of in an appropriate manner.

If and when in the future, opportunities exist to use this material, the Applicant plans to market Fe- SiO2 material as an additional product(s) to be shipped to a third party(ies) for use in other industrial processes, and it will no longer be a waste but a product. The market for Fe- SiO2 material is currently being developed. Based on average production rates at the target nominal process rate of 7,000 gmp, approximately 136,200 metric tons of Fe- SiO2 material will be processed annually.

Li Extraction as Lithium Chloride

The treated brine will be fed to a Li extraction process located within the Li extraction process area on the ATLiS plant site. This area will be outside on a concrete pad. The area will contain proprietary Li extraction media. Li from the brine will be retained on the extraction media. A lithium chloride (LiCl) product stream will be produced from the extraction process. The LiCl will be transported via pipeline from the Li extraction area into the Li purification process area. Impurities will be removed from the LiCl product stream and handled as nonhazardous waste. The purified LiCl will then be concentrated in an evaporator or equivalent process.

Conversion and Processing of LiCl into Li Products

The purified, concentrated LiCl will be transported via pipeline from the Li purification area to the Li Product Production Building. Proprietary technology will be used to convert the LiCl and then into lithium carbonate (Li2CO3) and then into LiOH product stream.

Drying and Packaging of Li Products

The lithium hydroxide (LiOH) product stream will be transported to a Lithium Product Handling, Production and Warehouse building where the crystals will be separated from the Li-rich process fluid in a dewatering system. LiOH crystals will be dried, sized, and cooled.

Packaging of the Li Products

The dried Li products will be packaged, palletized, staged, and loaded into trucks for distribution in the Li Product Handling, Production, and Warehouse buildings. The dried Li products will be loaded into bulk bags in a bagging station. Packaging is expected to be 500 kilograms (kg) to 1,000 kg super sacks.

Extraction of Zn and Mn

Zn/Mn filter cake will be acid leashed, separated and purified in a two-part solvent extraction process. The separated steams will each then be dried and packaged for further processing by others.

Mn Extraction and Processing to Mn Products

The Mn removed by the solvent extraction process will be precipitated into Mn oxides/hydroxides products, then dewatered in filter presses into wet cake product. The products will be transported to the Mn Product Handling, Production and Warehouse building for further handling, packaging, and offsite shipment to market.

Product Shipping to Offsite Markets

The ATLiS plant may produce multiple products for offsite shipment to market by truck. The average annual amount of product shipped out of the ATLiS plant is estimated as 19,000 metric tons of Li product, 10,000 to 20,000 metric tons of Zn product(s), and up to 60,000 metric tons of Mn product(s). Products will be transported by freight truck on existing roadways to shipping distribution points. Other products of the production operations may be generated by the proprietary technology on the ATLiS plant site and would also be shipped offsite to market by truck. Trucking will generally be to markets in the greater Los Angeles basin, Arizona, and Texas.

Operational Truck Traffic

It is estimated that approximately 24 trucks per day will travel in and out of the Project site during normal operations. The truck traffic includes about 10 trucks per day of outgoing products, including one truck load of dry lithium, two truckloads of 31% HCl, three truckloads of zinc, and four truckloads of manganese. Truck traffic also includes about eight truck deliveries of reagent chemicals; cooling tower treatment chemicals; consumptive media; product packaging materials; and fuel. The estimate also includes six trucks of outgoing waste generated on the site. The majority of the outgoing waste generated onsite is expected to be delivered to and processed at the Burrtec Solid Waste Facility. However, it is estimated that up to 10% of trucks carrying filter cakes (waste debris mix of silica, sand and iron) from the plant would be required to be delivered to a waste treatment facility in Arizona.

Operational Water Supply Source and Requirements

Approximately 90,000 gallons per hour (g/h) or about 3,400 acre-feet per year (AFY) of canal water will be purchased from the IID for project cooling water makeup and additional process water. Approximately 112 g/h or about 3 AFY of the canal water to be purchased will be used for potable water purposes, including potable washbasin water, eyewash equipment water, water for showers and toilets in crew change quarters, and sink water in the sample laboratory. A Water Supply Assessment is being prepared for the Project to analyze the impacts associated with the Project's construction and operational water requirements.

Operational Plant Maintenance

Operation of the Project would be dependent on the ability of the HR1 facility to deliver spent geothermal brine for processing at the ATLiS facility. Thus, approximately every three years the Project facility will be shut down for about three weeks to complete a facility cleaning in alignment with the HR1 plant cleaning. This process would remove mineral scale from Project plant piping.

Operational Work Force and Schedule

Project operations will begin as soon as construction activities are completed, expected to be Q2 of 2023. Beginning with startup operations, the Project is expected to be operated by a total staff of approximately 62 full-time, onsite employees. Plant operations will continue 24 hours per day, 7 days per week. It is projected that up to 40 employees

will be onsite at any given time with 24 day-staff employees and two rotating shifts of 16 additional employees overlapping the day-staff and covering nights, weekend, and holidays.

F. PROJECT DECOMISSIONING

The projected life of the Project is a nominal 30 to 40 years. The Applicant will prepare a Site Abandonment Plan in conformance with Imperial County requirements, for consideration by the Planning Commission prior to Project approval. This plan would describe the proposed equipment dismantling and site restoration program in conformance with the wishes of the respective landowners/lessors and Imperial County requirements in effect at the time of abandonment and would be implemented at the end of Project operations. Decommissioning activities would be similar to project construction activities; however, decommissioning is likely to be less intensive than construction. Because this phase would occur approximately 30 to 40 years into the future, decommissioning is anticipated to employ equipment that is more technologically advanced than that which will be used during construction. Further, there will be a reduction in the need for site preparation and associated activities.

G. REQUIRED PERMITS AND APPROVALS

Lead Agency Approval

Imperial County Planning Department would be the lead agency for the proposed Project. The following permits would be required from the lead agency:

- Imperial County Planning Department – Minor Subdivision
- Imperial County Planning Department – Water Supply Assessment
- Imperial County Planning Department – Conditional Use Permit
- Imperial County Planning Department – Development Agreement (if required)
- Imperial County Building Department – Building and Grading Permits
- Imperial County Public Works Department – Encroachment Permit(s)

Reviewing Agencies

State Agencies

- Caltrans – Encroachment Permit
- California Department of Toxic Substances/Certified Unified Program Agency (CUPA) – Hazardous Materials / Environmental Protection Agency Approvals and Permits
-

Regional Agencies

- Regional Water Quality Control Board – Water Discharge Requirement
- Imperial Irrigation District – Encroachment Permit
- Imperial County Air Pollution Control District – Permit to Construct and Permit to Operate
- Environmental Health Departments for HR1 – Potable Water Treatment Modified Permit
- Imperial County Public Works
- Imperial County Fire Department and Office of Emergency Services

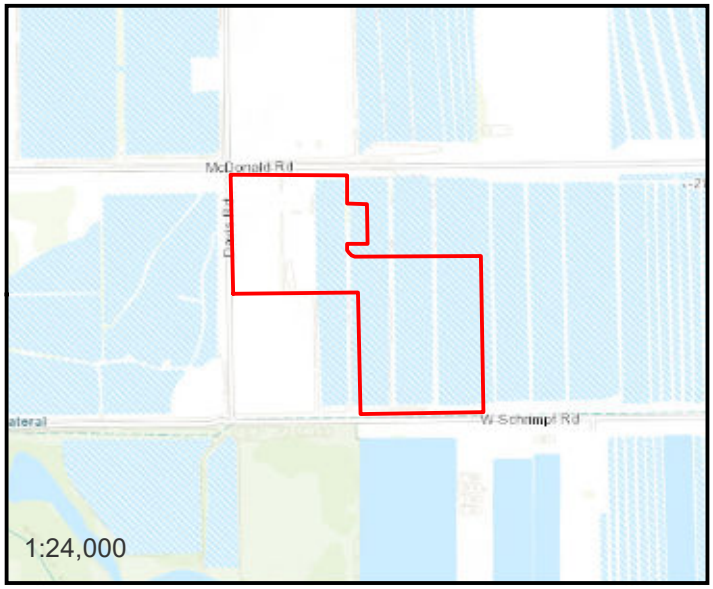
H. OBJECTIVES

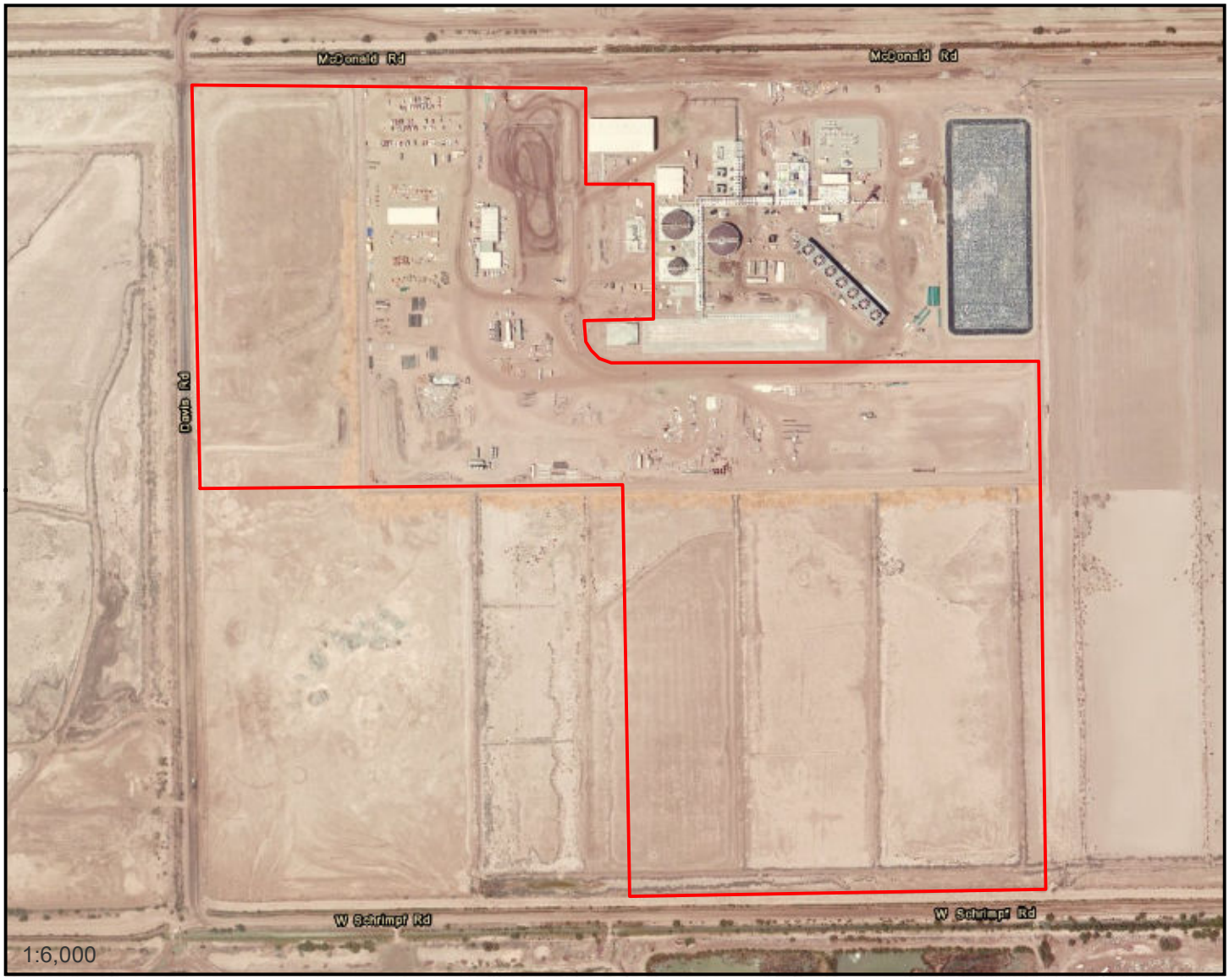
The Project has the following objectives:

- To produce quantities of lithium, manganese, zinc and other strategic minerals from geothermal brine for commercial sale.
- To co-locate near a geothermal flash plant to minimize the distance required to pipe the brine between the

geothermal plant and the mineral extraction plant.

- To provide a supplemental domestic source of lithium, a designated critical material identified by the U.S. Department of Energy.
- Minimize and mitigate any potential impact to sensitive environmental resources within the Project area.





Project Location

N

0 150 300 600

Feet

Figure 1

Energy Source Mineral Project

Project Location & Vicinity

Name: 21268 BIO Fig 1 Project Location and Vicinity.Mxd
Print Date: 11/9/2020, Author: pcarlos

CHAMBERS GROUP

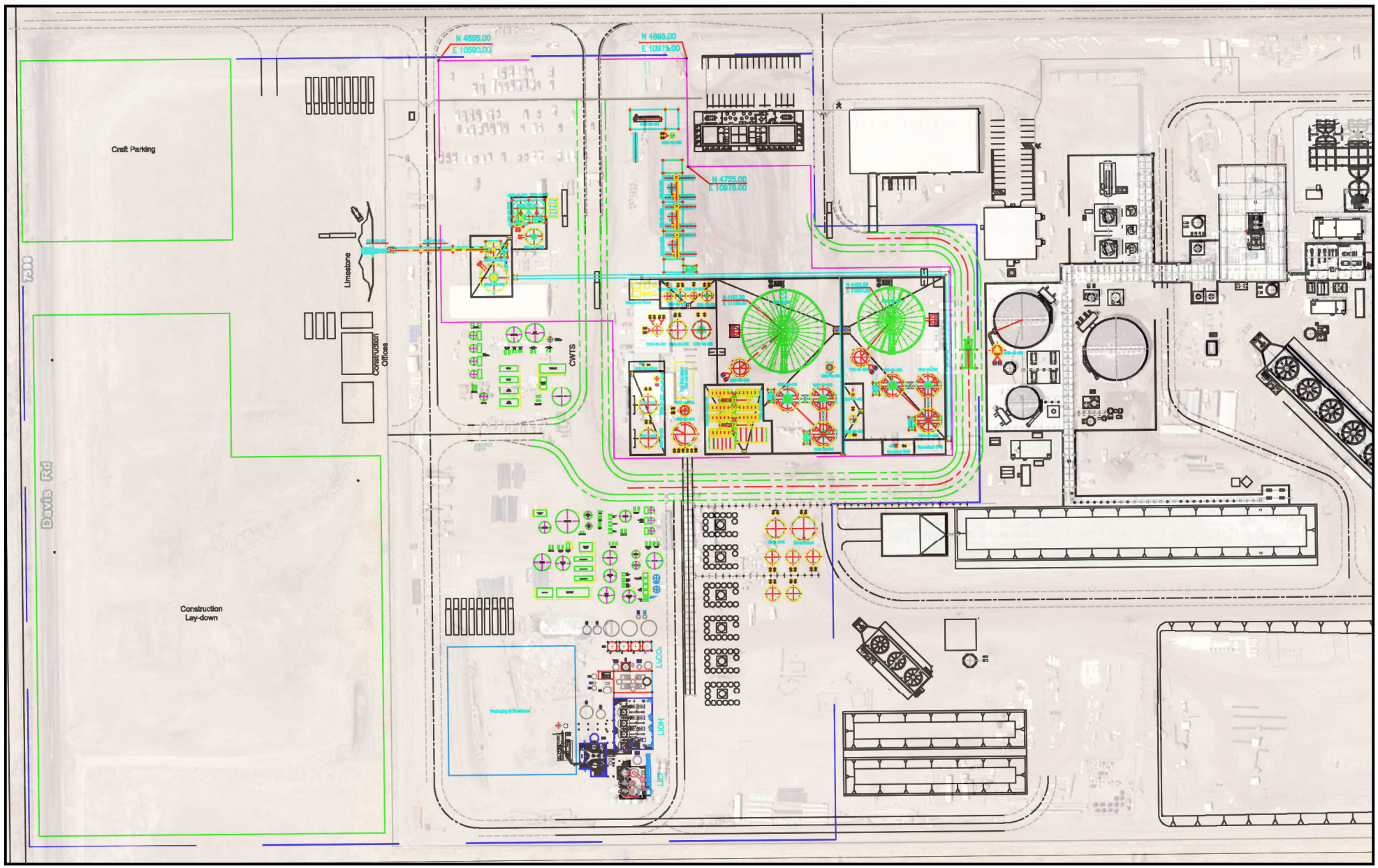


Figure 2
Energy Source Mineral Project
Project Site Plan

N

0 100 200 400
Feet

Name: 21268 PLAN Fig 2 Project Site Plan.Mxd
Print Date: 11/25/2020, Author: pcarlos

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EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

I. *AESTHETICS*

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista or scenic highway? ☐ ☐ ☐ ☒

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? ☐ ☐ ☐ ☒

a) and b) No Impact. The Project is not located within the viewshed of any scenic vistas or officially designated State scenic highways (Caltrans 2019). The closest scenic viewpoint is an observation deck located within the Sonny Bono Salton Sea National Wildlife Refuge, approximately 3 miles southwest of the Project site (USFWS 2019). Although the area is relatively flat, an extensive shrub-covered marsh and the Alamo River separate the viewpoint from the Project site; thus, the Project site would not be within the viewshed of the observation deck. Additionally, HWY 111 is listed by Caltrans as eligible for State scenic highway designation and is located 3 miles east of the Project site. Though, HWY 111 has not been officially designated and the eligible section of highway is from Bombay Beach to the Imperial County-Riverside County line, approximately 13 miles northwest of the Project site at the closest point (Caltrans 2019). Further, the site is void of any trees, rock outcrops, or historic buildings and therefore, no scenic resources would be damaged as a result of the Project. No impacts would occur to scenic vistas or scenic resources along a State scenic highway and no further analysis is required.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surrounding? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? ☐ ☐ ☐ ☒

c) No Impact. The Project is located on a vacant, non-urbanized area characterized by agricultural and industrial land uses, as well as vacant desert land. Public viewers of the Project site would be limited to workers at HR1 power plant, workers at the aquaculture farm to the southeast, and any passersby on nearby roads. There are no residences or recreation areas in proximity of the Project site. In addition, construction of the Project would be temporary occurring from approximately Q3 of 2021 to Q2 of 2023. Views of Project operations will be consistent with current views of the area, which includes the neighboring HR1 power plant. The Project would not substantially degrade the existing visual character or public views of the site or surroundings and no impacts would occur. Thus, no further analysis is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ☐ ☐ ☒ ☐

d) Less Than Significant Impact. As part of the Project design, industrial grade lighting sources would be required for Project operations and safety purposes. Lighting would be covered and directed downward (downshielded) or towards the proposed facility to avoid backscatter. Nighttime illumination features for the Project would be controlled with sensors or switches operated such that lighting would only be activated when needed. In addition, the Project is in a rural area of the County with the closest sensitive receptor being a residence over 1 mile north of the Project site on Pound Road. Industrial level lighting that would be associated with the proposed Project, would not be significant when compared to the existing uses on the site. Impacts related to increased light and glare from operation of the proposed facility would be less than significant and no further analysis is required.

II. *AGRICULTURE AND FOREST RESOURCES*

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. --Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ☐ ☐ ☐ ☒

a) No Impact. According to the California Department of Conservation's Farmland Mapping and Monitoring Program, the Project site is a combination of "Urban and Built-Up Land" and "Other Land" (DOC 2020a). No Prime Farmland, Unique Farmland, or Farmland of

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

Statewide Importance is located within or in proximity to the Project site. The County General Plan designates the Project site as Agriculture land use; however, according to the General Plan Land Use Element, a non-agricultural land use may be permitted within General Plan-designated agricultural land if the use does not conflict with agricultural operations and will not result in the premature elimination of agricultural operations (County 1993). There is no existing agricultural land on the Project site, thus the Project would not conflict with or eliminate agricultural operations. Historically there were agricultural operations on the Project site, but the conversion of this agricultural land to another use was analyzed as part of the 2007 Hudson Ranch Power I Project and determined to be below the level of CEQA significance. No impacts would occur and no further analysis is required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract? ☐ ☐ ☐ ☒

b) No Impact. The Project site is zoned M-2 and is located within the geothermal overlay zone (G) and pre-existing allowed/restricted overlay zone (PE). No land within the Project site is zoned for agricultural use and the Project was considered consistent with the site zoning with the approval of the Conditional Use Permit in June 2020. The Project site is not subject to the provisions of a Williamson Act contract (DOC 2018). No impacts would occur and no further analysis is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? ☐ ☐ ☐ ☒

d) Result in the loss of forest land or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

c) and d) No Impact. As previously mentioned, the Project site is zoned M-2-G-PE. No land within the Project site is zoned forest land or timberland and there is no existing forest land on the Project site or in the immediate vicinity. The Project would not result in the loss of forest land or the conversion of forest land to non-forest use; no impacts would occur and no further analysis is required.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

e) No Impact. The Project site is zoned M-2-G-PE and does not contain agricultural land or forest land. The Project would not result in the conversion of agricultural land or forest land. No impacts would occur and no further analysis is required.

III. *AIR QUALITY*

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to the following determinations. Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan? ☒ ☐ ☐ ☐

a) Potentially Significant Impact. The Project is located within the Salton Sea Air Basin (SSAB) and is subject to the jurisdiction of the Imperial County Air Pollution Control District (ICAPCD) Rules and Regulations (CARB 1999). The ICAPCD is charged with upholding ambient air quality standards set forth by the state and federal government for the area within its jurisdictional limits. The ICAPCD also serves as a regional authority to legally enforce air pollution regulations related to the release of toxic and hazardous emissions.

The Project has potential to create emissions during construction and operation including dust, fumes, equipment exhaust, and other air contaminates that could conflict with the ICAPCD Rules and Regulations as well as the County's Air Quality Attainment Plan. To limit impacts during site construction, the Project will implement a dust control plan consisting of dust-reducing Best Management Practices (BMPs). Some of these BMPs include frequent watering of the Project site during construction activities and limiting vehicle traffic to 15 miles per hour on unpaved onsite access roads. In addition, the Project would comply with the applicable ICAPCD regulations including but not limited to Rule 801, Rule 803, Rule 804, and Rule 805 (ICAPCD 2020).

During Project operations small quantities of criteria air pollutants, criteria air pollutant precursors, and hazardous air pollutants would be released during extraction, processing, and packaging activities. Additionally, the Project will utilize a backup diesel generator. Other than emergency uses, regular tests will be conducted in accordance with operational requirements. A Permit to Construct and a Permit to Operate would be obtained, as required by ICAPCD, for the facility's stationary air pollutant emission sources and air pollutant control equipment. Warehouse and yard vehicles (forklifts and manlift) would be propane-powered to minimize combustion emissions from these non-stationary sources. Moreover, the Project will utilize a small cooling tower designed to minimize particulate emissions.

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

Although Project emissions may be reduced through the use of pollution control devices and dust control measures, Imperial County is currently designated as a serious nonattainment area for PM10 (CARB 2019), and therefore potentially significant impacts may still result and impacts will be further addressed in the EIR.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? ☒ ☐ ☐ ☐

b) Potentially Significant Impact. Currently, the SSAB is either in attainment or unclassified for all federal and state air pollutant standards with the exception of ozone (O3) and total suspended particulate matter less than 2.5 microns in diameter (PM2.5) and 10 microns or less in diameter (PM10). SSAB is in federal and state nonattainment for ozone and PM10, and partially in federal nonattainment for PM2.5 (CARB 2019). As mentioned above, both Project construction and operations have the potential to create emissions that could result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is in non-attainment, namely O3, PM10, and PM2.5. Project emissions may be reduced through the use of pollution control devices and dust control measures previously discussed, but a potentially significant may still result. Thus, impacts are considered potentially significant and will be addressed in the EIR.

c) Expose sensitive receptors to substantial pollutants concentrations? ☐ ☐ ☒ ☐

c) Less Than Significant Impact. The Project is located in a rural area of the County and is not in close proximity to any sensitive receptors such as residences, hospitals, or schools. The closest residence is over a mile north of the Project site along Pound Road, the closest school is approximately 4 miles southeast of the Project site, and the closest hospital is approximately 16 miles south of the Project site (Google 2020).Approximately 62 full-time employees are expected to be working onsite, but these employees will be provided the proper personal protective equipment (PPE) and training in accordance with Occupational Safety and Health Administration (OSHA) regulations to protect them from substantial pollutant concentrations. A less than significant impact is expected to result, but these issues will be evaluated further in the EIR.

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)? ☐ ☐ ☒ ☐

d) Less Than Significant Impact. As mentioned above, the Project is located in a rural area of the County and is not in close proximity to any sensitive receptors with the closest residence over a mile north of the Project site along Pound Road, the closest school approximately 4 miles southeast of the Project site, and the closest hospital approximately 16 miles south of the Project site (Google 2020). Approximately 62 full-time employees are expected to be working onsite, but these employees will be provided the PPE and training in accordance with OSHA regulations. Any odors onsite are expected to only affect employees and are not anticipated to affect a substantial amount of people. Less than significant impacts are expected, but odors will be evaluated further in the EIR.

IV. ***BIOLOGICAL RESOURCES*** ***Would the project:***

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? ☒ ☐ ☐ ☐

a) Potentially Significant Impact. The Project site is heavily disturbed from historic agricultural operations onsite and construction of the HR1 plant. Yet, the Project site is approximately two miles east of the Salton Sea, which serves as an important wintering and staging site for migratory birds and several endangered species populations. Biological surveys were conducted by biologists at Chambers Group, Inc. in November 2020. A Biological Technical Report is being prepared for the Project to identify the potential for endangered, threatened, sensitive or species of concern within the Project area; map habitats; and ascertain the probability of the presence of sensitive species onsite. Due to previous disturbance of the Project site, high quality habitat is not expected to exist onsite. However, impacts from the Project on migratory birds may be potentially significant and will be addressed in the EIR.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? ☐ ☐ ☒ ☐

c) Have a substantial adverse effect on state or federally ☐ ☐ ☒ ☐

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

b) and c) Less Than Significant Impact. According to the U.S. Fish and Wildlife Service's National Wetland Inventory, the Project site does not contain any wetland or riparian habitat. The closest potential wetland and riparian habitats include freshwater emergent wetlands and the Alamo River, which is likely to have riparian habitat along its banks, located approximately 1 mile southwest of the Project site (USFWS 2020). The Project site is approximately 500 feet north of IID canals and agricultural drains that flow into these wetlands and the Alamo River; however, to prevent offsite impacts to nearby wetlands resulting from stormwater runoff during construction the Project would be required to obtain coverage under a Construction General Permit to comply with National Pollutant Discharge Elimination System (NPDES) requirements. Compliance with the Construction General Permit would require the development and implementation of a Stormwater Pollution Prevent Plan (SWPPP) and associated BMPs. These BMPs will include measures that would be implemented to prevent discharges into adjacent wetland and riparian habitat from the Project site during construction activities.

To prevent significant impacts to the nearby wetland and riparian habitat due to increased runoff at the Project site during operations, a stormwater retention basin will be developed on site. The Project will likely share the HR1 stormwater retention basin and will ensure the basin is engineered and constructed to contain the combined stormwater storage requirements of both the HR1 and Project plant sites. If a shared basin cannot be done for technical, legal, or other reasons then the Project will construct its own, separate basin on the far south side of the parcel. Overall, impacts to wetland and riparian habitats resulting from the Project would be less than significant and no further analysis is required.

d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐

d) Potentially Significant Impact. The Project site is heavily disturbed from previous agricultural operations and construction of the HR1 plant. Additionally, there are no identified wildlife corridors within the Project site (County 1993). However, as mentioned above, the Project site is approximately two miles east of the Salton Sea, which serves as an important wintering and staging site for migratory birds and several endangered species populations. A Biological Technical Report is being prepared for the Project to identify the potential for native or migratory wildlife within the Project area; map habitats; and ascertain the probability of the presence of sensitive species onsite. Due to previous disturbance of the Project site, high quality habitat is not expected to exist. However, impacts from the Project on migratory birds, may be potentially significant and will be addressed in the EIR.

e) Conflict with any local policies or ordinance protecting biological resource, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

e) and f) Less Than Significant Impact. The County General Plan Conservation and Open Space Element policies require conservation of native habitat of sensitive plants and animals through the dedication of open space easements, or other means that will ensure their long-term protection and survival. As mentioned above, the Project site is highly disturbed from previous uses and is not expected to contain high quality native habitat. However, the Project site is located within the Desert Renewable Energy Conservation Plan (DRECP) boundaries which aims at protecting irreplaceable desert habitats, plants, animals and ecological processes and allowing for the development of a significant amount of centralized renewable energy (from solar, wind and geothermal facilities, which will also require transmission lines) by focusing on areas with the least ecological impact. Because the DRECP's intent is to identify areas in the desert appropriate for the utility-scale development of wind, solar, and geothermal energy projects and the Project does not include the development of such energy projects, the Project would neither conflict with nor does it require compliance with the DRECP. Impacts to native habitat of sensitive plants and animals resulting from the Project would be less than significant and no further analysis is required.

V. *CULTURAL RESOURCES* *Would the project:*

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☒	☐	☐	☐

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐

a) and b) Potentially Significant Impact. Unrecorded subsurface archaeological and historical resources may be impacted, if present, by minor grading of the Project site and installation of footings four to six feet below the ground surface. A Cultural Resources Report will be prepared for the Project detailing the results of an archaeological literature review, records search, and intensive pedestrian survey of the Project site. Further analysis of the historical and archaeological resources is required and will be addressed in the EIR.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☒	☐	☐	☐

c) Potentially Significant Impact. The Project is not expected to disturb any human remains. However, with grading involved, a potential to find human remains exists. A Cultural Resources Report will be prepared for the Project detailing the results of an archaeological literature review, records search, and intensive pedestrian survey of the Project site. Further analysis of potential impacts to human remains is required and will be addressed in the EIR.

VI. *ENERGY Would the project:*

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☒	☐	☐	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☒	☐	☐	☐

a) and b) Potentially Significant Impact. Both Project construction and operational activities would require energy consumption. Construction activities consume energy temporarily through the use of heavy construction equipment, as well as truck and worker traffic. It is estimated on average 20 to 25 trucks per day will travel to and from the construction site, except during grading when about 50 to 60 trucks are anticipated. Approximately 200 to 250 workers are anticipated to be onsite during Project construction. Construction equipment anticipated for the Project is listed in Section 2 D above. The Project will use energy-conserving construction equipment to the extent possible, including standard mitigation measures for construction combustion equipment recommended in the Imperial County Air Pollution Control District (ICAPCD) CEQA Air Quality Handbook. The use of better engine technology, in conjunction with the ICAPCD's standard mitigation measures will reduce the amount of energy used for Project construction.

For operation of the ATLiS plant, up to 8 MW of electrical power is required. Power will be purchased from the IID and a new power line will be constructed to the ATLiS plant site from the current IID/HR1 substation located near the northeast corner of the HR1 property. Electrically driven equipment including a power distribution unit will be installed at the HR1 facility to deliver geothermal brine, steam/stream condensate and no condensable gas to the Project site. The power distribution unit will be provided power via a distribution line from either the ATLiS electrical building or the IID/HR1 substation. Further, a 600 HP emergency diesel generation will be used to keep vital plant systems operating during plant outages. Project operations would also require daily gasoline- and diesel-fueled vehicle travel for up to 62 full-time staff and approximately 24 trucks traveling to and from the Project site. Six of these trucks are estimated for outgoing waste generated on the site, which is expected to be delivered to and processed at the Burrtec Solid Waste Facility. However, it is estimated that up to 10% of trucks carrying filter cakes (waste debris mix of silica, sand and iron) from the plant would be required to be delivered to a waste treatment facility out of state.

Buildings onsite will be designed in accordance with the California Energy Commission's 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings and the California Green Building Standards (CCR, Title 24, Part 11). Additionally, an energy analysis will be prepared for the Project to quantify energy consumption. Further analysis of the Project's energy consumption and consistency with applicable plans, policies, and regulations for reducing wasteful, inefficient, and unnecessary energy usage. Impacts will be analyzed further in the EIR.

VII. *GEOLOGY AND SOILS Would the project:*

a) Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury, or death involving:				
1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☒	☐

1) Less Than Significant Impact. The Project site is not located within an Alquist-Priolo fault zone and the closest fault zone is

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

the San Andreas fault zone approximately 13 miles northwest (DOC 2020b). However, the County General Plan shows that the potentially active Calipatria Fault runs underneath the Project site (County 1993). Despite a known earthquake fault within the Project site, all parcels encompassing the site have been previously graded and would not require excavation. Approximately 10,000 cubic yards of soil will be brought onsite to raise the elevation, but no significant ground disturbing activities that could directly cause rupture of the Calipatria Fault would occur during Project construction or operation. Further, no Project activities would indirectly cause rupture of any known earthquake faults in the area. Impacts would be less than significant.

2) Strong Seismic ground shaking? ☒ ☐ ☐ ☐

2) Potentially Significant Impact. As mentioned above, the Project site is not located within an Alquist-Priolo fault zone and the closest fault zone is the San Andreas fault zone approximately 13 miles northwest (DOC 2020b). However, the Project site is located within a seismically active area of Southern California and the County General Plan shows that the potentially active Calipatria Fault is underlying the Project site (County 1993). Additionally, approximately 62 full-time employees would be on the Project site 24 hours per day, 7 days a week. To lessen potential hazards related to seismic ground shaking, Project structures would be analyzed for earthquake loading during design, and would be designed in accordance with the 2019 seismic requirements provided in the California Building Code. A registered professional civil/geotechnical engineer will also prepare a geotechnical investigation of the Project site that includes comprehensive subsurface exploration, appropriate laboratory testing, and detailed evaluation of potential constraints to critical project structures. The geotechnical investigation and proposed site measures may prevent Project activities from exacerbating the risk of loss, injury, or death involving rupture of a known earthquake fault or seismic ground shaking; however, further analysis is required and these issues will be addressed in the EIR.

3) Seismic-related ground failure, including liquefaction and seiche/tsunami? ☒ ☐ ☐ ☐

3) Potentially Significant Impact. The Project site is not located within a Department of Conservation identified liquefaction zone, but the County General Plan identifies that liquefaction is a common hazard in the County due to geologically young, unconsolidated sediments of the Salton Trough (DOC 2020b; County 1993). Soils on the Project site are also majority wet Imperial silty clay, which may be susceptible to ground failure (USDA 2020). Additionally, approximately 62 full-time employees would be on the Project site 24 hours per day, 7 days a week. As mentioned above, a registered professional civil/geotechnical engineer will prepare a geotechnical investigation of the Project site. Impacts involving seismic-related ground failure require further analysis and will be addressed in the EIR.

4) Landslides? ☐ ☐ ☐ ☒

4) No Impact. The Project site is flat and is not located within an identified landslide zone (DOC 2020b). According to the County General Plan, the closest area of landslide activity is on the border of San Diego and Imperial Counties approximately 30 miles west of the Project site (County 1993). The Project would not exacerbate the risk of loss, injury, or death involving landslides. No impacts would occur and no further analysis is required.

b) Result in substantial soil erosion or the loss of topsoil? ☐ ☐ ☒ ☐

b) Less Than Significant Impact. Project construction and operations have the potential to result in soil erosion and loss of topsoil mainly through increasing impervious surfaces onsite and increasing vehicle and foot traffic onsite. All parcels encompassing the Project site have been previously graded and would not require excavation. Approximately 10,000 cubic yards of soil will be brought onsite to raise the elevation and approximately 55 acres of the Project site would be permanently disturbed by the Project. The Project would implement standard industry methods, such as BMPs, to prevent surface runoff and erosion where applicable. These BMPs would comply with the County Building & Grading Regulations and the SWPPP developed for the Project. Moreover, a Drainage and Grading Plan will be submitted to the County to ensure implementation of all required BMPs. Impacts related to soil erosion would be less than significant and no further analysis is required.

c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse? ☒ ☐ ☐ ☐

d) Be located on expansive soil, as defined in the latest Uniform Building Code, creating substantial direct or indirect risk to life or property? ☒ ☐ ☐ ☐

c) and d) Potentially Significant Impact. As previously discussed, the Project site is flat and is not located within a Department of Conservation identified liquefaction or landslide zone (DOC 2020b). However, the County General Plan identifies that liquefaction is a common hazard in the County (County 1993). Soils on the Project site are also majority wet Imperial silty clay, which may be susceptible to soil instabilities causing subsidence, liquefaction, and expansion (USDA 2020). A registered professional civil/geotechnical engineer will prepare a geotechnical investigation of the Project site that includes comprehensive subsurface exploration, appropriate laboratory testing, and detailed evaluation of potential constraints to critical project structures, including liquefaction, subsidence, and expansive

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

soils. Impacts involving geologic unit or soil instability require further analysis and will be addressed in the EIR.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? ☐ ☐ ☐ ☒

e) No Impact. During construction of the Project, portable toilets would be provided for construction workers and waste would be transported offsite to a sanitary water treatment plant. Sewage generated during Project operations would be processed by the existing HR1 sewer treatment plant adjacent to the Project site which as discussed in Section XIX Utilities and Service Systems, has available capacity. No new septic tanks or alternative waste water disposal systems will be constructed as a result of the Project; thus, no impacts would occur and no further analysis will be required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ☒ ☐ ☐ ☐

f) Potentially Significant Impact. Paleontological resources are typically impacted when earthwork activities, such as mass excavation cut into geological deposits (formations) with buried fossils. The Project is anticipated to only require minor grading and installation of footings four to six feet below the ground surface. Moreover, the entire Project site development area has been previously disturbed during early agricultural operations and during the construction of HR1. No paleontological resources are known to occur in the area. However, the potential to disturb unknown resources may still exist as, many paleontological fossil sites have been recorded in Imperial County and have been discovered during construction activities. Further analysis is required and will be addressed in the EIR.

VIII. *GREENHOUSE GAS EMISSION Would the project:*

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ☒ ☐ ☐ ☐

b) Conflict with an applicable plan or policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ☒ ☐ ☐ ☐

a) and b) Potentially Significant Impact. The primary climate change legislation in California is Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing greenhouse gas (GHG) emissions in California, and AB 32 required that GHGs emitted in California be reduced to 1990 levels by the year 2020. In addition to AB 32, Executive Order B-30-15 was issued on April 29, 2015 that aims to reduce California's GHG emissions 40 percent below 1990 levels by 2030. In September 2016, AB 197 and Senate Bill (SB) 32 codified into statute the GHG emission reduction targets provided in Executive Order B-20-15.

Project construction activities are expected to emit GHGs including carbon dioxide (CO2), nitrogen oxides (NOx), and methane (CH4), from the combustion of fossil fuels during the operation of gasoline and diesel-fueled construction equipment and vehicles. A list of anticipated construction equipment for the Project can be found in Section D of the Project Description above. Project operations would create new sources of particulate matter from drying, transfer, and packing lithium products; operation of the cooling tower; and maintenance, testing, and emergency operations of the emergency diesel engine-generator. The emergency diesel engine-generator would also generate NOx, carbon monoxide (CO), PM, and sulfur dioxide (SO2). These emissions may potentially conflict with an applicable plan, policy, or regulation for reducing the emissions of GHGs. Further analysis of potential impacts related to GHG emissions generated by the Project, will be quantified and assessed in the EIR.

IX. *HAZARDS AND HAZARDOUS MATERIALS Would the project:*

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ☒ ☐ ☐ ☐

b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ☒ ☐ ☐ ☐

a) and b) Potentially Significant Impact. Construction of the Project would require the limited transport and temporary use of

materials deemed to be hazardous, including unleaded gasoline, diesel fuel, oil, lubricants (i.e., motor oil, transmission fluid, and hydraulic fluid), solvents, adhesives, and paint materials. However, any potentially hazardous materials used or found onsite during construction would be handled in accordance with state and federal regulations regarding the transport, use, and storage of hazardous materials.

Project operations would generate solid hazardous waste through geothermal brine processing, including iron-silica filter cakes, lead sulfide, and various laboratory wastes. Hazardous materials/waste generated by the Project would not be left on-site and will be transported to an approved hazardous waste landfill. The majority of the outgoing waste generated onsite is expected to be delivered to and processed at the Burrtec Solid Waste Facility. However, filter cakes generated during the impurity removal process may contain hazardous materials at higher levels than allowed at waste facilities in the state of California. These filter cakes will be tested and routed to the appropriate disposal location. It is estimated that up to 10% of trucks carrying hazardous waste from the plant would therefore be delivered to a waste treatment facility in Arizona or Idaho.

To prevent accidental release of hazardous materials, spill containment areas and sumps subject to spills of immiscible chemicals would be drained to a dilution water tank. Any oil contamination spills would be collected with absorbent pads and disposed as required by law. The Project site would be graded and constructed so that all process spills would drain into area drains that would be reprocessed into the system. Excess process spills would drain into the brine pond.

Additionally, an Emergency Response Plan (ERP) would be prepared and implemented, which will identify proper hazardous materials handling, use, and storage; emergency response; spill control and prevention; employee training; and reporting and record keeping. This would help to limit human risk and environmental risk associated with exposure to hazardous materials. Nonetheless, impacts from hazardous materials may occur and further analysis would be required. This issue will be addressed in the EIR.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ☐ ☐ ☒ ☐

c) Less Than Significant Impact. Although the Project has the potential to emit hazardous emissions and/or handle hazardous substances, the Project site is not within one-quarter mile of an existing or proposed school. The closest school to the Project site is Grace Smith Elementary School, approximately 4 miles northeast in Niland, CA. Additionally, the ERP that would be prepared and implemented for the Project will limit human risk associated with exposure to hazardous materials, with special consideration of the schools in the area. Impacts would be less than significant and no further analysis is required.

d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ☒ ☐ ☐ ☐

d) Potentially Significant Impact. According to the Department of Toxic Substance Control's EnviroStor Database and the State Water Resources Control Board's GeoTracker Database, there are no recorded hazardous material sites within a mile of the Project site (DTSC 2020; SWRCB 2020). However, due to the neighboring HR1 plant, a Phase I Environmental Site Assessment will be prepared to analyze the potential for contaminants within the Project site resulting from HR1 plant operations. Further analysis is required and will be addressed in the EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ☐ ☐ ☐ ☒

e) No Impact. The Project site is not located within two miles of a public airport or public use airport or within the boundaries of an airport land use plan. The closest airport is Calipatria Municipal Airport approximately 6 miles southeast of the Project site. Therefore, the Project would not expose people working in the Project area to safety hazards or excessive noise. No impact would occur and no further analysis is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☒ ☐

f) Less Than Significant Impact. Temporary or single-lane closure of some roadways may occur during the transport of oversized equipment or construction activities. Road closures would be coordinated with County Public Works, the County Sheriff, and ICFD prior to closure, and would be scheduled to occur during off-peak commute hours. The Project's construction and operational activities would be in compliance with the Imperial County Emergency Operations Plan (EOP) and Multi-Jurisdiction Hazard Mitigation Plan (MJHMP), and would not physically interfere with the execution of the policies and procedures in these plans (County 2015; 2016).

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

Therefore, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant and no further analysis is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? ☐ ☐ ☒ ☐

g) Less Than Significant Impact. The Seismic and Public Safety Element of the County General Plan states that the potential for a major fire in the unincorporated areas of the County is generally low (County 1993). According to the California Department of Forestry and Fire Protection's (CALFIRE) Fire Hazard Severity Zone Viewer, there are no very high, high, or moderate fire hazard severity zones in the local or state responsibility areas within 30 miles of the Project site (CALFIRE 2020). Additionally, the Project will include fire suppression systems designed in accordance with federal, state, and local fire codes; occupational health and safety regulations; and other jurisdictional codes, requirements, and standard practices. Included in the fire suppression system is a 500,000 gallon above-ground water tank to be installed onsite, serving as the primary water supply for the joint fire suppression system. In addition, during construction the Project site and access road will be cleared of all vegetation and cleared areas will be maintained throughout construction. Fire extinguishers will be available around the construction site as well. During operations, a brush control program will be prepared and implemented on those portions of the Project site that will not be developed. The Imperial County Fire District (ICFD) will be consulted to review and approve any and all proposed fire equipment, apparatus, and related fire prevention plans. Impacts would be less than significant and no further analysis is required.

X. *HYDROLOGY AND WATER QUALITY Would the project:*

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? ☐ ☐ ☒ ☐

a) Less Than Significant Impact. The Project site is located within the California Regional Water Quality Control Board's Colorado River Basin Region (RWQCB 2019). The Project is therefore subject to standards set forth in the Colorado River Basin's (Basin) Water Quality Control Plan. As previously mentioned, Project construction and operations would have the potential to result in soil erosion and runoff on and offsite mainly due to grading and increased impervious surfaces. Through implementation of a SWPPP and a Drainage and Grading Plan, the Project would implement standard industry BMPs and relevant Basin BMPs to control off-site discharges. Additionally, the Project would develop a stormwater retention basin, either shared with HR1 or independent, which would be engineered and constructed to contain any stormwater runoff. If a shared facility cannot be done for technical, legal, or other reasons then the Project will construct its own basin on the far south side of the parcel. Stormwater flows will be directed to the retention basin via ditches, culverts, and/or swales.

As previously mentioned in Section IX, Hazards and Hazardous Materials, spill containment areas and sumps subject to spills of immiscible chemicals would be drained to a dilution water tank. Any oil contamination spills would be collected with absorbent pads and disposed as required by law. The Project site would be graded and constructed so that all process spills would drain into area drains that would be reprocessed into the system. Excess process spills would drain into the brine pond.

The Project will not allow any offsite discharges that could violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality. Impacts would therefore be less than significant and no further analysis is required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ☒ ☐ ☐ ☐

b) Potentially Significant Impact. It is estimated that the Project would require up to 50,000 gallons of water per day during construction for fugitive dust control; approximately 90,000 gallons per hour for operational cooling and other processes; and approximately 112 gallons per hour for potable water purposes during operations. All water required for the Project would be purchased from the IID, whose only source of water is the Colorado River. IID operates no water wells or groundwater recharge areas due to the lack of rainfall and poor quality of groundwater resources in the area (IID 2017). However, a Water Supply Assessment will be prepared for the Project to analyze potential impacts to groundwater supplies in the area. Further analysis is required and would be included in the EIR.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or;	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☒	☐

c) i) through iv) Less Than Significant Impact. No rivers or streams travel through the Project site or are directly adjacent to the Project site. The Alamo River is approximately 0.7 mile southwest of the Project site and drainage channels approximately 500 feet south of the Project site (along Schrimpf Road) lead towards the Alamo River and surrounding wetlands. Although Project construction and operations would have the potential to result in soil erosion and runoff on and offsite due to grading and increased impervious surfaces, through implementation of a SWPPP and a Drainage and Grading Plan, the Project would implement standard industry BMPs and relevant Basin BMPs to control off-site discharges. Additionally, a stormwater retention basin would be developed on the site. In order to prevent substantial erosion resulting from high winds in the area, a Fugitive Dust Suppression Plan will be prepared and the Project site will be watered as necessary.

The western portion of the Project site, currently APN 020-100-025, is located within the Federal Emergency Management Agency (FEMA) 100-year floodplain (FEMA 2020). However, during construction of the HR1 plant an administrative Flood Plan permit was approved for the HR1 site and an earthen flood protection berm was constructed. This berm, constructed on the west and south sides of APN 020-100-025, would prevent flooding of the Project site.

With implementation of BMPs and construction of a new retention basin, substantial erosion and runoff on and offsite is not expected. Less than significant impacts would occur and no further analysis is required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐

d) Less Than Significant Impact. As mentioned above, the western portion of the Project site (APN 020-100-025) is located within the FEMA 100-year floodplain; although, an earthen flood protection berm surrounds the western and southern sides of the parcel (FEMA 2020). The flood protection berm would prevent flooding onto the Project site. Additionally, the Project site is two miles east of the Salton Sea, which is a potential source of seiche. According to the County General Plan's Seismic and Public Safety Element, a seiche at the Salton Sea could occur under the appropriate seismic conditions, but there have been a number of seismic events with no significant seiches occurred to date (County 1993). Further, all dams within the County are approximately 65 miles east of the Project site and the Project site is approximately 100 miles from the coast of the Pacific Ocean. Thus, there is no risk of dam inundation or tsunami within the Project site. Impacts would be less than significant and no further analysis is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☒	☐	☐	☐

e) Potentially Significant Impact. As discussed above, implementation of a SWPPP and a Drainage and Grading Plan would ensure the Project would implement standard industry BMPs and relevant Basin BMPs to control off-site discharges. Additionally, a stormwater retention basin would be developed on the site. The Project will not allow any offsite discharges that could violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality. Additionally, all water required for the Project would be purchased from the IID, and IID operates no water wells or groundwater recharge areas (IID 2017). A Water Supply Assessment will be prepared to ensure the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Further analysis is required and would be discussed in the EIR.

XI. *LAND USE AND PLANNING Would the project:*

a) Physically divide an established community?	☐	☐	☐	☒

a) No Impact. The Project is located in a rural area approximately 3 miles south of Niland, CA, which is the closest nearby community. There are no residences in close proximity to the Project site; thus, the Project would not physically divide an established community and no impacts would occur and no further analysis is required.

b) Cause a significant environmental impact due to a conflict with	☐	☐	☐	☒

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

b) No Impact. The Project site is zoned M-2-G-PE (Medium Industrial /Geothermal Overlay) and the County General Plan designates the Project site as Agriculture land use. According to the General Plan Land Use Element, a non-agricultural land use may be permitted within General Plan-designated agricultural land if the use does not conflict with agricultural operations and will not result in the premature elimination of agricultural operations (County 1993). As analyzed in Section II, Agriculture and Forest Resources above, there is no existing agricultural land on the Project site and the land is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Department of Conservation (DOC 2020a). A CUP was issued for the Project in June 2020, making the Project consistent with the site zoning in accordance with the County's Zoning Ordinance. No impacts would occur and no further analysis is required.

XII. *MINERAL RESOURCES* *Would the project:*

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a) and b) No Impact. Other than the geothermal resources being developed in the Project vicinity, there are no known mineral resources or mineral resource recovery sites within the vicinity of the Project site (DOC 2020d; County 1993). There are a number of mines along the Chocolate Mountain Range to the east, but the closest is approximately 6 miles from the Project site (DOC 2020c). The County General Plan's Additionally, the Project is a geothermal brine processing plant that would produce commercial-grade lithium, zinc, and manganese products, increasing the availability of these mineral resources. The Project would therefore be in alignment with the County General Plan's Renewable Energy and Transmission Element, Objective 3.2, which states that the County should "encourage the continued development of the mineral extraction/production industry for job development using geothermal brines from the existing and future geothermal flash power plants" (County 1993). No known mineral resources or mineral resource recovery sites would be lost as a result of the Project; thus no impacts would occur and no further analysis is required.

XIII. *NOISE* *Would the project result in:*

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

a) Potentially Significant Impact. The Imperial County Municipal Code Title 9 Land Use Code, Division 7, Chapter 2, Section 90702.00 - Sound level limits, establishes one-hour average sound level limits for the County's land use zones. Industrial operations are required to comply with the noise levels prescribed under the general industrial zones. Therefore, the Project is required to maintain noise levels below 75 decibels (dB) (averaged over one hour) during any time of day. The Project would also be expected to comply with the Noise Element of the General Plan, which states that construction noise from a single piece of equipment or a combination of equipment shall not exceed 75 dB when averaged over an eight hour period and measured at the nearest sensitive receptor. The County Noise Element also requires construction equipment operation to be limited to the hours of 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m. on Saturdays (County 1993). Approximately 90% of Project construction would occur during daylight hours, but the remaining 10% of work would occur during nighttime hours to avoid extreme summer temperatures. Although the closest sensitive receptor is a residence over one mile north on Pound Road, construction would occur outside the allowable construction noise hours set within the County Noise Element. Impacts would therefore be potentially significant and will be analyzed in the EIR.

b) Less Than Significant Impact. Groundborne vibration and groundborne noise could originate from earth movement during the construction phase of the Project. However, significant vibration is typically associated with activities such as blasting or the use of pile drivers, neither of which would be required during Project construction. Additionally, the closest sensitive receptor is a residence over one mile north of the Project site and therefore would not experience damage or nuisance. The Project would be expected to comply with all applicable requirements for long-term operation, as well as with measures to reduce excessive groundborne vibration and noise to ensure that the Project would not expose persons or structures to excessive groundborne vibration. Impacts would be less than significant and no further analysis is warranted.

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**
c) For a project located within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

c) No Impact. The Project site is not located within two miles of a public airport or public use airport. The closest airport is Calipatria Municipal Airport approximately 6 miles southeast of the Project site. Therefore, the Project would not expose people working in the Project area to excessive noise levels. No impact would occur and no further analysis is required.

XIV. *POPULATION AND HOUSING* *Would the project:*

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐

a) Less Than Significant Impact. The Project involves construction and operation of a geothermal brine processing plant and does not propose the development of any housing onsite. The Project would require approximately 62 full-time employees who are expected to live in and commute from the local surrounding communities. Therefore, the Project is not anticipated to induce population growth directly or indirectly, thus impacts would be less than significant and no further analysis is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

b) No Impact. The Project site is partially on the existing HR1 site, which was previously permitted for the geothermal plant. In addition to the actual power plant, the rest of the land has been used for laydown areas, storage areas, and stormwater management. The additional land that will be included is an approximately 15-acre parcel, APN 020-100-025, and an approximate 40-acre portion of APN 020-100-046 both of which have been vacant for several decades and were previously used for geothermal testing and associated activities. There are no residences within the Project site or within close proximity, thus no existing people or housing would be displaced as a result of the Project. No impacts would occur and no further analysis is required.

XV. *PUBLIC SERVICES*

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1) Fire Protection?	☐	☐	☒	☐

1) Less Than Significant Impact. Fire protection and emergency medical services in the Project area are provided by the ICFD. The closest station to the Project site is the Niland Station, approximately 4 miles northeast or an approximately 9 minute drive (Google 2020). During construction, the Project site and access road will be cleared of all vegetation and cleared areas will be maintained throughout construction. Fire extinguishers will also be available around the construction site. In case of emergency response during operations, both the Project access roads (off McDonald Road and Davis Road) would have turnaround areas to allow clearance for fire trucks per fire department standards: 70 feet by 70 feet, and 20-foot-wide. In addition, a 500,000 gallon fire water storage tank will be constructed adjacent to the HR1 water storage pond (on the east side of the site) to serve as the primary water supply for the new joint fire suppression system to be constructed near the storage tank. The joint fire protection system will be equipped with quick connect hose bibs; an underground fire main and surface distribution equipment such as yard hydrants and hose houses; monitors around the perimeter of the cooling tower; automatic sprinklers for the buildings, if needed; and a complete detection and alarm system. The firewater supply and pumping system will provide an adequate quantity of fire-fighting water and a 62 HP diesel-fueled firewater pump will be available onsite. A brush control program will also be prepared and implemented on those portions of the Project site not being developed to mitigate the potential of an offsite brush fire.

All fire suppression systems will be designed in accordance with federal, state, and local fire codes; occupational health and safety regulations; and other jurisdictional codes, requirements, and standard practices. The ICFD will be consulted to review and approve

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

any and all proposed fire equipment, apparatus, and related fire prevention plans. Acceptable service ratios and response times for fire protection will be maintained following Project implementation through consultation with the ICFD and the County. Impacts would be less than significant and no further analysis is required.

2) Police Protection? ☐ ☐ ☒ ☐

2) Less Than Significant Impact. Police protection services in the area are provided by the Imperial County Sheriff's Department. The closest police station to the Project site is the Imperial County Sheriff's office in Niland, approximately 4 miles northeast or an approximately 10 minute drive (Google 2020). The increase in construction related traffic is not anticipated to significantly increase demand on law enforcement services due to the rural nature of the Project vicinity. Additionally, the Project site would be fenced with 6-foot-high chain-link security fence, which may be topped with three-strand barbed wire, and points of ingress/egress would be accessed via locked gates with a guard house. As part of the Project design, industrial grade lighting sources would be also required for Project operations and safety purposes. This lighting will include sensors or switches operated such that lighting would be activated when needed during nighttime hours. In addition, approximately 62 full-time employees will be onsite 24 hours a day, 7 days a week during operations of the Project, thereby minimizing the need for police surveillance. Impacts would be less than significant and no further analysis is required.

3) Schools? ☐ ☐ ☐ ☒

4) Parks? ☐ ☐ ☐ ☒

5) Other Public Facilities? ☐ ☐ ☐ ☒

3) through 5) No Impact. There is estimated to be up to 200 to 250 workers traveling to the Project site during construction and approximately 62 full-time employees during operations. It is expected that most of these workers/employers will commute to the Project site from surrounding communities. Therefore, substantial temporary increases in population that will adversely affect local schools, parks, or other public facilities are not anticipated. No impacts would occur and no further analysis is required.

XVI. *RECREATION*

a) Would the project increase the use of the existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ☐ ☐ ☐ ☒

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment? ☐ ☐ ☐ ☒

a) and b) No Impact. There are no parks or other developed federal, State or county recreational facilities in the Project area or immediate vicinity. Further, the Project involves the construction of a geothermal brine processing plant and would not construct any recreational facilities. During construction 200 to 250 workers are anticipated to be on the Project site and operation would include 62 full-time workers employed onsite, but these workers and employees are expected to come from existing populations that live in and commute from the surrounding local communities. Therefore, no increase in population would result and no physical deterioration of existing recreational facilities would occur. No impacts would occur and no further analysis is required.

XVII. *TRANSPORTATION* *Would the project:*

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ☒ ☐ ☐ ☐

b) Would the project conflict or be inconsistent with the CEQA Guidelines section 15064.3, subdivision (b)? ☒ ☐ ☐ ☐

a) and b) Potentially Significant Impact. Primary access to the Project site would be located off of McDonald Road and secondary access would be located off of Davis Road. According to the County General Plan's Circulation Element, McDonald Road is a Minor Collector and Davis Road is a Major Collector (County 2008). During construction it is estimated that on average 20 to 25 trucks per day will travel in and out of the Project site, except during grading when about 50 to60 trucks will be traveling in and out of the Project site. An average of 100 workers will commute to the Project site during construction. Approximately 24 trucks per day are anticipated to travel in and out of the Project site during normal operations and approximately 62 full-time employees will be commuting to and

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from the Project site. Six of these trucks are estimated for outgoing waste generated on the site, which is expected to be delivered to and processed at the Burrtec Solid Waste Facility. However, it is estimated that up to 10% of trucks carrying hazardous filter cakes from the plant would be required to be delivered to a waste treatment facility out of State. Although the Project site is located in a rural area of the County, a Traffic Impact Study will be prepared to calculate estimated Vehicle Miles Traveled (VMT) for the Project and to analyze whether or not the Project aligns with the County's Circulation Plan. Further analysis is required and will be addressed in the EIR.

c)	Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d)	Result in inadequate emergency access?	☐	☐	☒	☐

c) and d) Less than Significant Impact. The Project would not increase hazards due to a design feature, nor impact emergency access. For emergency response, both the Project access roads (off McDonald Road and Davis Road) would have turnaround areas to allow clearance for fire trucks per fire department standards: 70 feet by 70 feet, and 20-foot-wide. The County Department of Public Works, the County Sheriff, and ICFD will be consulted as necessary to ensure that any potential impacts to the public or emergency services traveling on McDonald Road or Davis Road during Project construction or operations would be minimized. Impacts would be less than significant and no further analysis will be required.

XVIII. *TRIBAL CULTURAL RESOURCES*

a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is:				
	(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as define in Public Resources Code Section 5020.1(k), or	☒	☐	☐	☐
	(ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth is subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☒	☐	☐	☐

(i) and (ii) Potentially Significant Impact. Unrecorded subsurface Tribal cultural resources may be impacted, if present, by minor grading of the Project site and installation of footings four to six feet below the ground surface. In accordance with California Assembly Bill (AB) 52, Native American tribes with potential resources in the area were notified of the Project on November 6, 2020 and offered the opportunity for consultation. As of November 20, 2020, the Quechan Tribe has requested consultation for the Project. Any other requests regarding consultation will be outlined in the Cultural Resources Report being prepared for the Project in addition to the results of an archaeological literature review, records search, and intensive pedestrian survey of the Project site. Further analysis of the potential impact to Tribal cultural resources is required and will be addressed in the EIR.

XIX. *UTILITIES AND SERVICE SYSTEMS Would the project:*

a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

a) Potentially Significant Impact. During operations, the Project intends to use or connect to HR1 plant utility infrastructure to the extent possible. The HR1 potable water treatment plant has been renovated to accommodate sufficient use and reliability for both HR1 and the Project facilities. This system will be operated under one permit by HR1 and the Project will purchase water from HR1. Liquid waste generated by the Project will be processed by the HR1 sewer treatment plant and sludge will be pumped by licensed contractors as needed and transported to a sanitary water treatment plant. The Project may also share the HR1 stormwater retention basin, which would be engineered and constructed to contain the combined stormwater storage requirements for both the Project and HR1 sites. If a shared retention basin cannot be done for technical, legal, or other reasons then the Project will construct its own retention basin on the far south side of the parcel. Electrical power required for the Project will be purchased from the IID and a new power line will be constructed to the ATLiS plant site from the current IID/HR1 substation located near the northeast corner of the HR1 property. Natural gas and telecommunications facilities at the Project site would also tie into the existing infrastructure for HR1. A Water Supply Assessment and Energy Analysis will be prepared to analyze potential impacts resulting from the Project's water and power requirements. Approximate wastewater generation will be estimated using water requirements calculated in the Water Supply Assessment. All new utility infrastructure would be built entirely within the previously disturbed parcel, however further analysis is required and potential impacts to utilities will be analyzed in the EIR.

b) Have sufficient water supplies available to serve the project from existing and reasonably foreseeable future development during normal, dry and multiple dry years?	☒	☐	☐	☐

b) Potentially Significant Impact. As described in Section X Hydrology and Water Quality, it is estimated that the Project would require up to 50,000 gallons of water per day during construction for fugitive dust control; approximately 90,000 gallons per hour for operational cooling and other processes; and approximately 112 gallons per hour for potable water purposes during operations. All water required for the Project would be purchased from the IID, whose only source of water is the Colorado River. Climate change scenarios predict a decrease in annual runoff from the Basin to the Colorado River of about 400,000 acre-feet of water 40 percent of the time by 2025 (IID 2012). Therefore, a Water Supply Assessment will be prepared for the Project to analyze potential impacts to the available water supply. Further analysis is required and potential impacts to water will be analyzed in the EIR.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐

c) Potentially Significant Impact. As mentioned above, the Project would utilize the HR1 facility's potable water treatment plant and sewer treatment plant for liquid waste. Both of the plants accommodate sufficient use and reliability for the HR1 and the Project facilities. A Water Supply Assessment is being prepared to estimate the Project's water requirements, which will be used to calculate approximate wastewater generation. Further analysis is required in the EIR to determine potential impacts.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☒	☐	☐	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☒	☐	☐	☐

d) and e) Potentially Significant Impact. All non-hazardous and hazardous wastes generated during Project construction and operation would be handled and disposed of in accordance with applicable laws, ordinances, regulations, and standards. Non-hazardous solid waste would be disposed of using a locally-licensed waste hauling service, most likely Allied Waste. Solid waste would likely be hauled to the Niland Solid Waste Site located in Niland. The Niland Solid Waste Site has approximately 211,439 cubic yards of remaining capacity and is estimated to remain in operation through 2046 (CalRecycle 2020). Therefore, there is ample landfill capacity in the County to receive the non-hazardous solid waste generated by construction and operation of the Project.

Hazardous materials/waste generated by the Project would not be left onsite and will be transported to an approved hazardous waste landfill. The majority of the outgoing waste generated onsite is expected to be delivered to and processed at the Burrtec Solid Waste Facility, which is anticipated to have ample capacity. Filter cakes generated during the impurity removal process may contain hazardous materials at higher levels than allowed at waste facilities in the state of California, therefore approximately 10% of hazardous waste trucks may be routed to a waste treatment facility in Arizona or Idaho. Further analysis of potential impacts to solid waste is required and would be addressed in the EIR.

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

XX. ***WILDFIRE***

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☒ ☐

a) Less Than Significant Impact. As mentioned in Section IX Hazards and Hazardous Materials above, CALFIRE's Fire Hazard Severity Zone Viewer identifies no very high, high, or moderate fire hazard severity zones in the local or state responsibility areas within 30 miles of the Project site (CALFIRE 2020). Additionally, as mentioned in Section XV Public Services, all fire suppression systems will be designed in accordance with federal, state, and local fire codes; occupational health and safety regulations; and other jurisdictional codes, requirements, and standard practices. The ICFD will also be consulted to review and approve any and all proposed fire equipment, apparatus, and related fire prevention plans. Compliance with local emergency response and evacuation plans, including the EOP and MJHMP, will be maintained through consultation with the ICFD and the County. Impacts would be less than significant and no further analysis is required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ☐ ☐ ☒ ☐

b) Less Than Significant Impact. As mentioned above, CALFIRE does not have any designated very high, high, or moderate fire hazard severity zones in the local or state responsibility areas within 30 miles of the Project site (CALFIRE 2020). The Seismic and Public Safety Element of the County General Plan also states that the potential for a major fire in the unincorporated areas of the County is generally low (County 1993). Moreover, the Project site is flat and is not within an area of risk due to slope. Although the County has experienced damage from heavy winds in the past, hazards in the County are managed by the MJHMP which is reviewed and updated every 5 years (County 2015). Further, during construction the Project site and access road will be cleared of all vegetation and cleared areas will be maintained throughout construction. Fire extinguishers will be available around the construction site as well. During operations, a brush control program will be prepared and implemented on those portions of the Project site that will not be developed. Hazardous materials onsite during operations may be flammable, but fire suppression systems will be installed and the ICFD will be consulted to review and approve any and all proposed fire equipment, apparatus, and related fire prevention plans. Thus, employees onsite would not be exposed to pollutant concentrations from a wildfire. Impacts would be less than significant and no further analysis is required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ☐ ☐ ☒ ☐

c) Less Than Significant Impact. CALFIRE maps note that no very high, high, or moderate fire hazard severity zones in the local or state responsibility areas are within 30 miles of the Project site (CALFIRE 2020). To prevent fire-related impacts on the Project site, Project access roads (off McDonald Road and Davis Road) would be constructed with turnaround areas; a 500,000 gallon fire water storage tank will be constructed; and a joint fire protection system will be installed. These features would help fire suppression and would not exacerbate fire risk. Further, these features will be constructed/installed and maintained within previously disturbed areas of the Project site in accordance with federal, state, and local fire codes; occupational health and safety regulations; and other jurisdictional codes, requirements, and standard practices. No significant environmental impacts would result. Impacts would be less than significant and no further analysis is required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? ☐ ☐ ☒ ☐

d) Less than Significant Impact. CALFIRE does not have any designated very high, high, or moderate fire hazard severity zones in the local or state responsibility areas within 30 miles of the Project site (CALFIRE 2020). The Project site is also flat and is not located within an identified landslide zone (DOC 2020b). According to the County General Plan, the closest area of landslide activity is on the border of San Diego and Imperial Counties approximately 30 miles west of the Project site (County 1993). As described in Section X Hydrology and Water Quality, flooding onsite would be prevented by the flood protection berm on the southern and western sides of the Project site. The Project would not expose people or structures to significant risks as a result of runoff, post-fire instability, or drainage changes. Impacts would be less than significant and no further analysis is required.

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083,

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino,(1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

Revised 2009- CEQA
Revised 2011- ICPDS
Revised 2016 – ICPDS
Revised 2017 – ICPDS
Revised 2019 – ICPDS

	Potentially Significant Impact **(PSI)**	Potentially Significant Unless Mitigation Incorporated **(PSUMI)**	Less Than Significant Impact **(LTSI)**	No Impact **(NI)**

SECTION 3
III. MANDATORY FINDINGS OF SIGNIFICANCE

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, eliminate tribal cultural resources or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

a) Potentially Significant Impact. As discussed in Sections IV Biological Resources and V Cultural Resources, implementation of the Project has the potential to impact sensitive biological resources and cultural/paleontological resources. A Biological Technical Report and Cultural Resources Assessment are being prepared for the Project. Further analysis is required and potential impacts will be addressed in the EIR.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐

b) Potentially Significant Impact. The Project has the potential to result in significant impacts, and when combined with existing conditions or related projects, may result in a cumulatively considerable impact. Specifically, the Project has the potential to result in a cumulatively considerable net increase in one or more criteria pollutants for which the Project region is in non-attainment under applicable federal and state ambient air quality standards. Therefore further analysis is required and will be analyzed in the EIR.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

c) Potentially Significant Impact. The Project has the potential to result in significant environmental effects, which could directly or indirectly cause adverse effects on human beings. As demonstrated in this Initial Study, the Project has the potential to result in significant impacts to air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gasses, hazards and hazardous materials, hydrology and water quality, noise, transportation, Tribal cultural resources, and utilities and services systems. These impact areas could result in direct or indirect adverse effects on human beings. Further analysis is required and these issues will be discussed in the EIR.

IV. PERSONS AND ORGANIZATIONS CONSULTED

This section identifies those persons who prepared or contributed to preparation of this document. This section is prepared in accordance with Section 15129 of the CEQA Guidelines.

A. COUNTY OF IMPERIAL

- Jim Minnick, Director of Planning & Development Services
- Michael Abraham, AICP, Assistant Director of Planning & Development Services
- David Black, Project Planner
- Imperial County Air Pollution Control District
- Department of Public Works
- Fire Department
- Ag Commissioner
- Environmental Health Services
- Sheriff's Office

B. CHAMBERS GROUP

- Corinne Lytle-Bonine, Principal In Charge
- Victoria Boyd, Project Manager
- Elizabeth Fortin, Environmental Planner
- Phillip Carlos, GIS Specialist

C. OTHER AGENCIES/ORGANIZATIONS

- Quechan Tribe

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