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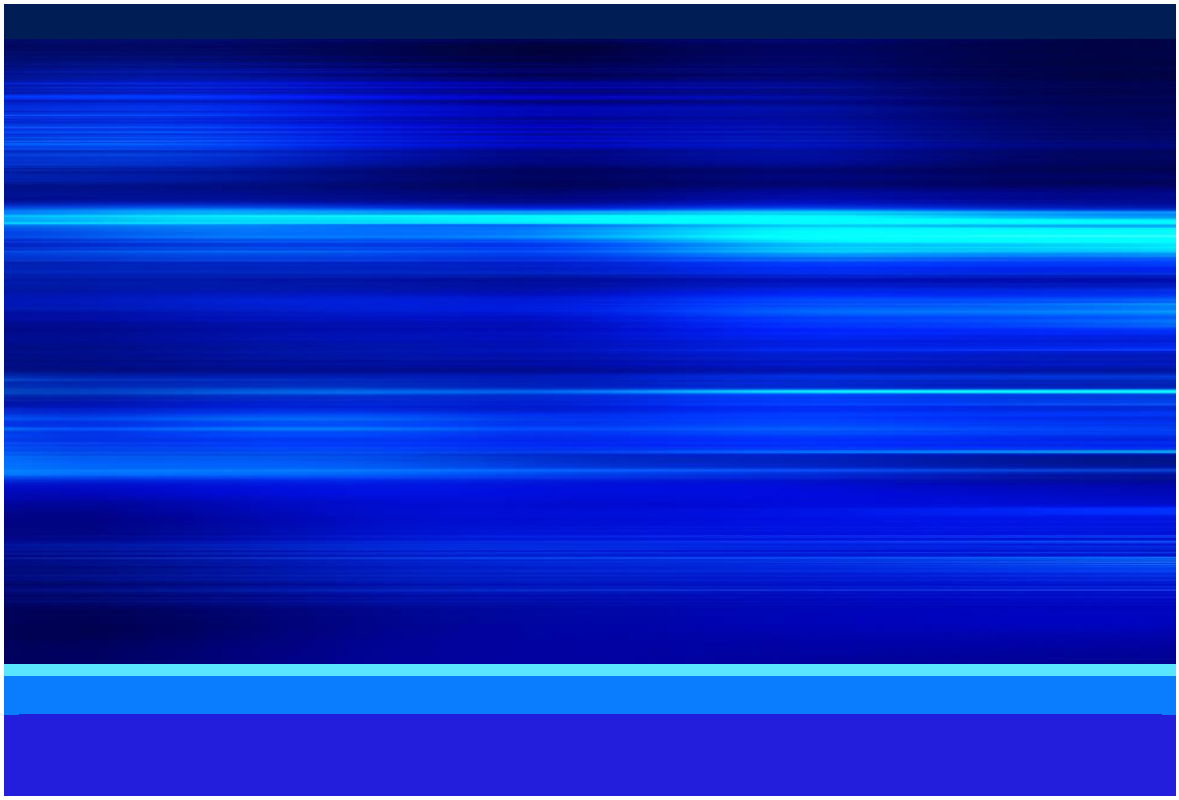
Data Adequacy Supplement

Submitted to
California Energy Commission

Prepared by
Elmore North Geothermal LLC

With assistance from
Jacobs

Elmore North Geothermal Project
(23-AFC-02)
May 30, 2023



Introduction

This Data Adequacy Supplement ("Supplement") to Elmore North Geothermal LLC's, an indirect, wholly owned subsidiary of BHE Renewables, LLC ("BHER"), Application for Certification ("AFC") for the Elmore North Geothermal Project (23-AFC-02) provides information in response to the California Energy Commission ("CEC" or "Commission") Staff data adequacy review of the AFC. This Supplement provides additional information to support a determination by the Commission that the AFC contains adequate data to begin a power plant site certification proceeding under Title 20 of the California Code of Regulations and the Warren-Alquist Energy Resources Conservation and Development Act.

The format for this Supplement follows the order of the AFC and provides additional information and responses to CEC Staff's information requests for several disciplines. Only sections for which CEC Staff requested additional information related to data adequacy are addressed in this Supplement. If the response calls for additional appended material, it is included at the end of each subsection. Appended material is identified by the prefix "DA" indicating an item submitted in response to a Staff Data Adequacy comment, a number referring to the applicable AFC chapter, and a sequential identifying number. For example, the Appendix in response to a Transmission System Engineering comment would be Appendix DA3.0-1, because the AFC section describing electrical transmission is Section 3.0. Tables are also numbered in this way. Appended material is paginated separately from the remainder of the document.

Each subsection contains data adequacy comments or information requests, with numbers and summary titles and, in parentheses, the citation from Appendix B (Information Requirements for an Application) of Title 20, California Code of Regulations indicating a particular information requirement for the AFC. Each item follows with the CEC Staff comment on data adequacy for this item, under the heading "Information required to make AFC conform with regulations" followed by Elmore North Geothermal LLC's response to the information request and the information requested.

Contents

Appendices

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Acronyms and Abbreviations

AFC	Application for Certification
ANSI	American National Standards Institute
ARMR	Archaeological Resource Management Report
BHER	BHE Renewables
CEC	California Energy Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNEL	Community Noise Equivalent Level
CPUC	California Public Utilities Commission
DA	Data Adequacy
EMF	Electric and Magnetic Fields
ENGP	Elmore North Geothermal Project
ESA	Environmental Site Assessment
FAA	Federal Aviation Administration
IEEE	Institute of Electrical and Electronics Engineers
LORS	laws, ordinances, regulations, and standards
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NAHC	Native American Heritage Commission
NPCA	Notice of Proposed Construction or Alteration
PRC	Public Resource Code
TLS&N	Transmission Line Safety and Nuisance
USACE	US Army Corps of Engineers

1. Introduction/Project Overview

1. Ownership Information - Appendix B (a) (3) (A)

A list of all owners and operators of the site(s), the power plant facilities, and, if applicable, thermal host, the geothermal leasehold, the geothermal resource conveyance lines, and the geothermal re-injection system, and a description of their legal interest in these facilities

Information required to make AFC conform with regulations:

Ownership interest of the project and the geothermal leasehold only is provided. More detailed ownership information specifying all additional aspects of the project is requested.

Response: All project features including the power plant site, generation tie line, well pads, pipelines, wells, and water pipelines will be owned and operated by Elmore North Geothermal LLC.

2. Legal Relationships - Appendix B (a) (3) (C)

A description of the legal relationship between the applicant and each of the persons or entities specified in (a)(3)(A) and (B).

Information required to make AFC conform with regulations:

A more full and detailed description of the relationships between the site, wells, linears (including transmission) or a statement that they are one and the same.

Response: Please see the response to Data Adequacy (DA) 1.

3. T-Line Section Figure - Appendix B (b) (2) (B)

A full-page color photographic reproduction depicting a representative above ground section of the transmission line route prior to construction and a full-page color photographic simulation of that section of the transmission line route after construction.

Information required to make AFC conform with regulations:

There are one-line drawings on an aerial photo showing the alignment of all T-line alignments, Figure 5.13-2f includes a visual simulation of the T-line, and Appendix 3 contains a rendering of individual towers, but not a section. A visual representation of a section is requested.

Response: Figure DA3.0-1 presents a visual representation of a generation tie line section showing two transmission poles and conductors.

Figure DA3.0-1
Visual Representation of Transmission Line Section,
Elmore North Geothermal Project
Imperial County, California

4. Well Descriptions - Appendix B (b) (3) (3)

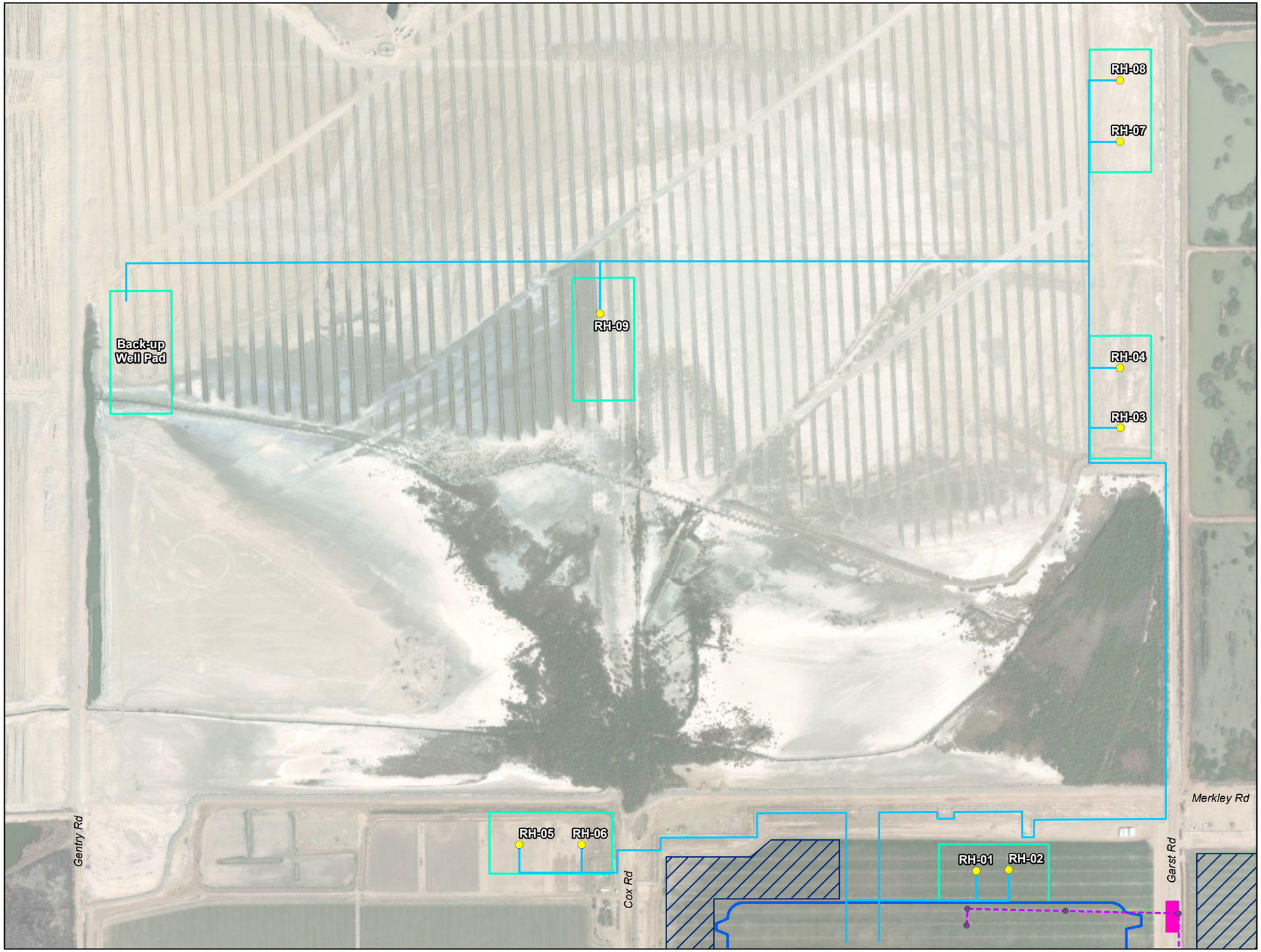
…(E) Proposed locations of production and re-injection wells for the project. Include the applicant's assessment of geothermal resource adequacy, including the production history of those wells within the leaseholds dedicated to the project, including pressure decline curves as available...

Information required to make AFC conform with regulations:

Detailed discussion with well numbers, of all wells and well pads, including production, injection, and make-up wells, along with diagrams at a suitable scale, should be included in the AFC, as part of the larger discussion of the geothermal leases and site selection, suggest 2.3.3 with discussion headings for each well type.

Response: Figure DA4.0-1a shows the five production well pads, backup well pad, and wells RH-01 to RH-09, at a suitable scale. The well pad with well RH-09 has sufficient space for an additional well to be added and two wells to the backup well pad.

Figure DA4.0-1b shows the six injection well pads, a backup well pad, and wells RH-CD-101/RH-AB-102/RG-IW20, RH-IW-21/RH-IW-22, RH-IW-23/RH-IW-24, RH-IW-25/RH-IW-26, RH-IW-27/RH-IW-28, and RH-IW-29 at a suitable scale. Wells RH-CD-101 will receive condensate blowdown from the cooling tower. Well RH-AB-102 will receive aerated brine from the Class II surface impoundment. Wells RH-IW-20 to RH-IW-29 will receive spent geothermal fluid from the clarifier process. As shown, space has been allocated for an additional well to the well pad with well RH-IW-29 and two wells to the backup well pad.



Legend

- Plant
- Well Pad
- Production Well
- Pipeline
- Gen-Tie Line Pole
- Gen-Tie Line
- Pull Site
- Construction Laydown and Parking Areas

N

0 250 500 1,000
Feet

Figure DA4.0-1a
Production Wells
Elmore North Geothermal Project
Imperial County, California

Jacobs

\\dc1vs01\gisproj\B\BHE_Renewables\Imperial_Valley\MapFiles\Wells\EN\Figure_DA1.4-1_230516.mxd

Legend

- Well Pad
- Injection Well
- Pipeline
- Construction Camp

N

0 375 750 1,500
Feet

Figure DA4.0-1b
Injection Wells
Elmore North Geothermal Project
Imperial County, California

Jacobs

\\dc1vs01\gisproj\B\BHE_Renewables\Imperial_Valley\MapFiles\Wells\EN\Figure_DA1.4-2_230516.mxd

2. Transmission Line Safety & Nuisance

5. TLS&N Laws, Ordinances, Regulations, and Standards (LORS) Applicability - Appendix B (i) (1) (A)

Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed…

Information required to make AFC conform with regulations:

Provide a table including LORS relevant to TLS&N.

Response: Table DA5.0-1 provides the adopted local, regional, state, and federal laws ordinances, regulations, and standards applicable to the project's proposed transmission line, substations, and engineering.

Table DA5.0-1. Design and Construction LORS for the Proposed Transmission Line and Switchyard

LORS	Applicability
Title 8 CCR, Section 2700 et seq. "High Voltage Electrical Safety Orders"	Establishes essential requirements and minimum standards for installation, operation, and maintenance of electrical installation and equipment to provide practical safety and freedom from danger.
General Order-52, CPUC, "Construction and Operation of Power and Communication Lines"	Applies to the design of facilities subject to California Public Utility Commission's (CPUC) jurisdiction to provide or mitigate inductive interference.
ANSI/IEEE 593, "IEEE Recommended Practices for Seismic Design of Substations"	Recommends design and construction practices.
IEEE 1119, "IEEE Guide for Fence Safety Clearances in Electric-Supply Stations"	Recommends clearance practices to protect persons outside the facility from electric shock. Applies to the design of facilities subject to CPUC's jurisdiction to provide or mitigate inductive interference.
IEEE 980, "Containment of Oil Spills for Substations"	Recommends preventions for release of fluids into the environment.
Decision 93-11-013, CPUC	CPUC position on EMF reduction.
General Order-131-D, CPUC, "Rules for Planning and Construction of Electric Generation, Line, and Substation Facilities in California"	CPUC construction application requirements, including requirements related to EMF reduction.

LORS	Applicability
ANSI/IEEE 544-1994, "Standard Procedures for Measurement of Power Frequency Electric and Magnetic Fields from AC Power Lines"	Standard procedure for measuring EMF from an electric line that is in service.
8 CCR 2700 et seq. "High Voltage Electrical Safety Orders"	Establishes essential requirements and minimum standards for installation, operation, and maintenance of electrical equipment to provide practical safety and freedom from danger.
ANSI/IEEE 80, "IEEE Guide for Safety in AC Substation Grounding"	Presents guidelines for assuring safety through proper grounding of alternating current outdoor substations.
NESC, ANSI C2, Section 9, Article 92, Paragraph E; Article 93, Paragraph C	Covers grounding methods for electrical supply and communications facilities.
47 CFR 15.25, "Operating Requirements, Incidental Radiation"	Prohibits operations of any device emitting incidental radiation that causes interference to communications; the regulation also requires mitigation for any device that causes interference.
General Order-52, CPUC	Covers all aspects of the construction, operation, and maintenance of power and communication lines, and specifically applies to the prevention or mitigation of inductive interference.
Title 14 CFR, Part 77, "Objects Affecting Navigable Airspace"	Describes the criteria used to determine whether a "Notice of Proposed Construction or Alteration" (FAA Form 7450-1) is required for potential obstruction hazards.
Federal Aviation Administration (FAA) Advisory Circular No. 70/7450-1G, "Obstruction Marking and Lighting"	Describes the FAA standards for marking and lighting of obstructions as identified by FAA Regulations Part 77.
14 CCR Sections 1250-1258, "Fire Prevention Standards for Electric Utilities"	Provides specific exemptions from electric pole and tower firebreak and electric conductor clearance standards and specifies when and where standards apply.
ANSI/IEEE 80, "IEEE Guide for Safety in AC Substation Grounding"	Presents guidelines for assuring safety through proper grounding of AC outdoor substations.
General Order-95, CPUC, "Rules for Overhead Electric Line Construction," Section 35	CPUC rule covers all aspects of design, construction, operation, and maintenance of electric transmission line and fire safety (hazards).

Notes:

ANSI = American National Standards Institute

IEEE = Institute of Electrical and Electronics Engineers

NESC = National Electrical Safety Code

NPCA = Notice of Proposed Construction or Alteration

Table DA5.0-2 identifies national, state, and local agencies with jurisdiction to issue permits or approvals, conduct inspections, or enforce the above-referenced LORS. Table2 also identifies the responsibilities of these agencies as they relate to the Project construction, operation, and maintenance.

Table DA5.0-2. National, State, and Local Agencies with Jurisdiction over Applicable LORS

Agency or Jurisdiction	Responsibility
FAA	Establishes regulations for marking and lighting of obstructions in navigable airspace (AC No. 70/7450-1G).
CEC	Jurisdiction over new transmission lines from ~~thermal~~ power plants that are 50 MW or more to the first point of interconnection with the grid (PRC 25500).
CPUC	Regulates construction and operation of overhead transmission lines (GO-95).
CPUC	Regulates construction and operation of power and communications lines for the prevention of inductive interference (GO-52).
Local Electrical Inspector	Jurisdiction over safety inspection of electrical installations that connect to the supply of electricity (NFPA 70).
Imperial County	Establishes and enforces zoning regulations for specific land uses. Issues variances in accordance with zoning ordinances. Issues and enforces certain ordinances and regulations concerning fire prevention and electrical inspection.

Note:

PRC = Public Resources Code

5.1 Air Quality

Response to Air Quality DA #6 is underway and will be provided in June 2023.

5.2 Biological Resources

Responses to Biological Resources DA #7 - #19 are underway and will be provided in June 2023.

5.3 Cultural Resources

19. Copies of Reports - Appendix B (g) (2) (B)

…Copies also shall be provided of all technical reports whose survey coverage is wholly or partly within .25 mile of the area surveyed for the project under section (g)(2)(C), or which report on any archaeological excavations or architectural surveys within the literature search area…

Information required to make AFC conform with regulations:

Provide a copy IM-01484, and appendices B–C in IM-01385

Response: IM-01484 has been filed as Appendix DA 5.3-1. Appendices B-C of IM-01385 are not on file with the South Coast Information Center. Therefore, we are unable to incorporate into the data adequacy supplement.

20. ARMR Clarifications - Appendix B (g) (2) (C)

…A technical report of the results of the new surveys, conforming to the Archaeological Resource Management Report format (CA Office of Historic Preservation Feb 1990), which is incorporated by reference in its entirety, shall be separately provided and submitted (under confidential cover if archaeological site locations are included)…

Information required to make AFC conform with regulations:

Describe the disposition of field notes and photographs per ARMR, p. 6; describe the depth and type of excavation required for each type of project component, per ARMR, p. 7; provide a schedule for project construction and implementation, per ARMR, p. 7; research design needs to address potential to encounter Native American archaeological resources (including buried archaeological resources) and tribal cultural resources, as the proposed project is adjacent to such, per ARMR, pp. 9–10; provide a bibliographic entry for Bee (1982) and Cleland and Apple (2003)

Response: Text to address each point has been added below in accordance with ARMR page reference.

ARMR, p. 6: Field notes and photographs, all of which are digital, are stored on PaleoWest's cloud-based database.

ARMR, p. 7: As shown in Figure 2.7a-d of the Application for Certification, all work will consist of standard construction/excavation techniques. Anticipated depths are as follows:

- Power Plant – Estimated excavation to a maximum depth of 5 feet.
- Gen Tie – Pier drilling to a maximum depth of 30 feet.
- Piping Corridor – Pier drilling to a maximum depth of 20 feet.
- Borrow Site/Construction Laydown/Construction Camp - Estimated excavation depth of 5 feet.
- Buried Pipe Corridor – Estimated excavation depth of 5 feet.
- Well Pad - Estimated excavation depth of 5 feet.
- IID Switching Station - Estimated excavation depth of 5 feet.

ARMR, p. 7: Construction of the Project is expected to begin no later than second quarter 2024 and full-scale commercial operation is expected to begin by the second quarter of 2026.

ARMR, p. 9-10

A research design has been developed to address potential Native American archaeological resources (including buried archaeological resources) and tribal cultural resources that may be encountered during Project implementation. Research-driven archaeological investigation typically focuses on broad research themes of local relevance. It is important that all of the themes be broadly defined, since the nature of the specific data used to address them is generally not known in advance, and it is, therefore, not possible or practical to predict all of the questions that may be relevant. This will ensure that fewer restrictions will be placed on the use of the data recovered from a site.

The research context presented herein focuses on the way that past human populations in Imperial County adapted to their environment, ascertaining when and how the environment and cultural behavior changed, and explaining why particular adaptations occurred. Among the many interrelated elements of human adaptation are technology, subsistence, land use, and settlement strategies, as well as external relations, including exchange systems, trade, and material conveyance. These aspects of adaptation can be studied archaeologically and, thus, have been the focus of regional studies. The existing research themes will be used to establish the context within which the significance of unanticipated discoveries can be evaluated. The major prehistoric themes and associated questions relevant to an assessment of Native American archaeological resources and tribal cultural resources that may be encountered during Project implementation include:

- **Chronology** – When was the site occupied? How do artifacts conform to patterns observed for the temporal components defined in the region?

- **Technology of Tool Manufacture and Use** – What kinds of tools were manufactured on site? Were lithic raw materials obtained exclusively from Obsidian Butte or are multiple raw material sources represented in the flaked stone assemblage? Do lithic artifacts and technologies reflect expedient manufacture and use or a more curated pattern of technology? What does this tell us about land use and mobility?

- **Settlement Organization and Land Use** – What does the artifact assemblage suggest about the range of activities conducted at the site? Are there artifact types with morphological and stylistic attributes that have specific regional or geographic affinities? Does the assemblage allow for investigations into trade and exchange?

- **Subsistence Behavior** – Are plant or animal remains available at the site to inform on subsistence behavior? Are there indications that certain resource types were preferentially exploited? What does this tell us about the seasonality of site use?

Bee, Robert L.

1982 The Quechan. In *The APS/SDG&E Interconnection Project, Miguel to the Colorado River and Miguel to Mission Tap: Identification and Evaluation of Native American Cultural Resources*, edited by Clyde Woods, pp. 34-55. Document on file with San Diego Gas & Electric Company.

Cleland, James H., and Rebecca McCorkle Apple

2003 A View Across the Cultural Landscape of the Lower Colorado Desert: Cultural Resource Investigations for the North Baja Pipeline Project. Prepared by EDAW, San Diego.

21. Revised Figures - Appendix B (g) (2) (C) (iv)

A map at a scale of 1:24,000 U.S. Geological Survey quadrangle depicting the locations of all previously known and newly identified cultural resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii); and

Information required to make AFC conform with regulations:

Confidential Appendix 5.3A-D (results of survey) depicts the locations of newly identified cultural resources but does not map them at a scale of 1:24,000 on a USGS quadrangle; provide one or more maps of newly identified resources at the required scale and on specified base map.

Response: Revised maps at 1:24,000 scale on USGS quadrangle background have been filed as Appendix DA 5.3-2 under a request for confidential designation.

22. Laws, Ordinances, and Regulations Updates - Appendix B (i) (1) (A)

Tables that identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and...

Information required to make AFC conform with regulations:

CEQA Guidelines are discussed in section 5.3.5.1, not in section 5.3.2.1, as identified in Table 5.3-5.

Calif. HSC Sect. 7050.5 is not discussed in the application and not in the section identified in Table 5.3-5.

Calif. PRC Sect. 5097.98 is not discussed in the application and not in the section identified in Table 5.3-5.

Response: Conformance discussion regarding CA HSC 7050.5 and CA PRC 5097.8 is provided below:

CA Health and Safety Code 7050.5: The disposition of Native American burials is governed by Section 7050.5 of the California Health and Safety Code and by Sections 5097.94 and 5097.98 of the PRC and falls within the jurisdiction of the NAHC.

CA Public Resource Code 5097.98: If human remains are discovered, the county coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the coroner determines the remains to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native American so they can inspect the burial site and make recommendations for treatment or disposal. ENGP will comply with these requirements related to cultural resources as part of the anticipated mitigation measures for this Project.

Table 5.3-5 of the AFC has been corrected and provided as Table DA22.0-1.

Table DA22.0-1. Summary of Laws, Ordinances, Regulations, and Standards for Cultural Resources

.LORS	Requirements Applicability	Administering Agency	Application for Certification Section Explaining Conformance
Federal			
Section 106, NHPA	Applies if the project would require a federal permit (such as a PSD permit). The lead federal agency must take into account the effect of issuing the permit on significant cultural resources.	California Office of Historic Preservation	N/A
State			
Warren-Alquist Act	Requires cultural resources be considered in consideration of an AFC.	CEC	Section 5.3.5.6
Health and Safety Code Section 7050.5	Construction may encounter Native American graves; coroner calls the NAHC.	State of California	Section 5.3.5
PRC Section 5097.98	Would apply only if some project lands were acquired by the state (currently no state land).	State of California	Section 5.3.5
CEQA Guidelines	Project construction may encounter archaeological and/or historical resources.	CEC	Section 5.3.5.1
Local			
Imperial County General Plan	Does not set requirements for cultural resources.	County of Imperial	N/A

23. Agency Contact Information - Appendix B (i) (1) (B)

Tables that identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.

Information required to make AFC conform with regulations:

Provide local agency information (County of Imperial, Department of Planning and Development Services).

Response: Table 5.3-6 has been updated to include the requested contact and is provided as Table DA23.0-1.

Table DA23.0-1 Agency Contacts for Cultural Resources

Issue	Agency	Contact
Native American traditional cultural properties	Native American Heritage Commission	Cynthia Gomez, Executive Secretary Native American Heritage Commission 1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95691 (916) 373-3710
Inadvertent Discovery of Human Remains	Imperial County Coroner	328 Applestill Road El Centro, CA 92243 (442) 265-2105
Inadvertent Discovery of Cultural Resources	CEC	Compliance Project Manager
Federal agency NHPA Section 106 compliance	California Office of Historic Preservation	Julian Polanco State Historic Preservation Officer 1423 23rd Street, Suite 100 Sacramento, CA 95816 (916) 445-7000
Imperial County permitting; Imperial County zoning and land use data; Imperial County engineering data	Imperial County Planning Division	Jim Minnick Planning & Development Services Director Email: jimminnick@co.imperial.ca.us

NHPA = National Historic Preservation Act

24. Agency Contact Information - Appendix B (i) (2)

The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and provide the name of the official who will serve as a contact person for Commission staff.

Information required to make AFC conform with regulations:

Provide local agency information (County of Imperial, Department of Planning and Development Services)

Response: Please see the response to DA 23.

5.7 Noise and Vibration

25. Operational Noise at Site Boundary - Appendix B (g) (4) (D)

An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.

Information required to make AFC conform with regulations:

Only cooling tower noise level was provided (Section 5.7.3.3.3 p. 5.7-9 to 5.7-10); however, the aggregate noise level from all operational equipment was not provided. Please provide the project's total operational noise level at one of the project site boundaries.

Response: Title 9, Division 17, Renewable Energy Resources, of the Imperial County Code establishes an operational noise limit for renewable and geothermal power projects of 70 dBA CNEL limit at the "nearest human receptor site outside the parcel boundary, or one-half mile from the sound, whichever is greater." The CNEL limit of 70 dBA equates 63 dBA and the nearest human receptor site to the project is located 0.65 miles from the project site. ENGP's predicted noise impacts, including all steady-state operating equipment, at the nearest human receptor site is predicted to be less than 63 dBA.

5.9 Public Health

26. Sensitive Receptors Map - Appendix B (g) (9) (D)

A map showing sensitive receptors within the area exposed to the substances identified in subsection (g)(9)(A).

Information required to make AFC conform with regulations:

There is no map showing complete sensitive receptors. Figure 5.9-1 only shows PMI, MEIW, MEIR and maximally exposed sensitive receptor. Figure 5.9-2 only shows nearby residential receptors.

Response: No sensitive receptors were identified within 5 kilometers (km) of the Project with the nearest sensitive receptor (Calipatria High School School) located more than 9.5 km to the Southeast. As a result, no discrete sensitive receptors were included in the health risk assessment and each residential receptor was additionally analyzed as a sensitive receptor for a conservative assessment of risk. A map of these residential receptors assumed to be sensitive receptors is included in Figure 5.9-2 of the AFC.

27. Chronic Exposure Definition - Appendix B (g) (9) (E) (iii)

A chronic exposure is one that is greater than twelve (12) percent of a lifetime of seventy (70) years.

Information required to make AFC conform with regulations:

The applicant did define chronic toxicity but there is no definition regarding "a chronic exposure is one that is greater than twelve (12) percent of a lifetime of seventy (70) years.".

Response: The second paragraph under the *Non-Cancer Risk* discussion of Section 5.9.3.1 "Risk Types" has been revised to clarify a chronic exposure with the following language: "A chronic exposure is defined by OEHHA as 24 hour per day exposures for at least a significant fraction of a lifetime, which is considered to be about 8 years (≥12 percent of a 70-year lifespan) (OEHHA 2015[1])."

5.14 Waste Management

28. Phase I ESA Date - Appendix B (g) (12) (A)

A Phase I Environmental Site Assessment (ESA)for the proposed power plant site using methods prescribed by the American Society for Testing and Materials (ASTM) document entitled "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process" (Designation: E 1527-93, May 1993), which is incorporated by reference in its entirety; or an equivalent method agreed upon by the applicant and Commission staff that provides similar documentation of the potential level and extent of site contamination. The Phase I ESA shall have been completed no earlier than one year prior to the filing of the AFC.

[1] Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines*, Cal-EPA. February.

Information required to make AFC conform with regulations:

Evidence of the ESA being completed no more than one year ago shall be provided

Response: A copy of the Phase I Environmental Site Assessment was filed on May 11, 2023 (TN#: 250127). The Phase I Environmental Assessment was completed on November 1, 2022.

Appendix DA 5.3-1
Archaeological Technical Reports

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Simbol Calipatria I Plant Project CUP #12-0004

Lead Agency: Imperial County Planning and Dev. Services Department
Contact Person: Armando G. Villa, Director
Mailing Address: 801 Main Street
Phone: (760) 482-4236, ext. 4310
City: El Centro Zip: 92243
County: Imperial

Project Location: County: Imperial City/Nearest Community: Calipatria
Cross Streets: McDonald Road/Davis Road Zip Code: 92233
Longitude/Latitude (degrees, minutes and seconds): 33 ° 12 ′ 8.12 ″ N / 115 ° 34 ′ 28.02 ″ W Total Acres: 216.54
Assessor's Parcel No.: 020-100-044 & 020-100-047 Section: 24 Twp.: 11S Range: 13E Base: SBB&M
Within 2 Miles: State Hwy #: SR 111 Waterways: Imperial Irrigation District irrigation canals and drains
Airports: None Railways: None Schools: None

Document Type:

CEQA: ☒ NOP ☐ Draft EIR NEPA: ☐ NOI Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR ☐ EA ☐ Final Document
☐ Neg Dec (Prior SCH No.) ☐ Draft EIS ☐ Other:
☐ Mit Neg Dec Other: ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☒ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☐ Other:

Development Type:

☐ Residential: Units _____ Acres _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____
☐ Commercial: Sq.ft. _____ Acres _____ Employees _____
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type _____ MGD _____
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type _____ MW
☐ Waste Treatment: Type _____ MGD
☐ Hazardous Waste: Type
☒ Other: Mineral Extraction Plant

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☒ Fiscal ☒ Recreation/Parks ☒ Vegetation
☒ Agricultural Land ☒ Flood Plain/Flooding ☐ Schools/Universities ☒ Water Quality
☒ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☒ Water Supply/Groundwater
☒ Archeological/Historical ☒ Geologic/Seismic ☐ Sewer Capacity ☐ Wetland/Riparian
☒ Biological Resources ☒ Minerals ☒ Soil Erosion/Compaction/Grading ☒ Growth Inducement
☐ Coastal Zone ☒ Noise ☒ Solid Waste ☒ Land Use
☒ Drainage/Absorption ☒ Population/Housing Balance ☒ Toxic/Hazardous ☒ Cumulative Effects
☒ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☐ Other:

Present Land Use/Zoning/General Plan Designation:

Fallow agriculture/M-2-G-PE (Medium Industrial/Geothermal Overlay Zone/Pre-Existing)

Project Description: *(please use a separate page if necessary)*

Simbol, Inc. is proposing to construct and operate the SmCP-1, a commercial mineral extraction plant in the Salton Sea Known Geothermal Resource Area. The facility would use geothermal brine from the existing HR-1 geothermal flash plant to produce lithium carbonate, lithium hydroxide, hydrochloric acid, zinc, and manganese products for commercial sale. After the geothermal brine is processed, it would be returned to HR-1 for injection into the geothermal reservoir. In addition to the mineral extraction and processing facilities, the project includes geothermal brine supply/return pipelines, new driveway access from Davis Road and from McDonald Road, a new power line and substation, and paving McDonald Road, between SR 111 and English Road.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

___	Air Resources Board	X	Office of Historic Preservation
___	Boating & Waterways, Department of	___	Office of Public School Construction
___	California Emergency Management Agency	___	Parks & Recreation, Department of
X	California Highway Patrol	___	Pesticide Regulation, Department of
X	Caltrans District # 11	___	Public Utilities Commission
___	Caltrans Division of Aeronautics	X	Regional WQCB # 7
___	Caltrans Planning	___	Resources Agency
___	Central Valley Flood Protection Board	___	Resources Recycling and Recovery, Department of
___	Coachella Valley Mtns. Conservancy	___	S.F. Bay Conservation & Development Comm.
___	Coastal Commission	___	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
___	Colorado River Board	___	San Joaquin River Conservancy
X	Conservation, Department of	___	Santa Monica Mtns. Conservancy
___	Corrections, Department of	___	State Lands Commission
___	Delta Protection Commission	___	SWRCB: Clean Water Grants
___	Education, Department of	X	SWRCB: Water Quality
___	Energy Commission	___	SWRCB: Water Rights
X	Fish & Game Region # 6	___	Tahoe Regional Planning Agency
___	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
___	Forestry and Fire Protection, Department of	___	Water Resources, Department of
___	General Services, Department of		
___	Health Services, Department of	X	Other: Division of Oil, Gas, & Geothermal Resources
___	Housing & Community Development	___	Other:
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date April 24, 2012 Ending Date May 29, 2012

Lead Agency (Complete if applicable):

Consulting Firm: Ecology and Environment, Inc.
Address: 401 West A Street, Suite 775
City/State/Zip: San Diego, CA 92101
Contact: Christina J. Willis
Phone: (619) 696-0578, ext. 4205

Applicant: Simbol, Inc.
Address: 6920 Koll Center Parkway, #216
City/State/Zip: Pleasanton, CA 94566
Phone:

Signature of Lead Agency Representative: _____ **Date:** 04/20/12

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

NOTICE OF PREPARATION

To: Office of Planning and Research
P.O. Box 3044, 1400 Tenth Street, Room 212
(Address)
Sacramento, CA 95812-3044

From: Imperial County,
Planning & Development Services Department
801 Main Street
(Address)
El Centro, CA 92243

Subject: Notice of Preparation of a Draft Environmental Impact Report

The County of Imperial will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☒ is ☐ is not) attached.

Due to the time limits mandated by State law, your response must be sent ***not later than May 29, 2012.***

Please send your responses to Armando G. Villa, AICP, Director, Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243.

Project Title: Simbol Calipatria Plant I CUP #12-0004

Project Applicant: Simbol Inc., 6920 Koll Center Parkway, #216, Pleasanton, CA 94566

Project Description: Simbol, Inc. is proposing to construct and operate the SmCP-1, a commercial mineral extraction plant in the Salton Sea Known Geothermal Resource Area. The facility would use geothermal brine from the existing HR-1 geothermal flash plant to produce lithium carbonate, lithium hydroxide, hydrochloric acid, zinc, and manganese products for commercial sale. After the geothermal brine is processed, it would be returned to HR-1 for injection into the geothermal reservoir. In addition to the mineral extraction and processing facilities, the project includes geothermal brine supply/return pipelines, new driveway access from Davis Road and from McDonald Road, a new power line and substation, and paving McDonald Road, between SR-111 and English Road.

Date: April 24, 2012

Signature _____

Title _____

Telephone _____

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Section 15082(a), 15103, 15375

INITIAL STUDY AND NOTICE OF PREPARATION

FOR

SIMBOL CALIPATRIA PLANT I – CUP#12-0004

Prepared By:

ECOLOGY AND ENVIRONMENT, INC.
401 W. A Street, Suite 775
San Diego, CA 92101

and Reviewed By:

COUNTY OF IMPERIAL
Planning & Development Services Department
801 Main Street
El Centro, CA 92243
(760) 482-4236
www.icpds.com

April 2012

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LIST OF FIGURES

I. Introduction

A. PURPOSE

This document is a ☐ policy-level, ☒ project-level Initial Study for evaluation of potential environmental impacts resulting from the proposed Simbol Calipatria Plant I (SmCP-1) Project, which process geothermal brine from the existing Hudson Ranch I Geothermal Power Plant (HR-1), located immediately north of the project site, to produce lithium carbonate, lithium hydroxide, hydrochloric acid, and zinc and manganese products for commercial sale.

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

As defined by Section 15063 of the California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's Rules and Regulations for Implementing CEQA, 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 the 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 EIR is deemed as the appropriate document to provide necessary environmental evaluations and clearance for the proposed project.

This Initial Study and Notice of Preparation has been 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 and County of Imperial's Rules and Regulations 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 Rules and Regulations 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 Initial Study and Notice of Preparation are informational documents which are intended to inform County of Imperial 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 Initial Study and Notice of Preparation 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 AND NOTICE OF PREPARATION

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.

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/Mitigated Negative Determination 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 EIR and Environmental Assessment for the 1993 "County of Imperial General Plan EIR" prepared by Brian F. Mooney Associates.

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 is available, along with this document, at the County of Imperial Planning and Development Services Department, 801 Main Street, El Centro, CA 92243. Phone number (760) 482-4236.
- 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 and Development Services Department, 801 Main Street, El Centro, CA 92243. Phone number. (760) 482-4236.
- 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**: Simbol Calipatria Plant I (SmCP-1)
2. **Lead Agency**: Imperial County Planning and Development Services Department
3. **Contact Person and Phone Number**: Armando G. Villa, AICP, Director (760) 482-4236, extension 4310
4. **Address**: 801 Main Street, El Centro, CA 92243
5. **E-mail**: armandovilla@co.imperial.ca.us
6. **Project Location**: The proposed SmCP-1 plant facilities would be developed within an approximately 32-acre area of land spanning parts of two neighboring parcels, APN 020-100-044 (65.12 acres) owned by affiliates of HR-1, and APN 020-100-47 (151.42 acres) owned by Simbol. The SmCP-1 project area is located about 3 miles west-southwest of the town of Niland, California in Imperial County. The project site is generally located south of McDonald Road, north of Schrimpf Road, and east of Davis Road, immediately southwest of the existing HR-1 site.
7. **Project Sponsor's Name and Address**: Simbol, Inc., 6920 Koll Center Parkway, Suite 216, Pleasanton, CA 94566
8. **General Plan Designation**: Agriculture
9. **Zoning**: M-2-G-PE (Medium Industrial/Geothermal Overlay Zone/Pre-Existing)
10. **Description of Project**: See Project Summary on the following pages.
11. **Surrounding Land Uses and Setting**: The proposed project site is uncultivated farmland that has historically been flooded seasonally to attract waterfowl for hunting. The Simbol property was last flooded for the 2009/2010 hunting season and has been dry since about March 2010. The project site is bounded on the north by the Imperial Irrigation District (IID) "O" Lateral and McDonald Road, and on the south by the IID "N" drain and Schrimpf Road. The existing HR-1 site currently occupies much of the HR-1 property. HR-1 is a 49.9-megawatt (MW) geothermal flash power plant. The SmCP-1 site process facilities would occupy the southwest corner of the HR-1 property. The Simbol property is located immediately east of the HR-1 property, and additional SmCP-1 facilities would be located on the Simbol property. There are no existing structures on the Simbol property. The geothermal wellfield supporting HR-1 is located north of the project area across McDonald Road. There is a proposed Hudson Ranch II Geothermal Project (HR-2) and Simbol Calipatria Plant II (SmCP-2) mineral extraction project to be located approximately 1.1 miles east of this project. Also, a commercial algae farm is located about a mile southeast of the project site. The uncultivated fields south of the project site, across Schrimpf Road, are also flooded seasonally for recreational hunting.

12. **Other Public Agencies Whose Approval is Required (e.g., permits, financing approval, or participation agreement)**:

a) Imperial County Planning Commission

b) California Regional Water Quality Control Board (CRWQCB), Colorado Region – Construction Activities General Construction Permit/Notice of Intent

c) Imperial County Air Pollution Control District (ICAPCD) – Authority to Construct and Permit to Operate

d) Imperial Irrigation District (IID) – Encroachment permits

e) Imperial County Department of Public Works (ICDPW) – Drainage plan and grading plan review; encroachment permit for new or altered driveways and upgrade of Davis Road along HR-1 parcel to McDonald Road

f) Imperial County Environmental Health Services (EHS)/Public Health Department – Non-transient non-community water system permit for the on-site potable water system

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	☒ Geology / Soils
☒ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials	☒ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☒ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☒ Transportation / Traffic	☐ Utilities / Service Systems	☒ Mandatory Findings of Significance

ENVIRONMENTAL EVALUATION COMMITTEE DETERMINATION

After Review of the Initial Study, the Environmental Evaluation Committee (EEC) 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 GAME DE MINIMIS IMPACT FINDING: ☐ Yes ☐ No

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

Armando G. Villa, AICP, Director of Planning/
EEC Chairman

Date: 04/20/12

Project Summary

Simbol, Inc. (Simbol) is proposing to construct and operate the SmCP-1, a commercial lithium carbonate production plant in the Salton Sea Known Geothermal Resource Area. The facility would process geothermal brine from the existing HR-1, located immediately northeast of the SmCP-1 plant process facilities, to produce lithium carbonate, lithium hydroxide, hydrochloric acid, and zinc and manganese products for commercial sale. The proposed project consists of the:

- Construction and operation of a facility to extract/process lithium, manganese, zinc, and other possible products from HR-1's geothermal brine;
- Construction and operation of brine supply and return pipelines and other interconnection facilities associated with HR-1;
- Construction of a primary access road from Davis Road and a secondary access road from McDonald Road;
- Paving of McDonald Road from State Highway 111 to English Road;
- Paving of Davis Road from English Road to the SmCP-1 primary access road;
- Construction of a freshwater storage pond;
- Construction of a new IID substation north of Schrimpf Road on Simbol property neighboring the SmCP-1 site;
- Construction of a one-mile segment of a 92-kilovolt (kV) transmission line connecting the new substation to IID's existing MW-1 transmission line; and
- Construction of a power line from the new IID substation to the SmCP-1 plant site.

A. PROJECT LOCATION

The SmCP-1 process facilities would be located about 3 miles west-southwest of the town of Niland (see Figure 2) near the southwest corner of the existing HR-1 site (APN 020-100-044) on approximately 65.12 acres owned by Hudson Ranch Power I LLC. The new IID substation would be constructed near the southwest corner of an approximately 151.42-acre parcel (APN 020-100-047) owned by Simbol ("Simbol property"). A freshwater pond and related pumping facilities would be located near the northwest corner of the Simbol property (see Figure 3). Both properties are zoned for manufacturing (medium industrial) (M2G-PE) and are located entirely within the existing Salton Sea Geothermal Overlay Zone (see Figure 1). The proposed SmCP-1 site and associated facilities would be built within an approximately 32-acre development area. The SmCP-1 project area includes the SmCP-1 site on the HR-1 property, the proposed freshwater pond, pond-associated facilities, the proposed new IID substation on the Simbol property, the power line to SmCP-1 site, and all associated access roads. The existing stormwater retention basin on the HR-1 property would be shared with HR-1. In addition, the project area includes: (1) construction of a new 92-kV transmission line running parallel to Schrimpf Road near the intersection of English and Schrimpf Roads and terminating at the new IID substation on the Simbol property; and (b) different options for interconnection with IID transmission line service.

3. **Site Access**

Driveway access to the SmCP-1 site would be constructed off of Davis Road approximately 0.25 mile south of McDonald Road (see Figure 4 and Figure 5). A secondary access road to the plant site and primary access to the substation and the freshwater pond would be constructed off of McDonald Road, across the IID "O" Lateral, approximately 0.5 mile east of Davis Road. Primary highway access to the proposed SmCP-1 site would be via State Highway 111, traveling west on McDonald Road and south on Davis Road, onto the proposed SmCP-1 driveway to the plant site. Simbol would obtain encroachment permits from ICDPW for the driveway access from Davis Road.

Primary highway access to the proposed substation site would be via State Highway 111, traveling west on McDonald Road and south onto the proposed SmCP-1 driveway to the substation, and would cross over the IID "O" lateral (see Figure 2). McDonald Road, between State Highway 111 and English Road, would be paved, and left-turn pockets would be installed at the State Highway 111/McDonald Road intersection. Driveway access from McDonald Road would be designed and built by IID, and Simbol would obtain an encroachment permit from IID.

Fugitive dust on the unpaved portion of McDonald Road between State Highway 111 and English Road would be mitigated with an asphaltic dust palliative during construction, followed by the paving of McDonald Road to County standards following the completion of construction of the proposed SmCP-1 facility.

4. **Plant Site Construction**

The SmCP-1 site would be constructed immediately southwest of the HR-1 site (see Figure 5). Construction would include grading of approximately 22.4 acres of land within the 32-acre development area that would include the SmCP-1 site, new entry roads off of Davis Road and McDonald Road, a freshwater pond, and an electric substation. A power line would also be constructed to the plant site. The plant site driveway, parking, and maneuvering areas would be constructed to County standards (minimum of 3 inches of asphaltic concrete paving or higher quality material).

5. **Plant Site Operations**

SmCP-1 would utilize post-secondary clarifier brine produced from the existing HR-1 site as the resource process stream for the commercial production of lithium carbonate (Li_2CO_3), lithium hydroxide ($LiOH\ H_2O$), hydrochloric acid (approximately 31 wt.% HCl), and zinc and manganese products. The production operations would consist of the following general steps which are also summarized in a flow diagram (see Figure 6).

- Silica Management
- Lithium Extraction as Lithium Chloride (LiCl)
- Conversion and Processing of LiCl to Lithium Products
- Drying and Packaging of Lithium Products
- HCl Product Synthesis
- Zinc Extraction and Processing to Zinc Products

- Lead Extraction
- Manganese Extraction and Processing to Manganese Products
- Off-Site 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 plant site.

Each of the general processing steps is discussed further below. After the geothermal brine is processed, the depleted barren brine would be returned to HR-1 for injection into the geothermal reservoir.

a. Offsite Product Shipping

The SmCP-1 facility would produce multiple products for offsite shipment to market by truck. The average annual amount of product shipped out of the plant operating at a nominal 2,600 gallons per minute (gpm) brine flow capacity is estimated at 5,000 to 8,000 metric tons of dry lithium product (LiOH H_2O and/or Li_2CO_3), 10,000 to 20,000 metric tons of zinc product(s), up to 25,000 metric tons of wet cake manganese product(s), and approximately 30,000 metric tons of 31% liquid HCl product. Products would be transported by freight truck on existing roadways to shipping distribution point(s). Other products of production operations may be generated by the proprietary technology on the plant site and would also be shipped offsite to market by truck.

b. Electrical Power, Substation and Power Line Facilities

Up to 13 MW of electrical power would be needed for SmCP-1 operations. This power would be purchased from the IID, and Simbol would construct the electrical substation to meet IID requirements and then relinquish the substation to IID. The access road off McDonald Road to the substation would be constructed and covered with aggregate when the substation site is graded, prior to substation construction.

A power line would be constructed between the substation and the plant site (see Figure 3 and Figure 4). Two optional routes are being considered. Under Option One, IID would rebuild most of the existing MW-1 line to current IID standards from the Niland substation to the intersection of English and Schrimpf Roads and would transfer the existing 795 AAC conductor wire to new poles. IID would also construct one mile of new 92-kV transmission line from the existing, rebuilt MW-1 transmission line on English Road at Schrimpf Road to the substation site (see Figure 3). Under Option Two, the new 92-kV power line to be constructed along Schrimpf Road would connect with either (1) the existing MW-1 92-kV power line, located on the west side of English Road at its intersection with Schrimpf Road, or (2) the existing MW-2 92-kV power line, located on the east side of English Road, at its intersection with Simpson Road.

An emergency diesel generator would be used to keep vital SmCP-1 plant systems operating during power outages.

c. Water Supply Source, Requirements, and Storage Facilities

It is estimated that up to 50,000 gallons of water would be needed each day during site construction for fugitive dust control associated with site grading and construction activities. This water would be purchased from the IID and transported to the site via temporary pipeline or water truck.

Process water would be used for reagent preparation, product washing, and cooling tower makeup. Process water would be generated from steam condensate provided by the neighboring HR-1 facility. Additional process water for cooling tower make-up would be purchased from the IID and taken from the "O" lateral canal under a water purchase agreement with the IID. Water would be delivered to the freshwater storage pond on the Simbol property northeast of the SmCP-1 site via pipeline from the canal.

Approximately 18,600 gallons per hour (g/h), or about 500 acre-feet per year (AFY), of canal water would be purchased from the IID for projected SmCP-1 cooling water make-up and additional process water. Approximately 112 g/h, or about 3 AFY, of the canal water to be purchased would be used for potable water purposes, including potable washbasin water, eyewash and safety shower equipment water, water for showers and toilets in crew change quarters, and sink water in the sample laboratory. The water treatment plant will treat canal water to potability standards. This water treatment plant will be reviewed and approved by County EHS/Public Health Department.

d. Freshwater Pond, Fire Protection and Stormwater Retention Basin

The SmCP-1 project would construct a high-density polyethylene (HDPE)-lined freshwater pond near the northwest corner of the Simbol property which would store and provide fresh water for plant operations and additional fire water for the SmCP-1 facilities. The freshwater pond would be sized to meet the freshwater storage requirements of the SmCP-1 facility.

The SmCP-1 fire protection system would 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. Fire hydrants would be looped with no dead ends. The firewater supply and pumping system would provide an adequate quantity of fire-fighting water. A diesel-fueled firewater pump would be available onsite.

The project would share the existing HR-1 stormwater retention basin.

6. Work Force and Schedule

e. Construction Work Force and Schedule

Project construction would begin when all necessary permits are obtained. Construction would occur in three phases over an intermittent 24-month period based on a 5-day work week schedule and an estimated construction work force of about 100 workers. Construction is tentatively projected to be completed in February 2015.

f. Plant Operations Work Force and Schedule

SmCP-1 operations would begin as soon as construction activities are completed. Beginning with startup operations, the SmCP-1 facility is expected to be operated by a total staff of approximately 88 full-time, on-site employees. Plant operations would continue 24-hours/day, 7-days/week. It is projected that up to 40 employees would 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, weekends, and holidays.

7. Traffic

g. Construction Traffic

It is estimated that, on average, 25 trucks per day would travel to and from the SmCP-1 construction site, except during site grading when about 60 trucks would travel to and from the SmCP-1 construction site. An average of 100 workers would commute to the plant site during site construction.

h. Plant Operations Traffic

It is estimated that approximately 24 trucks per day would travel in and out of the SmCP-1 plant site during normal operations. The truck traffic includes about 10 trucks per day of outgoing products. Truck traffic also includes about eight truck deliveries. The estimate also includes six trucks of outgoing waste generated onsite. Additional traffic would result from the plant staff commuting to the site and periodic contractor and maintenance vehicles.

8. Abandonment and Site Restoration

The projected life of the SmCP-1 facility is a nominal 30 years. Prior to project approval, Simbol would prepare a Site Abandonment Plan, in conformance with Imperial County requirements, for consideration by the County Planning Commission. This plan, implemented at the end of the useful life of the facility, 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 SmCP-1 plant operations.

B. ENVIRONMENTAL SETTING

The proposed SmCP-1 project would be situated in an unincorporated area of Imperial County approximately 3 miles west-southwest of the community of Niland, California and east of the Salton Sea. A portion of the SmCP-1 facility would be located within the boundaries of HR-1, within the existing Salton Sea Geothermal Overlay Zone. Primary highway access to the proposed SmCP-1 site will be via State Highway 111, traveling west on McDonald Road and then south on Davis Road.

C. GENERAL PLAN CONSISTENCY

The Imperial County General Plan designates this area as "Agriculture" (County of Imperial 2008a), and the site is zoned "M-2-G-PE" (Medium Industrial/Geothermal Overlay Zone/Pre-Existing Condition). The proposed project is

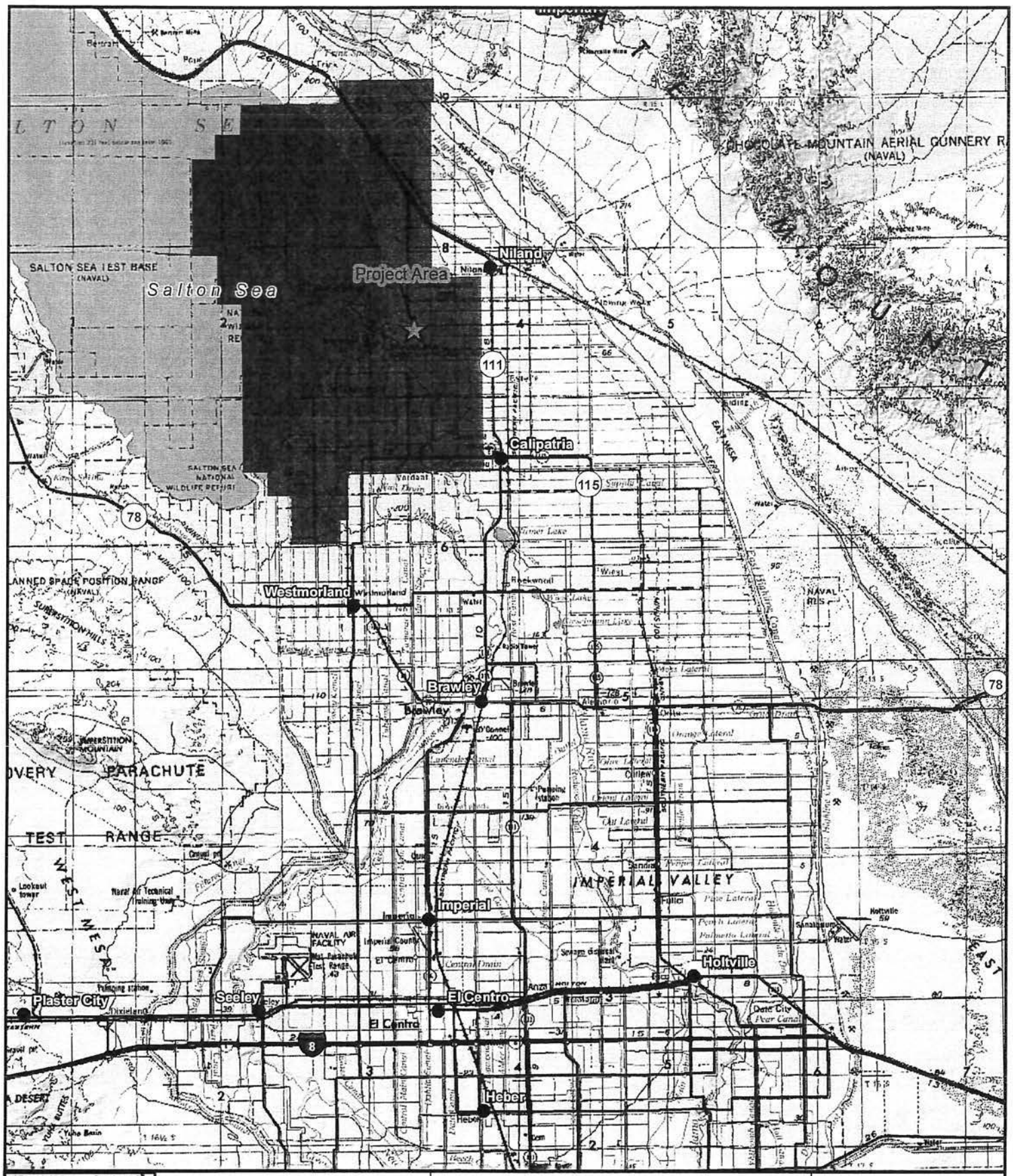
considered to be consistent with the Geothermal/Alternative Energy and Transmission Element (Geothermal Element, p. 44; Land Use Element, p. 49) of the County's General Plan, with the approval of a Conditional Use Permit (CUP). As noted in the Geothermal Element of the General Plan, the extraction of minerals from the geothermal fluids is included in the description of activities that may occur with the development of geothermal flash plants (County of Imperial 2006, p. 62). In addition, the proposed project is considered to be consistent with the County's Land Use Ordinance. Pursuant to Title 9, Division 5, Chapter 8 of the Land Use Ordinance (Section 90516.02), which permits "chemical manufacturing," "facilities for the transmission of electrical energy (100-200 kV)," and "electrical substations in an electrical transmission system (500 kv/230 kv/161 kV)," with a CUP (County of Imperial 2008b).

D. HUDSON RANCH POWER I GEOTHERMAL PROJECT

In February 2007, the County of Imperial Planning Commission approved CUP#06-0047 for the HR-1 project, a 49.9-MW geothermal flash plant. The project included construction and operation of production and injection wells, a geothermal brine processing facility, and turbine-generator facility on a site located north of McDonald Road and east of Davis Road. It also included construction of a 230-kV transmission line along McDonald Road to transport power generated from the power plant to the existing IID electrical transmission grid system.

Subsequently, Hudson Ranch Power I LLC requested an amendment to CUP#06-0047 (CUP#07-0019) to allow for the relocation of HR-1. All project development facilities, with the exception of the production and injection wells and pipelines were relocated south of McDonald Road, east of Davis Road, on a portion of a 305-acre parcel (APN 020-100-026-000). The relocation of the flash power plant was due to an inability to come to terms with the surface land owner. The production/injection well brine pipelines were plumed to the new plant site by undergrounding the pipelines below McDonald Road and the IID canal/drainage system. The County Planning Commission approved CUP#07-0019 on October 10, 2007.

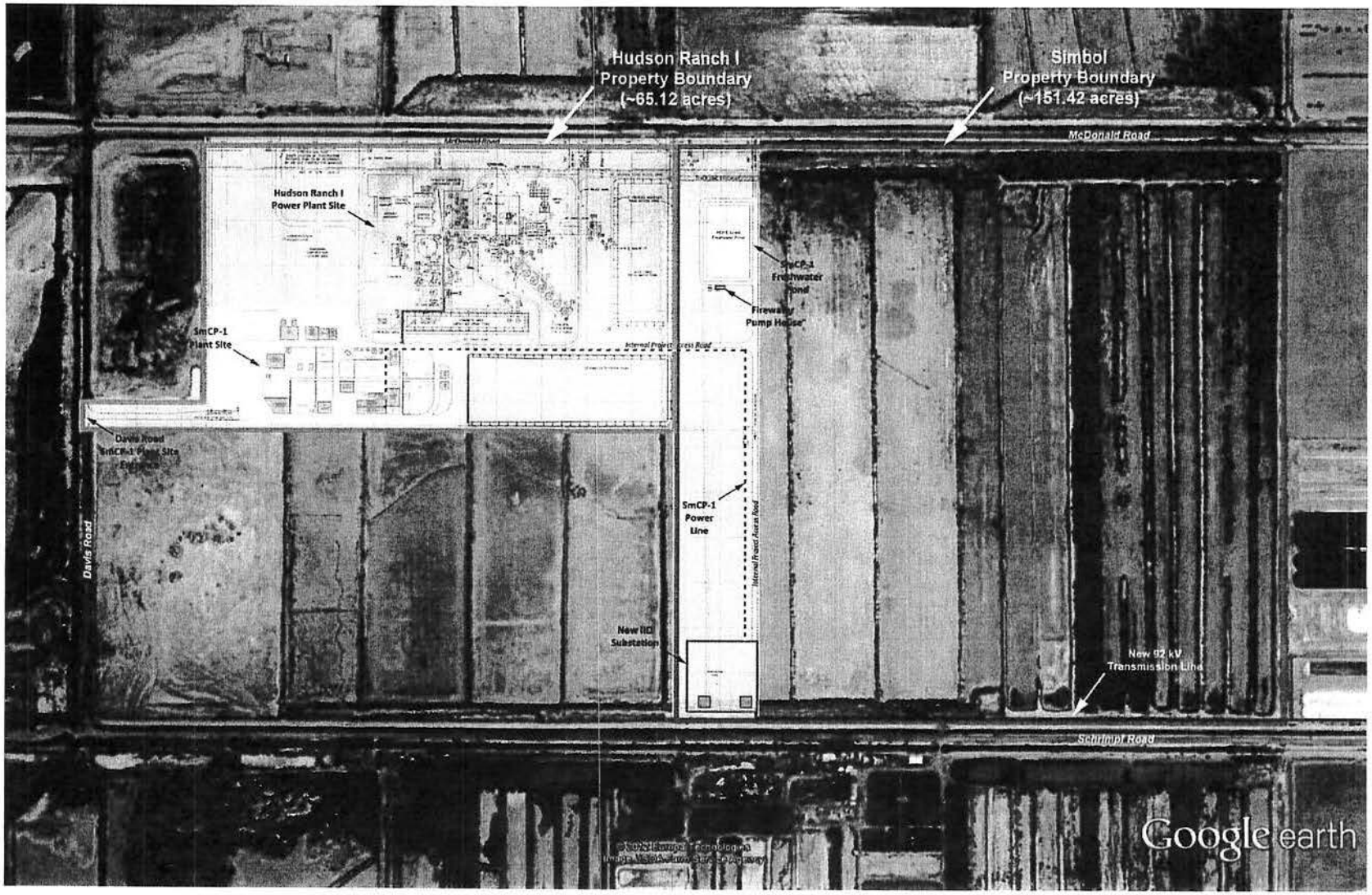
Construction on the HR I project commenced in May 2010 (Energy Source 2012), and the plant went on-line in March 2012.



Simbol Calipatria Plant I
(SmCP-1) Project
CUP #12-0004
Regional Overview

Figure 1

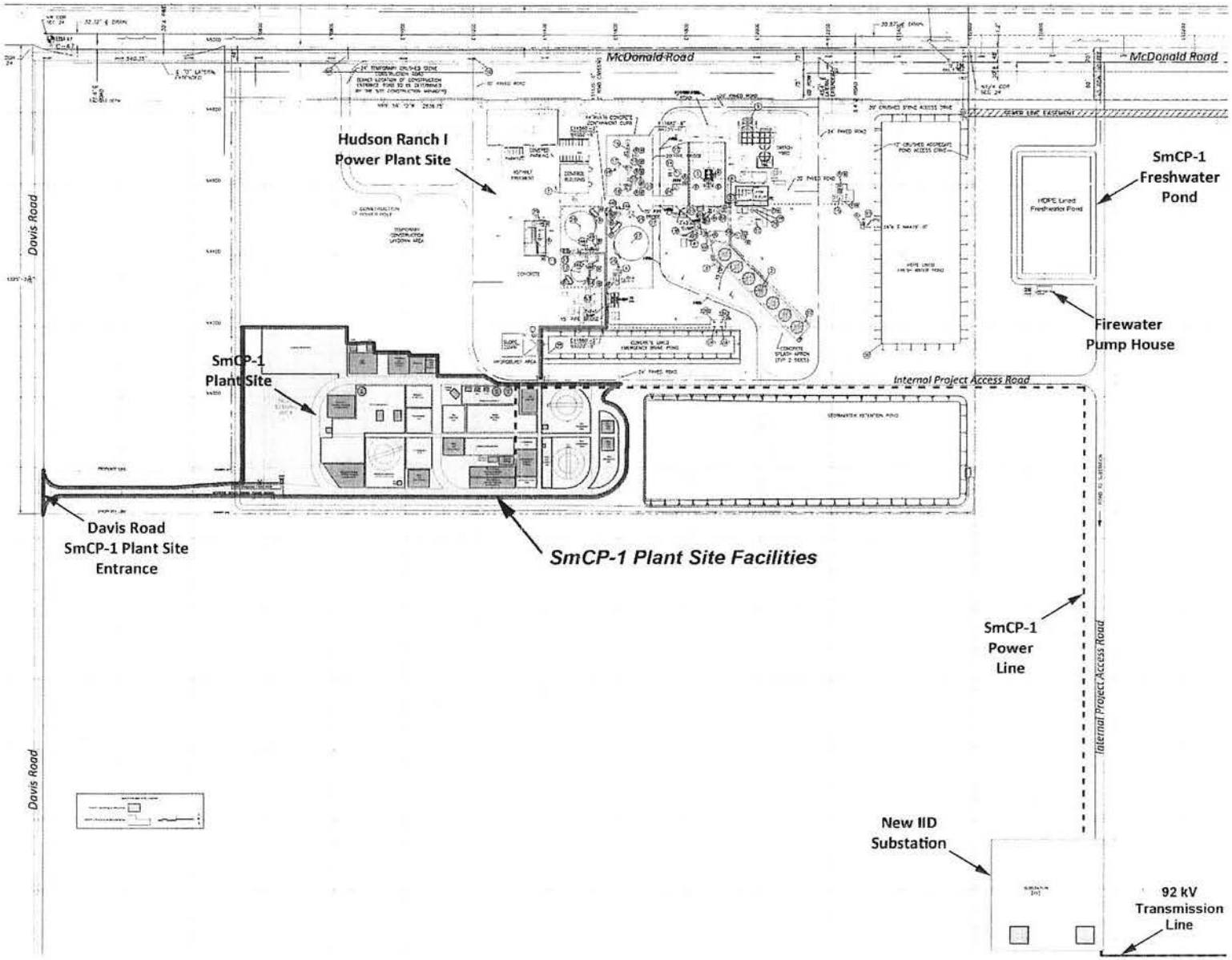

English Road
Beal Road
Noffsinger Road
Alcott Road
Pound Road
Hazard Road
McDonald Road
Schrimpf Road
Simpson Road
Merkeley Road
Sinclair Road
Hoober Road
Davis Road
MW-1 Transmission Line Upgrade
Hudson Ranch I Site
13.8kV Power Line
New 92-kV Transmission Line
Project Site
111
Riverside County
Imperial County
Mexico
SmCP-1 Project Site
Hudson Ranch I Site
New 92-kV Transmission Line
Existing MW-1 92-kV Transmission Line Upgrade
New 13.8 kV Power Line
Proposed Substation
Existing Substation
Simbol Calipatria Plant I (SmCP-1) Project
CUP #12-0004
Project Location
Figure 2



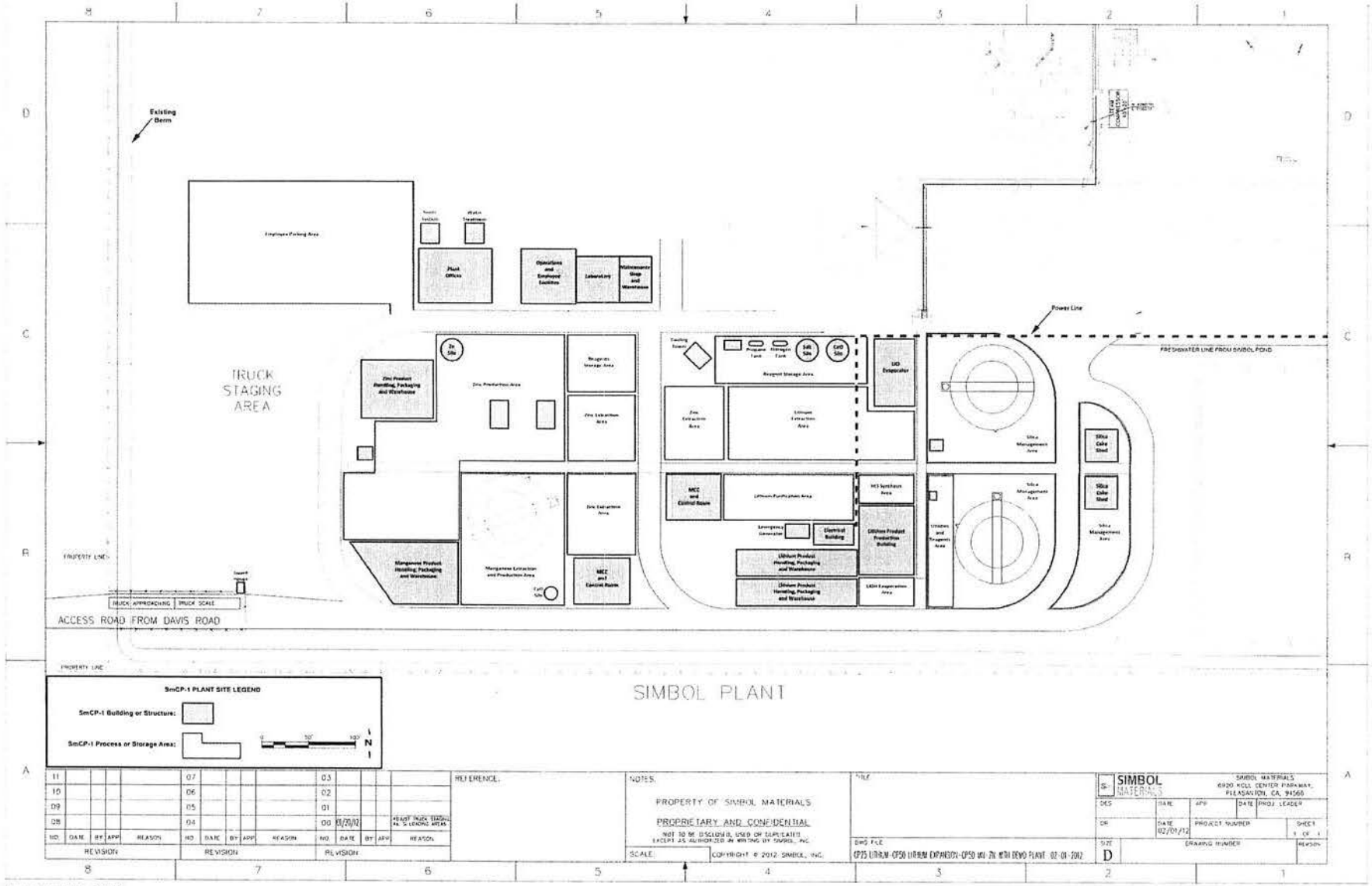
Source: Simbol Inc. 2012

0 500 1,000 1,500 2,000
feet

Figure 3: Aerial Photo – Project Boundary and Transmission Line Routes

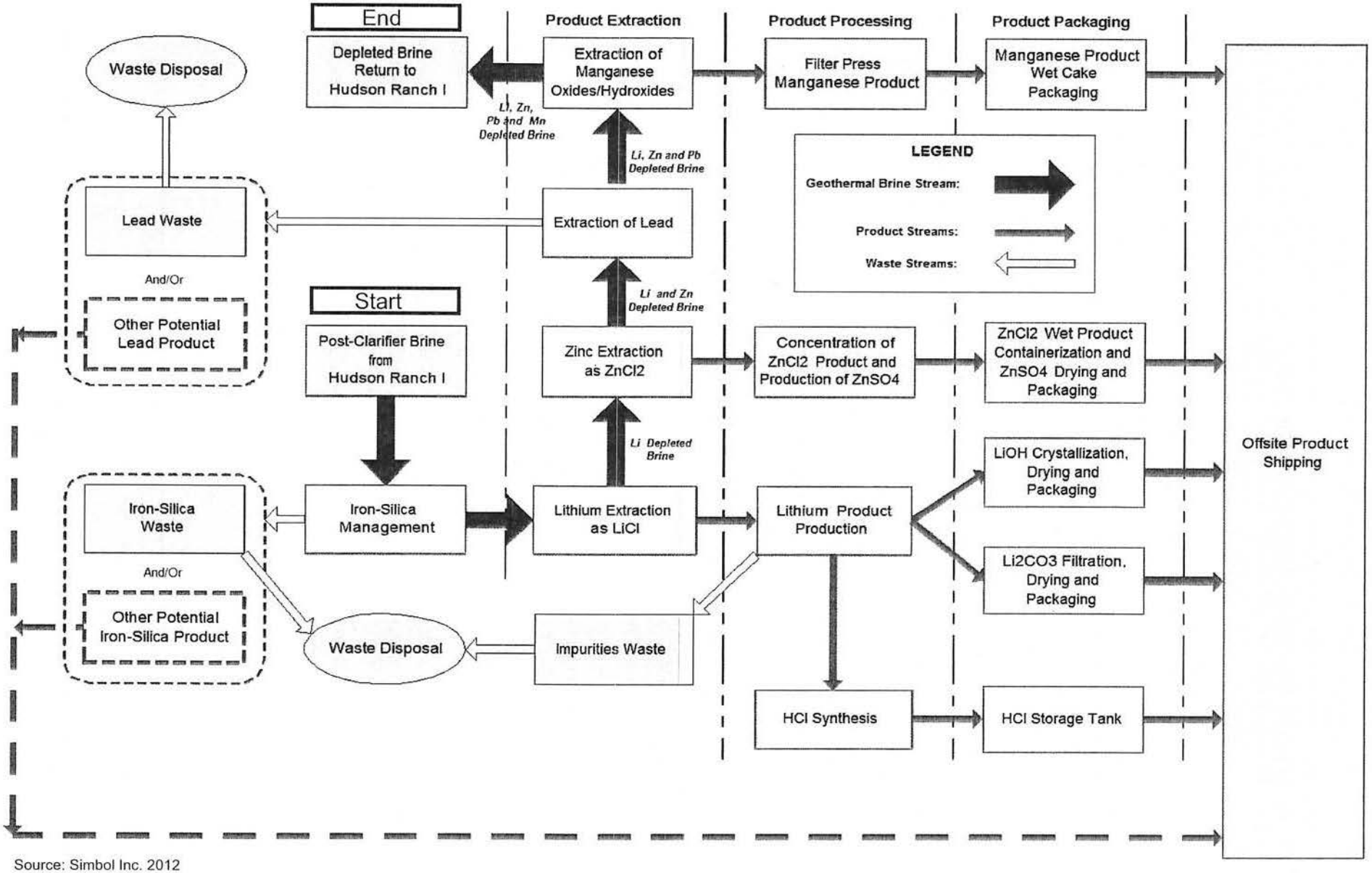


Source: Simbol Inc. 2012



Source: Simbol Inc. 2012

Figure 5: Site Plan



Source: Simbol Inc. 2012

Figure 6: Process Flow Diagram

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*	*No Impact (NI)*
I.	**AESTHETICS**				
Would the project:					
a)	Have a substantial adverse effect on a scenic vista or scenic highway?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

(a, b) No natural scenic resources (i.e., rock outcroppings, trees) occur on the project site, and no scenic vistas or officially designated State scenic highways are located proximate to the project area. The Salton Sea is less than one mile west of the site. No substantial adverse effects to a scenic vista, officially designated State scenic highway, or other scenic resource would occur. No impacts are identified for these issues.

(c) Plant construction activities for the SmCP-1 facilities would temporarily compromise the scenic integrity of the area due to the presence of construction equipment, vehicles, and fugitive dust; however, this disturbance would be short-term in duration and would not represent a significant impact. The proposed project would alter the visual character of the site from its existing condition (agricultural land) through the addition of a new mineral extraction plant, and associated facilities and fencing. Potential changes in the aesthetic quality of the area associated with temporary plant construction and permanent visual impacts during operation would occur. A less than significant impact is identified for this issue, which will be evaluated in the EIR.

(d) As part of the project design, lighting on the plant site would be limited to areas required for project operations or safety purposes. It would be covered and directed downward 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. However, potentially significant impacts from project lighting and glare could occur. Potentially significant impacts related to increased light and glare from operation of the proposed facility will be evaluated in the EIR.

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

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

(a, e) According to the California Department of Conservation's Farmland Mapping and Monitoring Program, the SmCP-1 site does not include Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. A Land Evaluation Assessment (LESA) has been prepared for the proposed project (EMA 2012e) which indicates that new disturbance at the plant site and the substation site would not be significant. While the proposed 92-kv transmission line route along Schrimpf Road would cross Farmland of Statewide Importance, this impact to important farmland is not expected to be significant. The EIR will quantify the acreage of important farmland that would be converted to non-agricultural use and will also analyze potential operational conflicts between the mineral extraction, substation and transmission facilities, and existing agricultural practices, as applicable.

(b, c, d) The Imperial County General Plan designates this area as "Agriculture" (County of Imperial 2008a), and the site is zoned "M-2-G-PE" (Medium Industrial/Geothermal Overlay Zone/Pre-Existing Condition). The proposed project is not zoned for agricultural use and is not subject to the provisions of a Williamson Act contract. Therefore, no impact is identified for this issue area.

There are no existing forest lands on the project site or in the immediate vicinity of the site. The proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use.

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

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management 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?	☐	☒	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c)	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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d)	Expose sensitive receptors to substantial pollutants concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

(a) Construction and operation of the proposed project could create emissions of 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. These emissions could be mitigated through the use of pollution control devises and dust control measures. Thus, unless mitigation is incorporated, a potentially significant impact is identified for this issue area. This issue will be addressed in the EIR.

(b) Currently, the Salton Sea Air Basin (SSAB) is either in attainment or unclassified for all federal and state air pollutant standards, with the exception of ozone (O_3; 8-hour) and total suspended particulate matter less than 10 microns in diameter (PM_{10}). Emissions from the construction and/or operation of the proposed project could violate air quality standards or contribute to an existing or projected air quality violation unless the emissions are mitigated to below a level of significance. Unless mitigation is incorporated, this impact is identified as potentially significant and will be addressed in the EIR.

(c) The project site is located in the SSAB and is subject to the jurisdiction of ICAPCD Rules and Regulations. 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 proposed project could generate construction and operational emissions that could result in a cumulatively considerable net increase of a criteria pollution for which the project region is in non-attainment, namely O_3 (8-hour) and PM_{10}. This impact is identified as potentially significant and will be addressed in the EIR.

(d) The proposed project is not expected to expose sensitive receptors to substantial pollutant concentrations. Therefore, a less than significant impact is identified for this issue, which will be addressed in the EIR.

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

(e) The proposed project is not expected to create objectionable odors that would affect a substantial number of people. Therefore, a less than significant impact is identified for this issue, which will be addressed in the EIR.

To address the issues identified above, an assessment of potential air quality impacts will be included in the EIR and will contain:

- A description of the existing air quality and related emissions within the area, including the attainment status of the ICAPCD relative to state and federal air quality standards;
- A description of diesel equipment that would be used during construction and operations;
- A description of criteria and toxic air pollutants that would be emitted from the proposed project, by emission source (i.e., truck emissions, construction and maintenance equipment, onsite generators), and their primary health impacts;
- Identification of the composition of non-condensable gas and quantification of the projected emissions;
- An analysis on all relevant emission sources for all project phases;
- An assessment of potential odor impacts; and,
- An evaluation of the proposed project's consistency with the Clean Air Act/Plan and applicable ICAPCD Rules and Regulations.

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 Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e)	Conflict with any local polices or ordinances 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?	☐	☐	☐	☒

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

(a) The Salton Sea, located less than one mile west of the project site, serves as an important wintering and staging area for migratory birds, and several endangered species populations are prominent at the sea. The proposed project site is adjacent to IID agricultural drains that flow into the Salton Sea. A general biological survey, a focused burrowing owl survey, and a preliminary jurisdictional delineation were conducted in the winter of 2011 (Barrett's Biological Surveys [Barrett] 2011). No sensitive plants or animals were observed and no federal or state botanical or zoological species of concern were found (Barrett 2011, p. 4). The California Department of Fish and Game (CDFG) species of concern, burrowing owl (*Athene cunicularia*) was not observed onsite or within the 500-foot buffer zone (Barrett 2011, p. 4). Other than the crossing of the "O" lateral canal (driveway access to the proposed substation site), no IID canals, drainage, or field ditches would be removed or impacted through construction activities, and no jurisdictional waters of the United States (U.S. Army Corp of Engineers, Section 404 Clean Water Act or CRWQCB Section 401) would be impacted, and no streambeds (CDFG, Section 1602 Streambed Alteration Permit) would be altered. Because burrowing owls have been found on adjacent properties, this impact is identified as potentially significant unless mitigated.

Implementation of the proposed project could have an adverse effect on sensitive and special-status species. This impact is identified as potentially significant and will be addressed in the EIR.

(d) Implementation of the proposed project is not expected to interfere substantially with the movement of resident or migratory fish or wildlife species. This impact is identified as less than significant and will be addressed in the EIR.

(b, c, e, f) The biological resources reports for the proposed project identified no riparian, wetlands, or other sensitive habitats on the project site (Barrett 2011, p. 4). Implementation of the proposed SmCP-1 project would not impact such resources. In addition, there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that covers the project site. Therefore, no impact is identified for these issues.

V. CULTURAL RESOURCES

Would the project:

a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

(a, b) A Cultural Resource Study for SmCP-1 was prepared by ASM Affiliates in January 2011 to assess the presence or absence of cultural resources within the project boundary (ASM Affiliates 2011). This study included a records search of the South Coastal Information Center files. It also included a systematic pedestrian survey of the project area (performed on January 22, 2011). In January

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

2012, ASM Affiliates prepared an Addendum to the Simbol 1 Survey Report for the proposed 92-kV transmission line that would be located along Schrimpf Road (ASM Affiliates 2012).

No previously recorded cultural resources were identified during the record search or pedestrian field surveys (ASM Affiliates 2011, p. 6; 2012, p 5). Therefore, this impact is identified as less than significant and will be addressed in the EIR.

(c) The project area contains sediments that have a moderate to high potential to contain significant paleontological resources. Both marine and terrestrial fossils have been recovered from localities within the Salton Trough. Paleontological resources may be impacted, if present, by project site grading, trenching for subsurface conduits, and well drilling. Therefore, unless mitigation is incorporated, a potentially significant impact is identified for this issue. This issue will be addressed in the EIR.

(d) The proposed project is not expected to disturb any human remains. However, in the event that human remains are encountered during ground disturbing activities, ground disturbing activities in the vicinity of the find will be stopped and the County Coroner, County of Imperial Development and Planning Services Department, and the Permittee will be notified in compliance with all relevant federal regulations. All parties involved will ensure that any such remains are treated in a respectful manner and that all applicable state and federal laws are followed. If human remains are found to be of Native American origin, or if associated grave goods or objects of cultural patrimony are discovered, the provisions of the Native American Graves Protection and Repatriation Act shall be followed. This issue is identified as potentially significant, unless mitigation is incorporated, and will be addressed in the EIR.

VI. GEOLOGY AND SOILS

Would the project:

a)	Expose people or structures to 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?	☐	☐	☒	☐
	2) Strong Seismic ground shaking?	☒	☐	☐	☐
	3) Seismic-related ground failure, including liquefaction and seiche/tsunami?	☐	☒	☐	☐
	4) Landslides?	☐	☐	☐	☒
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
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?	☒	☐	☐	☐

		Potentially Significant Impact (PSI)	*Potentially Significant Unless Mitigation Incorporated (PSUMI)*	*Less Than Significant Impact*	*No Impact (NI)*
d)	Be located on expansive soil, as defined in the latest Uniform Building Code, creating substantial risk to life or property?	☒	☐	☐	☐
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?	☐	☐	☐	☒

(a-1) The project site is not located within a State of California Alquist-Priolo Earthquake fault zone. However, the project site is located within a seismically active area of Southern California and geothermal resources borne from seismic activity associated with the San Andreas Fault Zone would be used by the proposed project for the purpose of electricity generation. Therefore, there would be a less than significant impact.

(a-2) The primary seismic hazard at the project site is the potential for strong ground shaking during earthquakes along the Imperial, Brawley, and San Andreas Faults and the Brawley Seismic Zone (Land Mark Consultants 2007, p. 8). This is identified as potentially significant and will be evaluated in the EIR.

(c, d) The project site is not located within a State of California Alquist-Priolo Earthquake fault zone. However, the project site is located within a seismically active area of Southern California. Movement along active and potentially active fault zones in the area could subject project structures to strong ground shaking motion. The proposed project would not be used for long-term human occupancy, and direct public access to the site would be blocked by perimeter fencing around the power generation facility. Therefore, the only people who may be exposed to risk associated with earthquake motion would include project personnel whose presence is required during the temporary project construction phase and the operation and maintenance phases.

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 most recent seismic Category D requirements provided in the California Building Code. Adherence to applicable regulations and site-specific engineering design would reduce potential impacts associated with strong ground shaking at the project site. While the proposed project is not expected to expose people or structures to safety hazards associated with surface fault rupture, strong seismic ground shaking, subsidence, liquefaction, or collapse, potentially significant impacts are identified for these issues.

A registered professional civil/geotechnical engineer will prepare a geotechnical investigation of the project site that includes comprehensive subsurface exploration, appropriate laboratory testing, and a detailed evaluation of potential constraints to critical project structures, including liquefaction, subsidence, and expansive soils. It will also identify regional faults and seismicity in relation to the project site, and estimate peak ground acceleration. In addition, the geotechnical report will determine general soil and groundwater conditions pertaining to design and construction of the proposed power plant and provide recommendations for design and construction of the project, as related to site-specific geotechnical conditions to meet State and County building code requirements.

Appropriate engineering and/or construction specifications would be based on the findings of a geotechnical investigation conducted at the proposed site, and measures would be incorporated

into the project design. Potential impacts of geologic hazards (lateral spreading, subsidence, liquefaction, or a collapse associated with unstable geologic units or soils) would be less than significant with utilization of these measures.

(a-3) The project site is on flat terrain that has no potential of inundation by seiche, tsunami, or mudflow, loss, injury, or death from flooding, nor would the site be subject to a seiche, tsunami, or mudflow. Therefore there would be a less than significant impact.

There is some potential for soil liquefaction to occur on the project site (Land Mark Consultants 2007, p. 8). As discussed previously, a registered professional civil/geotechnical engineer will prepare a geotechnical investigation of the project site, which will include identification of potential constraints, including liquefaction. This impact is identified as potentially significant, unless mitigation is incorporated, and will be addressed in the EIR.

(a-4) Since the project site and surrounding area are predominantly flat, a landslide would not occur; the proposed project would not expose people or structures to potential adverse environmental impacts associated with landslides, including risk of loss, injury, or death. No impact is identified for this issue.

(b) Project activities could result in soil erosion or the loss of topsoil at the project site. Standard industry methods, such as best management practices, will be implemented to prevent surface runoff and erosion impacts, where applicable. Therefore, unless mitigation is incorporated, a potentially significant impact is identified for this issue area. Potentially significant impacts related to soil erosion from project drilling, construction, and operation activities will be assessed in further detail in the EIR.

(e) The proposed project would not include the installation of a septic tank. Therefore, no impact would occur.

VII. GREENHOUSE GAS EMISSIONS

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, b) The Global Warming Solutions Act of 2006 requires that the State of California's greenhouse gas (GHG) emissions be reduced to 1990 levels by the year 2020. The California Air Resource Board (CARB), under the California Environmental Protection Agency (CalEPA), is charged with the preparation of plans to achieve the objectives stated in the Act. GHGs, as listed in Kyoto Protocol, include all of the following: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

The operation of construction equipment and vehicles would emit GHGs (mainly CO_2, N_2O, and CH_4) from the combustion of fossil fuels. These gases could also be emitted from operation of engines, and GHGs could be released during operation of the mineral extraction plant and the

transport of minerals to commercial destinations. These emissions could conflict with an applicable plan, policy, or regulation for reducing the emissions of GHGs unless mitigation measures are incorporated.

Potentially significant impacts related to GHG emissions generated by the proposed project will be quantified and assessed in the EIR.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	*Potentially Significant Impact (PSI)*	*Potentially Significant Unless Mitigation Incorporated (PSUMI)*	*Less Than Significant Impact*	*No Impact (NI)*
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?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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 for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

(a, b) Construction, operation, and maintenance of the proposed project would require the limited transport and use of materials deemed to be hazardous, including unleaded gasoline, diesel fuel, oil, lubricants (i.e., motor oil, transmission fluid, and hydraulic fluid), chemical reagents, water treatment chemicals, solvents, adhesives, and paint materials, and smaller quantities of other potentially hazardous chemicals.

In addition, project construction and operation would generate solid hazardous waste including dried paint and iron-silica material and lead sulfide waste extracted from the brine stream. Hazardous materials/waste generated during facility construction and plant operations would be handled and disposed of in accordance with applicable laws, ordinances, regulations, and standards. Solid waste materials would be sorted, characterized, collected by a licensed hauler, and transported from the site to a disposal facility permitted to accept such waste.

As part of the proposed project, a Hazardous Materials Business Plan (HMBP) will be prepared and implemented, and will identify proper hazardous materials handling, use, and storage; emergency response; spill control and prevention; employee training; and reporting and record keeping. This plan will help to limit human risk and environmental risk associated with exposure to hazardous materials. However, a potentially significant impact remains for this issue, and this issue will be addressed in the EIR.

(c) The project site is not located within 0.25 mile of an existing or proposed school, and the project would not expose sensitive receptors at schools to hazardous materials spills or hazardous emissions. No impact is identified for this issue.

(d) According to the 2012 Agency Data Base Search conducted for the SmCP-1 project, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code, Section 65962.5 (Environmental Management Associates 2012d). Therefore, the proposed project would not result in a significant health risk to the public or contamination threat to the environment. No impact is identified for this issue.

(e, f) The Cliff Hatfield Memorial Airport is the nearest airport and is approximately 5.9 miles south of the project site. The project site is not located within the boundaries of an airport land use plan or within 2 miles of a public or private use airport. Therefore, project implementation would not introduce any aviation safety hazards for individuals working or residing in the project area. No impact is identified for this issue.

(g) 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 ICDPW, California Department of Transportation (Caltrans), County Sheriff's Office, fire, ambulance, and paramedic service providers prior to closure, and would be scheduled to occur during off-peak commute hours. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No impact is identified for this issue.

(h) Wildlands that could be ignited during construction or operation activities do not exist in the project area. The proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. No impact is identified for this issue.

IX. HYDROLOGY AND WATER QUALITY

Would the project:

a)	Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

		Potentially Significant Impact (PSI)	*Potentially Significant Unless Mitigation Incorporated (PSUMI)*	*Less Than Significant Impact*	*No Impact (NI)*
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d)	Substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e)	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?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect the flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

(a) Site preparation and grading activities could result in increased erosion. The project will file a Notice of Intent to comply with the requirements of the CRWQCB General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Appropriate erosion control measures would be used to control any off-site discharges and the propose project would adopt relevant CRWQCB best management practices to prevent soil erosion, including the preparation of a Storm Water Pollution Prevention Plan.

(b) The proposed project is not expected to substantially deplete groundwater supplies or interfere with groundwater recharge. The primary source of external freshwater for the SmCP-1 project is anticipated to be irrigation water made available under a supply contract with the IID. Water will be obtained from the "O" lateral located north of the HR-1 site, and a portion will be treated to potability standards. The water would be used for maintenance purposes, firewater for the fire protection system, for cooling water make-up, and to charge the cooling tower prior to startup. The use of groundwater is not anticipated. Therefore a less than significant impact is identified.

(c, d, e, f) There are no rivers or streams in the project area. The proposed project would not substantially alter existing drainage patterns of the site or area. Potential increases in the rate or amount of surface runoff would be directed to and contained within the onsite retention basin. Impacts to water quality from a substantial alteration of the existing drainage pattern and the creation of site runoff that exceeds the capacity of existing or planned drainage systems are identified as less than significant. These issues will be evaluated in the EIR.

(g) The western portion of the SmCP-1 facility is located within the Federal Emergency Management Agency (FEMA) "Zone A" flood zone. However, the project would not place any housing within a

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

100-year flood hazard area, as mapped on a Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

(h, i, j) No structures are proposed within a 100-year flood area which would impede or redirect the flood flows. The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. The project site is on flat terrain that has no potential of inundation by seiche, tsunami, or mudflow, loss, of injury or death from flooding, nor would the site be subject to a seiche, tsunami, or mudflow.

X. LAND USE AND PLANNING

Would the project:

a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (include, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

(a, b) The project would not physically divide an established community since the project site is surrounded by agricultural land and the nearest community is Niland, approximately 3 miles away.

The Imperial County General Plan Land Use Map designates this area as "Agriculture" (County of Imperial 2008a), and the site is zoned "M-2-G-PE" (Medium Industrial/Geothermal Overlay Zone/Pre-Existing Condition). As noted in the Geothermal Element of the General Plan, the extraction of minerals from the geothermal fluids is included in the description of activities that may occur with the development of geothermal flash plants (County of Imperial 2006, p. 62). In addition, the County Land Use Ordinance (Section 90516.02) permits "chemical manufacturing," "facilities for the transmission of electrical energy (100-200 kV)," and "electrical substations in an electrical transmission system (500 kv/230 kv/161 kV)," with a CUP (County of Imperial 2008b).

(c) There are no known habitat conservation plans or natural community conservation plans encompassing the project area. As such, there is no potential for the proposed project to conflict with any applicable habitat conservation plan or natural community conservation plan. No impact is identified for these issue areas.

XI. 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?	☐	☐	☐	☒

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

(a) Other than the geothermal resources being developed in the project vicinity, there are no known mineral resources in the project area. As such, the proposed SmCP-1 project would not 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. In fact, the proposed SmCP-1 project would enable the utilization of a previously untapped source of minerals.

(b) There are no known mineral recovery sites in the project vicinity. As, such, the proposed SmCP-1 project would not result in the loss of availability of a locally important resource recovery site. No impact is identified for this issue.

XII. NOISE

Would the project result in:

a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

(a, b, c, d) The proposed project has the potential to exceed construction noise (temporary noise) standards onsite and offsite (e.g., sensitive habitat areas). Site construction activities could create excessive groundborne vibration or noise levels; however, mitigation measures, such as temporary sound walls and mufflers, could mitigate this to below a level of significance. A noise analysis will be prepared to identify temporary and permanent noise levels from the proposed project. Thus, unless mitigation is incorporated, potentially significant impacts are identified for these issue areas. These issues will be addressed in the EIR.

(e, f) The project site is not located in the vicinity of a public or private airstrip and has no potential for exposing people residing or working in these kinds of areas to excessive noise levels. The Cliff Hatfield Memorial Airport is the nearest airport and is approximately 5.9 miles southeast of the project site. No impact is identified for this issue.

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

XIII. POPULATION AND HOUSING

Would the project:

a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example through extension of roads or other infrastructure)?	☐	☐	☒	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

(a) The proposed project does not include the development of housing. Although construction of the proposed project would require a construction workforce of approximately 100 persons and operations would require 88 new full-time employees, a substantial population increase is not anticipated. Therefore a less than significant impact is identified for this issue area.

(b, c) The project site contains no existing housing units. No people or existing housing would be displaced, and no replacement housing would be required. Therefore, no impact is identified for this issue area.

XIV. 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?	☐	☐	☒	☐
	2) Police protection?	☐	☐	☒	☐
	3) Schools?	☐	☐	☒	☐
	4) Parks?	☐	☐	☒	☐
	5) Other public facilities?	☐	☐	☒	☐

(a-1, a-2) There would be negligible need for additional sheriff, fire, or security protection services as a result of the proposed project. The proposed project would install 6-foot-high security chain link fencing topped with three-strand wire to prevent unauthorized access and theft of equipment.

In addition, the proposed SmCP-1 project would construct its own fire protection system. The fire protection system would 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, and a complete detection and alarm system. This system would be designed in accordance with federal, state, and local fire

codes, occupational health and safety regulations, and other jurisdictional codes, requirements, and standard practices. Thus, a less than significant impact is identified for these issues.

(a-3, a-4, a-5) Although operation of the proposed project would require 88 new full-time employees, a substantial population increase is not anticipated. In addition, it is assumed that the estimated construction work force of about 100 workers would be local residents that would commute to the project site. The proposed project would not require the need for new or physically altered recreation facilities in order to maintain acceptable service ratios or other performance objectives for schools, parks, or other public facilities. Therefore, a less than significant impact is identified for this issue.

XV. RECREATION

		Potentially Significant Impact (PSI)	*Potentially Significant Unless Mitigation Incorporated (PSUMI)*	*Less Than Significant Impact*	*No Impact (NI)*
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) There are no parks or other developed federal, state, or County recreational facilities in the project area or immediate vicinity. The proposed project would require an operation staff of 88 full-time employees, which would not significantly increase the use or accelerate the deterioration of existing recreational facilities. Therefore, a less than significant impact is identified for this issue.

(b) The proposed project does not include or require the construction or expansion of any recreational facilities. The project would have no direct, indirect, or cumulative potential to have an adverse effect on the environment through construction or expansion of recreation facilities. No impact is identified for this issue.

XVI. TRANSPORTATION/TRAFFIC

Would the project:

a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b)	Conflict with an applicable congestion management program, including but not limited to level of service standard and travel demand measures, or other standards established by the county congestion/management agency for designated roads or highways?	☐	☒	☐	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

		Potentially Significant Impact (PSI)	*Potentially Significant Unless Mitigation Incorporated (PSUMI)*	*Less Than Significant Impact*	*No Impact (NI)*
e)	Result in inadequate emergency access?	☐	☐	☐	☒
f)	Conflicts with adopted policies, plans, programs, regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

(a, b) The proposed project would result in an increase in traffic during construction and operations for the project area. A Traffic Study for the proposed project was prepared by Fehr & Peers in April 2011 (Fehrs & Peers 2012). According to the study, all affected road segments, key intersections, and affected highways would continue to operate at acceptable levels of service, with the addition of project traffic during construction and operations in the near-term year of 2015 (Fehr & Peers 2012, p. 32). During the future year (2030), all key study area intersections would operate at acceptable levels of service, with the exception of State Highway 111/McDonald Road during the AM peak hour, and State Highway 111/Sinclair Road during both the AM and PM peak hours (Fehrs & Peers 2012, p. 32). Therefore, unless mitigation is incorporated, a potentially significant impact is identified for this issue.

(c, d, e, f) The proposed project would not result in a change in air traffic patterns, including either an increase in traffic or a change in location that results in substantial safety risks. The project would not increase hazards due to a design feature, nor impact emergency access, nor impact public parking, nor conflict with alternative transportation plans, programs, or policies in the project's vicinity. ICDPW will be consulted by the Permittee to ensure that any potential impacts to the traveling public on affected roadway segments during construction and/or plant operations would be minimized. Additionally, the proposed project would not result in inadequate emergency access or parking. Furthermore, the project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). Therefore, no impact is identified for these issues.

XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:

a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b)	Require or result in the construction of new water or water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e)	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?	☐	☐	☒	☐

		Potentially Significant Impact (PSI)	*Potentially Significant Unless Mitigation Incorporated (PSUMI)*	*Less Than Significant Impact*	*No Impact (NI)*
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

(a, c) There will be no process wastewater discharges to land or waters from the proposed SmCP-1 facility. Unused steam condensate, process water, blowdown from the cooling tower, and depleted brine would be delivered to the HR-1 site for beneficial use by HR-1 through subsurface injection into the geothermal reservoir. Stormwater from the SmCP-1 site would be directed into the stormwater retention basin shared with HR-1 on the east side of the plant site. Consequently, no impacts are identified.

(b, e) Sanitary waste from the SmCP-1 facility would be collected in a septic tank which would initially digest the sewer effluent. Liquid waste would be pumped to a waste water treatment system on the neighboring HR-1 facility. Sludge retained in the septic tank would be pumped by licensed contractors, as needed, and transported to a sanitary water treatment plant. The proposed project would not require or result in the construction of new water or water treatment facilities, or the expansion of existing facilities. No impacts are identified.

(d, e) During construction, the proposed project would require water for construction, road grading, and dust control, which would be obtained from the IID and transported to the site via temporary pipeline or water truck. During operations, water would be used for reagent preparation, product washing, cooling tower make-up, maintenance purposes, and firewater for the fire protection system. A portion of this water would be generated from steam condensate provided by the existing HR-1. Additional water would be purchased from IID and obtained from the "O" lateral canal. Water would be delivered to the new freshwater storage pond on the Simbol property northeast of the SmCP-1 site via pipeline from the canal. The freshwater pond would be constructed below finished grade and lined with HDPE. The freshwater pond would be sized to meet the freshwater storage requirements of SmCP-1.

Canal water would also be used for potable water purposes, including potable washbasin water, eyewash and safety shower equipment water, water for showers and toilets in crew change quarters, and sink water in the sample laboratory. A filtration-based or reverse osmosis potable water system would be used to treat canal water for the potable water needs at the site. The filter backwash or reverse osmosis concentrate would be delivered back to the freshwater pond. A Nontransient-Noncommunity Water System Permit would be obtained from the Imperial County EHS/Public Health Department for the onsite potable water system. Bottled drinking water would be purchased for consumption.

An SB 610 Water Supply Assessment (WSA) was prepared for the proposed project by Pangaea Land Consultants, Inc., dated March 15, 2012. The WSA is prepared as a requirement of California law under Senate Bill 610 (Chapter 643, Statutes of 2001). The WSA indicated that sufficient water supplies are available to meet the proposed project's demands through 2045 (Pangaea 2012, p. 70). Therefore, a less than significant impact is identified for these issues. Utilities and service systems will be addressed in the EIR.

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

(f, g) The total amount of solid waste (including lumber, excess concrete, metal, glass scrap, and empty nonhazardous containers) to be generated by construction activities is anticipated to be similar to that generated for typical commercial construction. All non-hazardous and hazardous wastes generated during facility construction and operation would be handled and disposed of in accordance with applicable laws, ordinances, regulations, and standards. Typical management practices required for non-hazardous waste management include recycling, when possible, proper storage of waste and debris to prevent wind dispersion, and weekly pickup and disposal of wastes to local Class III landfills by a local disposal service. Office waste and general refuse will be removed by a local sanitation service.

All hazardous wastes generated during facility construction and plant operations will be handled and disposed of in accordance with applicable laws, ordinances, regulations, and standards. Any hazardous wastes generated during construction will be collected in hazardous waste accumulation containers near the point of generation and moved daily to the contractor's 90-day hazardous waste storage area located onsite. The accumulated waste will be subsequently delivered to an authorized waste management facility. Hazardous wastes will be managed and disposed of properly in a licensed Class I waste disposal facility authorized to accept the waste. Therefore, a less than significant impact is identified for this issue. Potential impacts to utilities and service systems will be addressed in the EIR.

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, 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

III. Mandatory Finding 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 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
(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.)	☐	☒	☐	☐
(c)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

(a) Implementation of the proposed project has the potential to impact sensitive biological resources and cultural/paleontological resources. A potentially significant impact has been identified and these issues will be further evaluated in the EIR.

(b) The proposed 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, a potentially significant impact unless mitigation is incorporated has been identified. An analysis of air quality impacts is being prepared for the proposed project and will be discussed in the EIR.

(c) The proposed project has the potential to result in significant environmental effects or significant effects unless mitigation is incorporated, which could directly or indirectly cause adverse effects on human beings. As demonstrated in this Initial Study, the proposed project has the potential to result in significant impacts to air quality/GHG emissions, agricultural resources, cultural resources, geology/soils, hazards and hazardous materials, and noise. These impact areas could result in direct or indirect adverse effects on human beings. This impact is identified as potentially significant, unless mitigation is incorporated, and these issues will be discussed in the EIR.

IV. Persons and Organizations Consulted

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

A. COUNTY OF IMPERIAL

a) Armando G. Villa, AICP, Director of Planning & Development Services

b) Jim Minnick, Assistant Director of Planning & Development Services

c) Sean M. Moore, AICP, Planning Manager

d) Richard Cabanilla, Project Planner IV

e) Monica Soucier, Air Pollution Control Division Manager, Imperial County Air Pollution-Control District

f) Imperial County Department of Public Works

g) Tony Rouhotas, Chief, Imperial County Fire Department

h) Connie Valenzuela, Imperial County Agricultural Commissioner

i) Jeff Lamoure, Deputy Director of Environmental Health Services

j) Sheriff's Office

B. OTHER AGENCIES/ORGANIZATIONS

REVIEWING AGENCIES (Copies and/or Notice Provided)

LOCAL AGENCIES

- [x] AG. DEPT.
- [x] APCD
- [x] ASSESSOR
- [ ] C.E.O.
- [ ] COUNTY COUNSEL
- [x] E.H.S. DIVISION
- [x] FIRE / O.E.S.
- [x] FISH & GAME (COUNTY)
- [x] IMPERIAL IRRIGATION DISTRICT
- [x] PUBLIC WORKS DEPT.
- [x] SHERIFF
- [x] OTHER
- [x] IC APPLICATORS
- [x] NILAND ELEMENTARY SCHOOL
- [x] NILAND CHAMBER OF COMMERCE
- [x] NILAND FIRE DEPARTMENT
- [x] CALIPATRIA UNIFIED SCHOOL DISTRICT
- [x] SOUTH COASTAL INFORMATION CENTER

CITIES

- [ ] BRAWLEY
- [ ] CALEXICO
- [x] CALIPATRIA
- [x] EL CENTRO
- [ ] HOLTVILLE
- [ ] IMPERIAL
- [ ] WESTMORLAND

LIBRARIES

- [ ] CALEXICO
- [ ] COACHELLA VALLEY
- [ ] BRAWLEY
- [ ] EL CENTRO
- [ ] HOLTVILLE
- [ ] IMPERIAL
- [ ] IMPERIAL VALLEY COLLEGE
- [ ] INDIAN HILL
- [ ] MEYER MEMORIAL

STATE AGENCIES

- [x] AIR RESOURCES BOARD
- [x] CALTRANS/District 11/San Diego
- [x] CALIFORNIA HIGHWAY PATROL
- [x] DEPT. OF FISH & GAME *TRUSTEE AGENCY*
- [x] HISTORIC PRESERVATION
- [ ] HOUSING & COMMUNITY DEVELOPMENT
- [x] INT. WASTE MAN. BOARD/CALRECYCLE
- [ ] STATE LANDS COMMISSION *TRUSTEE AGENCY*
- [x] CA DEPARTMENT OF CONSERVATION
- [ ] MINE RECLAMATION (OMR)
- [x] NATIVE AMERICAN HERITAGE
- [x] OFFICE OF PLANNING & RESEARCH (OPR)
- [ ] PARKS & RECREATION DEPT. *TRUSTEE AGENCY*
- [x] REGIONAL WATER QUALITY BOARD
- [ ] RESOURCE AGENCY
- [ ] SCAG
- [ ] STATE GEOLOGIST
- [ ] WATER RESOURCE BOARD
- [x] DIV. OF OIL, GAS & GEOTHERMAL RESOURCES

FEDERAL AGENCIES

- [ ] BUREAU OF LAND MANAGEMENT (BLM)
- [ ] BUREAU OF MINES
- [ ] BUREAU OF RECLAMATION
- [ ] BORDER PATROL
- [x] MARINE CORPS. AIR STATION, YUMA
- [x] NAVAL AIR FACILITY, EL CENTRO
- [x] SOIL CONSERVATION SERVICE
- [x] U.S. FISH & WILDLIFE SERVICES
- [x] IMPERIAL WILDLIFE AREA/WISTER UNIT
- [x] AH-MUT-PIPA FOUNDATION
- [x] CABAZON BAND OF MISSION INDIANS
- [x] CAMPO KUMEYAAY NATION
- [x] COCOPAH INDIAN TRIBE
- [x] EWIIAAPAAYP TRIBAL OFFICE, Executive Director
- [x] EWIIAAPAAYP TRIBAL OFFICE, Vice Chairperson
- [x] KUMEYAAY CULTURAL HERITAGE PRESERVATION
- [x] KWAAYMII LAGUNA BAND OF MISSION INDIANS
- [x] MANZANITA BANC OF KUMEYAAY NATION
- [x] QUECHAN INDIAN TRIBE

REVIEWING AGENCIES (Copies and/or Notice Provided)

LIBRARIES (Continued)

- ☐ PALO VERDE
- ☐ SAN DIEGO STATE UNIVERSITY

FEDERAL AGENCIES (Continued)

- ☒ TORRES-MARTINEZ DESERT CAHUILLA INDIANS
- ☒ TORRES-MARTINEZ INDIAN TRIBE

FOR ADDITIONAL & GENERAL NOTICING
SEE DISTRIBUTION LIST IN PROJECT FILE

V. References

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Appendix DA 5.3-2
Revised Cultural Maps - CONFIDENTIAL