



Imperial County Planning & Development Services Planning / Building

Jim Minnick
DIRECTOR

May 8, 2023

**SUBJECT: REQUEST FOR PROPOSAL – MONITORING & COMPLIANCE
PROJECT: CUP 20-0008 ENERGY SOURCE MINERAL EXTRACTION PROJECT**

Ladies and Gentlemen:

The Imperial County Planning & Development Services Department (ICPDS) is soliciting proposals for the third party monitoring and compliance on the **Energy Source Mineral Extraction Project**. **Proposals will be accepted from May 8, 2023 thru May 30, 2023.** ICPDS will act as the "Lead Agency" during all phases including the Laydown, Move On, pre-construction, construction phase, and operational phase of these projects. The successful consultant will work directly for ICPDS on the following phases:

1. The Laydown Phase which will allow for construction equipment to be delivered within the development area;
2. The initial Move On Phase where construction trailers and equipment will be used for construction;
3. The Pre-Construction Phase including all reports;
4. The Full Development Phase, and
5. The ongoing Operational Monitoring Phase, as required in the Conditional Use Permits and Mitigation Monitoring Reporting Programs. **(Please include as optional task).**

ICPDS is requesting a Statement of Interest consisting of a Statement of Qualifications and a Schedule of Charges from personnel & organizations which are included in the environmental compliance services proposal.

The TPEI consultant will coordinate with the Energy Source Minerals project Contractors, staff, and Imperial County agencies regarding third party review of environmental construction compliance and monitoring activities.

Assist the developers/ environmental coordinators on the review of plans to support pre-construction, construction and operation of the Project (e.g. Pest Management Plan, Raven Control Plan, Hazardous Materials Management Plan, etc.) in fulfillment of the requirements of the Mitigation Monitoring and Reporting Program and the conditions as identified in the Conditional Use Permit for the Project. Provide review of the compliance management/mitigation monitoring as a comprehensive service to assist public agencies and the on-site developers with carrying out the intent of the California Environmental Quality Act (CEQA) as it applies to environmental mitigation.

Additionally, the TPEI to coordinate with the contractors, County staff and regulatory agencies (e.g. Imperial County Air Pollution Control District, California Department of Fish and Game [CDFW], Caltrans etc.) during construction of the Project. The monitoring efforts will focus on the conditions and mitigation measures included in CUP #19-0015. Responsibilities as the TPEI will include ensuring that the requirements of the CUPs are implemented and complied with as specified. TPEI will fulfill these duties by inspecting the site for non-compliance issues; monitoring construction activities; protecting/avoiding biological and cultural resources; and verifying implementation of approved Conditions of Approval and mitigation measures as required in the MMRP.

Attached hereto is a copy of the Mitigation, Monitoring and Reporting Programs (MM&RP) and recorded CUP with conditions for the project. The below links are for review of the approved FEIR/ DEIR for project.

<https://www.icpds.com/assets/Energy-Source-Mineral-ATLiS-Project-DEIR-.pdf>

<https://www.icpds.com/planning/environmental-impact-reports/final-eirs/hudson-ranch-simbol-ii-feir>

ICPDS hereby requests the project scope and cost associated with all of the following Phases & Tasks:

- 1. Laydown phase-** *Delivery and staging of solar equipment within the development area. This phase is limited to a specific area of the project site that will be used to store materials and components in advance of construction. TPEI involvement for this phase includes monitoring to insure a biologist is doing a sweep of the area ensure there are no birds, burrowing owls or other wildlife present prior to staging materials followed by a pre-construction survey before disturbance of the Project site. If species are present, the appropriate actions will be implemented to avoid or relocate the affected species in consultation with CDFW and in accordance with required protocols. The TPEI will also ensure that staged materials are properly covered/capped to prevent birds and wildlife from nesting in these areas. Monitoring costs on the biological as needed per surveys, including the monitoring of potential passive re-locations, if needed. Please include the hourly rate for monitoring, as well as the total estimated hours.*
- 2. Move-On phase-** *Review of the Mobilizing of job trailers and equipment in advance of construction. This phase involves placement of mobile units that serve as offices for the contractors during construction, placement of port-a-potties, and staging of equipment including the J-stand for filling water trucks. Light grading is also involved so the Dust Control Plan needs to be in place. Likewise, pre-construction surveys need to be conducted prior to the move-on as this phase serves to assemble the necessary infrastructure and equipment to commence construction. TPEI involvement for this phase includes review of the oversight of this mobilization process and establishing parameters for operation of the area. This involves ensuring that containment is in place beneath equipment; confirming that port-a-potties are secured with containment beneath; checking for drips/pooling water from the J-stand; covering gaps beneath trailers to inhibit birds and wildlife from occupying these areas; and directing that garbage cans be covered to avoid blowing trash and attracting wildlife.*
- 3. Pre-construction phase (Tasks & Costs) Review of Reports-** *Review of all required reports and plans as specified in the Conditions of Approval and/or MMRP. A multitude of reports and plans must be prepared prior to the start of construction. These may include, but are not limited to:*
 - *A dust control plan,*
 - *Pest Management Plan,*
 - *Storm-water Pollution Prevention Plan (SWPPP),*
 - *Hazardous Materials Business Plan, etc.*
 - *Surveys for nesting birds and burrowing owls.*
 - *Biological surveys and written reports for the construction area.*
 - *The County will need the costs for these surveys on project areas and the off-site areas as required.*
- 4. Costs for third party monitoring the Developer's construction crews** *including, but not limited to the EPC contractor, electrical contractors, and subcontractors including the grading for each site. Please include the hourly rate and the total estimated hours for inspections & monitoring;*

5. **Any Costs for review of the paleontological, culture, and archeological work** as required by the MMR&P's and CUP conditions and or as requested by the Imperial County Planning & Development Services Department; please include the hourly rate and the total estimated hours.
6. **Costs for writing compliance reports** for the project; please include the hourly rate and the cost for third party weekly compliance reports.
7. **Costs for conducting onsite monitoring and documenting** whether the Project complies with the conditions of the County permits; please provide the hourly rate.
8. **Costs for attending meetings with the Contractor, State Agencies, or Local Agencies on site or via phone conference as well as writing reports documenting these meetings;** please provide the hourly rate and the total estimated hours.
9. **Costs for reviewing the training and the maintaining of the Workers Environmental Awareness Program (WEAP) training** for all workers and contractors working on site during Pre-construction & construction activities.

The proposed hourly/daily billing rate, travel billing rate, mileage billing rate, proposed per diem (if any), and expected round-trip miles to be billed for visits to the Energy Source Mineral site.

The estimated project construction completion is one (1) year. The construction is scheduled to begin August 2023; however, the duration of requested service to carry out the Scope of Work may vary.

If you have any questions, you may contact David Black, Project Planner, by phone at (442) 265-1736, extension 1746 or by email at davidblack@co.imperial.ca.us.

Sincerely,

JIM MINNICK, Director
Planning & Development Services

By: 

David Black
Project Planner

Attachments: Documents Required Matrix
FEIR DEIR MMRP CUP CONDITIONS

DB\IS\AllUsers\APN\020\100\044\CUP20-0008\MONITORING AND COMPLIANCE\CUP20-0008 Energy Source Mineral Extraction Project Monitoring Compliance RFP.docx

CHAPTER 5.0 – MITIGATION MONITORING AND REPORTING PROGRAM

5.0 INTRODUCTION

This document is the Final Mitigation Monitoring and Reporting Program (FMMRP) for the Energy Source Mineral ATLiS Project. This FMMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” A FMMRP is required for the Project because the EIR identified significant adverse impacts, and mitigation measures have been identified to address these impacts and ensure a less-than-significant impact to the furthest extent feasible. The numbering of the individual mitigation measures follows the numbering sequence found in Chapter 2 of the Draft EIR. No revisions to mitigation measures were necessary as a result of responding to public comments.

5.1 MITIGATION MONITORING AND REPORTING PROGRAM

The FMMRP, as outlined in the table beginning on page 5.0-2, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Final EIR. The County of Imperial will be the primary agency, but not the only agency, responsible for implementing the mitigation measures. In some cases, other public agencies will implement measures. In other cases, the Project Applicant will be responsible for implementation of measures, and the County’s role is exclusively to monitor the implementation of the measures. In such cases, the Project Applicant may choose to require the construction contractor to implement specific mitigation measures prior to and/or during construction. The County will continue to monitor mitigation measures that are required to be implemented during the operation of the Project.

The FMMRP is presented in tabular form on the following pages. The components of the FMMRP are described briefly below:

Mitigation Measures: The mitigation measures are taken from the Draft EIR in the same order that they appear in the Draft EIR. No revisions to mitigation measures or new mitigation measures were necessitated as part of response to comments.

Mitigation Timing: Identifies at which stage of the Project mitigation must be completed.

Monitoring Responsibility: Identifies the department within the County, Project Applicant, or consultant responsible for mitigation monitoring.

Compliance Verification Responsibility: Identifies the department of the County or other state agency responsible for verifying compliance with the mitigation. In some cases, verification will include contact with responsible state and federal agencies.

Table 5.0-1: Final Mitigation Monitoring and Reporting Program

MM #	Mitigation Measure	Monitoring Responsibility	Timing
Biological Resources			
BIO-1	The Applicant shall ensure that prior to and during construction, onsite occupied burrows shall be avoided during nesting season (February 1 through August 31).	ICPDS/Applicant	Prior to and during construction
BIO-2	The Applicant shall conduct a preconstruction survey within 30 days of groundbreaking activities to identify any burrowing owls on site.	ICPDS/Applicant	Prior to construction; within 30 days of groundbreaking activities.
BIO-3	If burrowing owls are found within the Project site, a Burrowing Owl Mitigation Plan must be prepared by a qualified biologist and approved by CDFW prior to any ground-disturbing activities.	ICPDS/Applicant	Prior to ground disturbance
BIO-4	The construction or site manager shall ensure that no construction occurs within 250 feet of the artificial burrows or other active or occupied burrows unless active or occupied burrows are sheltered with hay bales and monitored by a qualified biologist; if this is done, work may occur within 20 feet of active or occupied burrows. If qualified biologists observe burrowing owls' agitation, work in the vicinity will stop. Additional shelter materials can be added until burrowing owls remain calm during construction activities.	ICPDS/Applicant	During construction
BIO-5	If passive relocation is required, it shall be done by a qualified biologist from September 1 to January 31 and will follow the CDFW Staff Report on Burrowing Owl Mitigation Guidelines (CDFW 2012).	ICPDS/Applicant	During construction
Geology and Soils			
GEO-1	All grading operations and construction shall be conducted in conformance with the recommendations included in the Preliminary Geotechnical Report on the Project site that has been prepared by LandMark Geo-Engineers and Geologists (LandMark) in August 2020. Design, grading, and construction shall be performed in accordance with the recommendations of the project geotechnical consultant as summarized in a final written report, subject to review by the County, prior to commencement of grading activities. A full description of recommendations in the Preliminary Geotechnical Investigation is provided in Section 4: Design Criteria of Appendix E of the Draft EIR.	ICPDS/Applicant	During construction

Table 5.0-1: Final Mitigation Monitoring and Reporting Program

MM #	Mitigation Measure	Monitoring Responsibility	Timing
Paleontological Resources			
PALEO-1	Developer shall retain the services of a qualified paleontologist and require that all initial ground-disturbing work be monitored by someone trained in fossil identification in monitoring contexts. The consultant shall provide a supervising paleontological specialist and a paleontological monitor to be present at the Project construction phase kickoff meeting.	ICPDS/Applicant	Prior to and during ground disturbance
PALEO-2	On the first day of construction and thus prior to any ground disturbance in the Project site, the supervising cultural resources specialist and cultural resources monitor shall conduct initial Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the Project construction work phase, for which the lead contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with the monitor(s) to identify and minimize impacts to paleontological resources and maintain environmental compliance and will be performed periodically for new personnel coming onto the Project as needed.	ICPDS/Applicant	Prior to ground disturbance
PALEO-3	<p>The contractor shall provide the supervising paleontological resources specialist with a schedule of initial potential ground-disturbing activities. A minimum of 48 hours shall be provided to the consultant of commencement of any initial ground-disturbing activities such as vegetation grubbing or clearing, grading, trenching, or mass excavation.</p> <p>A paleontological monitor shall be present on site at the commencement of ground-disturbing activities related to the Project. The monitor, in consultation with the supervising paleontologist, shall observe initial ground-disturbing activities and, as they proceed, make adjustments to the number of monitors as needed to provide adequate observation and oversight. All monitors shall have stop-work authority to allow for recordation and evaluation of finds during construction. The monitor shall maintain a daily record of observations as an ongoing reference resource and to provide a resource for final reporting upon completion of the Project.</p> <p>The supervising paleontologist, paleontological monitor, and the lead contractor and subcontractors shall maintain a line of communication regarding schedule and activity such that the monitor is aware of all ground-disturbing activities in advance in order to provide appropriate oversight.</p>	ICPDS/Applicant	Prior to and during construction
PALEO-4	If paleontological resources are discovered, construction shall be halted within 50 feet of any paleontological finds and shall not resume until a qualified paleontologist can determine the significance of the find and/or the find has been fully investigated, documented, and cleared.	ICPDS/Applicant	During construction

Table 5.0-1: Final Mitigation Monitoring and Reporting Program

MM #	Mitigation Measure	Monitoring Responsibility	Timing
PALEO-5	At the completion of all ground-disturbing activities, the consultant shall prepare a Paleontological Resources Monitoring Report summarizing all monitoring efforts and observations, as performed, and any and all prehistoric or historic archaeological finds, as well as providing follow-up reports of any finds to the SCIC, as required.	ICPDS/Applicant	After construction
Transportation			
TRA-1	A Commute Trip Reduction (CTR) program shall be implemented to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The CTR program could include features such as carpooling encouragement, ride-matching assistance, preferential carpool parking, half-time transportation coordinator, vanpool assistance, and bicycle end-trip facilities (parking, showers, and lockers) and provide employees with assistance in using alternative modes of travel.	ICPDS/Applicant	During operations
TRA-2	The Highway 111/McDonald Road intersection shall be improved to Caltrans' satisfaction prior to the Project's certificate of occupation, including the installation of a northbound left-turn pocket prior to the Project's opening, utilizing one of the four intersection control methods (existing two-way stop, all-way stop, signal, roundabout) which was analyzed in an Intersection Control Evaluation (ICE) analysis.	ICPDS/Applicant	Prior to operations
Utilities and Service Systems			
UTIL-1	If the IID does not receive its annual 3.1 MAF water apportionment according to the QSA obligations of Colorado River water during the Project's 30-year lifespan, the Applicant shall work with IID to ensure any reduction in water availability can be managed by the Project.	ICPDS/Applicant	During operations

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

When Recorded Return To:

Imperial County Planning & Development Services Dept.
801 Main Street
El Centro, California 92243

Recorded in Official Records,
IMPERIAL COUNTY
Doc#: 2021026543
10/18/2021 10:21 AM

**AGREEMENT FOR
CONDITIONAL USE PERMIT #20-0008
ENERGY SOURCE MINERAL LLC**

This agreement is hereby made and entered into on this 30 day of September 2021, by and between Energy Source Mineral LLC hereinafter referred to as the Permittee, and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor-in-interest in certain land in Imperial County with the applicant proposing to construct and operate a commercial lithium hydroxide, manganese, and zinc production plant within the Salton Sea geothermal field. The facility will process geothermal brine from the neighboring Hudson Ranch Power I Plant to produce mineral products to be sold commercially. Project is currently located on a portion of Section 24, Township 11 South, Range 13 East, SBB&M, Assessor Parcel Numbers 020-100-044-000; 020-100-046-000; 020-100-025-000, and is approximately 3 miles southwest of the Townsite of Niland.

WHEREAS, Permittee has applied to the County of Imperial for a Conditional Use Permit #20-0008 allowing for the construction and operation to include mineral extraction facilities and pipelines to/from HR-1, additionally, the Permittee has applied for a Minor Subdivision Parcel Map #2485.

The letter "G" shows the "GENERAL CONDITIONS". These conditions are conditions that either routinely and commonly are included in all Conditional Use Permits as "standardized conditions and/or are conditions that the Imperial County Planning Commission has established as a requirement on all CUP's for consistent application and enforcement. The Permittee is hereby advised that the General Conditions are as applicable as the SITE SPECIFIC conditions.

GENERAL CONDITIONS:

G-1 GENERAL LAW:

The Permittee shall comply with all local, state and/or federal laws, rules, regulations, ordinances, and/or standards (LORS) as they may pertain to the Project whether specified herein or not.

1 **G-2 PERMITS/LICENSES:**

2 The Permittee shall obtain all local, state and/or federal permits, licenses, and/or other approvals
3 for the construction and/or operation of the Project. This shall include, but not be limited to, local
4 requirements for Health, Building, Sanitation, ICAPCD, Public Works, County Sheriff, Fire
5 Protection/Office of Emergency Services, Regional Water Quality Control Board, California Division
6 of Oil, Gas and Geothermal Resources (CDOGGR), among others. Permittee shall likewise comply
with all such permit requirements. Additionally, Permittee shall if so requested submit a copy of
such additional permit and/or licenses to the Planning & Development Services Department within
thirty (30) days of receipt, including amendments or alternatives thereto.

7 **G-3 RECORDATION:**

8 This permit shall not be effective until CUP is recorded at the Imperial County Recorder's Office
9 and payment of the recordation fee shall be the responsibility of the Permittee. If the Permittee
10 fails to pay the recordation fee within six (6) months from the date of approval, this permit shall be
11 deemed null and void. The Planning & Development Department will submit the executed Permit
12 to the Imperial County Recorder's office for recordation purposes. Permittee shall commence
construction of the permitted activities or provide evidence of substantial process within twelve (12)
months from the effective date of this permit, i.e. approval date. The Planning Director shall have
the authority to extend this time limit not to exceed 24 months if so requested by the Permittee.

13 **G-4 CONDITION PRIORITY:**

14 The Project shall be constructed and operated as described in this Permit, the project description
15 and as specified herein. If a conflict occurs between the permitting/regulatory agencies, the most
stringent condition shall govern and takes precedence.

16 **G-5 INDEMNIFICATION:**

17 As a condition of this permit, Permittee agrees to defend, indemnify, hold harmless, and release
18 the County, its agents, officers, attorneys, and employees from any claim, action, or proceeding
19 brought against any of them, the purpose of which is to attack, set aside, void, or annul the permit
20 or adoption of the environmental document which accompanies it. This indemnification obligation
21 shall include, but not be limited to, damages, costs, expenses, attorney's fees, or expert witness
fees that may be asserted by any person or entity, including the Permittee, arising out of or in
connection with the approval of this permit, whether there is concurrent, passive or active
negligence on the part of the County, its agents, officers, attorneys, or employees. This
indemnification shall include Permittee's actions involved in construction, operation or
abandonment of the permitted activities.

22 **G-6 INSURANCE:**

23 The Permittee shall secure and maintain liability in tort and property damage, insurance at a
24 minimum of \$1,000,000.00 or proof of financial responsibility to protect persons or property from
25 injury or damage caused in any way by construction, or operation, of permitted facilities. The
26 Permittee and/or operator shall require that proper Workers' Compensation insurance covers all
27 laborers working on such facilities, e.g. construction and operational activities, as required by the
28 State of California. The Permittee shall also secure liability insurance and such other insurance as
may be required by the State and/or Federal Law.

1 Evidence of such insurance shall be provided to the County prior to commencement of any
2 activities authorized by this permit, e.g. a Certificate of Insurance is to be provided to the Planning
3 & Development Services Department by the insurance carrier and said insurance and certificate
4 shall be kept current for the life of the permitted Project. Certificate(s) of insurance shall be sent
5 directly to the Planning & Development Services Department by the insurance carrier and shall
6 name the Department as a recipient of both renewal and cancellation notices.

7 **G-7 INSPECTION AND RIGHT OF ENTRY:**

8 The County reserves the right to enter the premises to make appropriate inspection(s) and to
9 determine if the condition(s) of this permit are complied with. The owner or operator shall allow
10 authorized County representative(s) access upon the presentation of credentials and other
11 documents as may be required by law to:

12 (a) Enter at reasonable times upon the owner's or operator's premises where a
13 permitted facility or activity is located or conducted, or where records must be kept under the
14 conditions of the permit;

15 (b) Have access to and copy, at reasonable times, any records that must be kept under
16 the conditions of the permit; and,

17 (c) Inspect at reasonable times any facilities, equipment (including monitoring and
18 control equipment), practices, or operations regulated or required under the permit.

19 **G-8 SEVERABILITY:**

20 Should any condition(s) of this permit be determined by a Court or other agency with proper
21 jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining
22 provision(s) of this permit.

23 **G-9 PROVISION TO RUN WITH THE LAND/PROJECT:**

24 The provisions of this project are to run with the land/project and shall bind the current and future
25 owner(s), successor(s)-in-interest, assignee(s) and/or transferee(s) of said project. Permittee shall
26 not without prior notification to the Planning & Development Services Department assign, sell or
27 transfer, or grant control of project or any right or privilege therein. The Permittee shall provide a
28 minimum of sixty (60) days written notice prior to such proposed transfer becoming effective. The
permitted use identified herein is limited for use upon the permitted properties described herein
and may not be transferred to any another parcels.

G-10 TIME LIMIT:

Unless otherwise specified within the specific conditions, this permit shall be limited to a maximum
of thirty (30) years from the recordation of the CUP. The CUP may be extended for a successive
thirty (30) year period by the Planning Director upon a finding by the Planning & Development
Services Department that the project is in compliance with all conditions of the CUP as stated
herein and any applicable Land Use regulation of the County of Imperial.

If an extension is necessary, the Permittee shall file a written extension request with the Planning
Director at least sixty (60) days prior to the expiration date of the Permit. Such an extension request
shall include the appropriate extension fee, pursuant to the Land Use Ordinance, Title 9, Division
9, Section 90901.03 *et. seq.*, General Planning fees. If the original approval was granted by the
Planning Commission and/or the Board of Supervisors, such an extension shall only be considered

1 by the approving body, after a noticed public hearing. Nothing stated or implied within this permit
2 shall constitute a guarantee that an extension will be granted. An extension may not be granted if
3 the project is in violation of any one or all of the conditions or if there is a history of non-compliance
4 with the permit conditions.

4 **G-11 COST:**

5 The Permittee shall pay any and all amounts determined by the County Planning & Development
6 Services Department to defray any and all cost(s) for the review of reports, field investigations,
7 subsidence/seismicity monitoring, provisions for geothermal waste services, and other activities
8 directly related to the enforcement/monitoring for compliance of this Permit, County Ordinance or
9 any other applicable law as provided in the Land Use Ordinance, Section 90901.03 *et. seq.*,
10 General Planning fees. All County Departments', directly involved in the monitoring/enforcement
11 of this project may bill Permittee under this provision; however, said billing shall only be through
12 and with the approval of the Planning & Development Services Department.

9 **G-12 REPORTS/INFORMATION:**

10 If requested in writing by the Planning Director, Permittee shall provide any such
11 documentation/report as necessary to ascertain compliance with the Permit. The format, content
12 and supporting documentation shall be as required by the Planning Director.

13 **G-13 DEFINITIONS:**

14 In the event of a dispute the meaning(s) or the intent of any word(s), phrase(s) and/or conditions
15 or sections herein shall be determined by the Planning Commission of the County of Imperial. Their
16 determination shall be final unless an appeal is made to the Board of Supervisors within the
17 required time, i.e. ten (10) calendar days, pursuant to the Land Use Ordinance, Title 9, Division 1,
18 Chapter 4, Section 90104.05, *Appeal from Decision*.

17 **G-14 MINOR AMENDMENTS:**

18 The Planning Director may approve minor changes or modifications to the design, construction,
19 and/or operation of the Project provided said changes are necessary for the project to meet other
20 laws, regulations, codes, or conditions of the CUP and provided further, that such changes will not
21 result in any additional environmental impacts.

21 **G-15 SPECIFICITY:**

22 The issuance of this permit does not authorize the Permittee to construct or operate the Project in
23 violation of any state, federal, local law nor beyond the specified boundaries of the Project as shown
24 in the application/project description/permit, nor shall this permit allow any accessory or ancillary
25 use not specified herein. This permit does not provide any prescriptive right or use to the Permittee
26 for future addition and/or modifications to the Project.

25 **G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):**

26 Should the Permittee violate any condition herein, the County shall give notice of such violation. If
27 Permittee does not act to correct the identified violation, and after having given reasonable notice
28 and opportunity, the County may revoke the permit.

1 (a) If the Planning Commission finds and determines that the Permittee or successor-in-interest
2 has not complied with the terms and conditions of the CUP, or cannot comply with the terms and
3 conditions of the CUP, or the Planning Commission determines that the permitted activities
4 constitute a public nuisance, the Planning Director shall provide Permittee with notice and a
5 reasonable opportunity to comply with the enforcement or abatement order; and,

6 (b) If after receipt of the order, (1) Permittee fails to comply, and/or (2) Permittee cannot comply
7 with the conditions set forth in the CUP, then the matter shall be referred to the Planning
8 Commission for permit modification, suspension, or termination, or to the appropriate prosecuting
9 authority.

10 **G-17 GENERAL WELFARE:**

11 All construction and operations shall be conducted with consistency with all laws, conditions,
12 adopted County policies, plans and the application so that the Project will be in harmony with the
13 area and not conflict with the public health, safety, comfort, convenience, and general welfare.

14 **G-18 PERMITS OF OTHER AGENCIES INCORPORATED:**

15 Permits granted by other governmental agencies in connection with the Project are incorporated
16 herein by reference. The County reserves the right to apply conditions of those permits, as the
17 County deems appropriate; provided that enforcement of a permit granted by another
18 governmental agency shall require concurrence by the respective agency.

19 **G-19 HEALTH HAZARD:**

20 If the County Health Officer determines that a significant health hazard exists to the public, the
21 Health Officer may require appropriate measures and the Permittee shall implement such
22 measures to mitigate the health hazard. If the hazard to the public is determined to be imminent,
23 such measures may be imposed immediately and may include temporary suspension of permitted
24 activities, the measures imposed by the County Health Officer shall not prohibit the Permittee from
25 requesting a special Planning Commission meeting, provided Permittee bears all related costs.

26 **G-20 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:**

27 Permittee acceptance of this permit shall be deemed to constitute agreement with the terms and
28 conditions contained herein.

- Where requirements are imposed in this permit that Permittee shall conduct monitoring and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom.
- Where Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning Director or other affected party, to be determined by the Planning Director, may request that a hearing be conducted before the Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory committee. Failure to take any action shall constitute endorsement of staff's determination.

1 **G-21 CHANGE OF OWNER/OPERATOR:**

2 In the event the ownership of the site or the operation of the site transfers from the current Permittee
3 to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions
4 of this permit as if said successor was the original Permittee. Current Permittee shall inform the
5 County Planning and Development Services Department in writing at least 60 days prior to any
6 such transfer. Failure of a notice of change of ownership or change of operator shall be grounds
7 for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall
8 file with the Department, via certified mail, a letter stating that they are fully aware of all conditions
and acknowledge that they will adhere to all. If this permit or any subservient or associated permit
requires financial surety, the transfer of this permit shall not be effective until the new Permittee
has requisite surety on file. Furthermore existing surety shall not be released until replacement
surety is accepted by County. Failure to provide timely notice of transfer by Permittee shall forfeit
current surety.

9 **G-22 LOCAL BENEFIT AGREEMENT:**

10 Permittee has agreed to provide a local benefit per a negotiated agreement between the County
and the Permittee.

11 **G-22 COMPLIANCE WITH ORDINANCE:**

12 Permittee is aware of, has been provided a copy of and has agreed to be bound by and maintain
13 compliance with the "Communications Ordinance", being Title 9, Division 24 of the County's
14 codified ordinances.

15 (The remainder of this page is intentionally left blank)

16
17
18
19
20
21
22
23
24
25
26
27
28

1 **CUP #20-0008 MINERAL EXTRACTION:**

2
3 **SITE SPECIFIC CONDITIONS:**

4 **S-1 AUTHORIZED SCOPE OF ACTIVITIES:**

5 The Permittee is authorized to construct and operate the following facilities in compliance with the
6 County's General Plan, Renewable Energy and Transmission Element, Land Use Ordinance, CUP
7 application and all other applicable local, state, and federal laws, ordinances, regulations and
8 standards (LORS):

9 The project site is located at 477 West McDonald Road, Calipatria, California approximately 3.8
10 miles southwest of the community of Niland. Project facilities will build on the currently existing
11 three parcels privately owned by Hudson Ranch Power I LLC in the County of Imperial: APNs 020-
12 100-025, 020-100-044, 020-100-046. Two primary entry driveways will provide access to the
13 project site. Additionally, the applicant is currently proposing a Parcel Map 2485 on this location
14 and the proposed project will be located on proposed Parcel 2 of PM 2485.

15 Energy-Source Minerals LLC (Applicant) is proposing to construct and operate a commercial
16 lithium hydroxide, manganese, and zinc production plant within the Salton Sea geothermal field.
17 The facility will process geothermal brine from the neighboring Hudson Ranch Power I Plant to
18 produce mineral products to be sold commercially. In order to support future mineral extraction
19 activities, the project would also consist of the following:

- 20 • Construction and operation of brine supply and return pipelines and other associated
21 interconnection facilities with the Hudson Ranch 1 power plant;
- 22 • Construction of a primary access road from McDonald Road (approximately 500 feet
23 west of the HR 1 entrance), a second primary access about 800 feet west, and an
24 emergency access entrance only from Davis Road;
- 25 • Paving of McDonald Road from State Route 111 (Highway 111) to English Road
26 (approximately 2 miles);
- 27 • Construction of a power interconnection line from the Imperial Irrigation District (IID) and
28 Hudson Ranch 1 switchyard located at the northeast corner of the Hudson Ranch 1 site;
- Construction of associated facilities between Hudson Ranch 1 and the Project site to
facilitate the movement of brine and other services;
- Construction of a laydown yard that will also support temporary offices during
construction as well as serve as a truck management yard during operations; and
construction of offices, repair facilities, shipping and receiving facilities, and other
infrastructure including the relocation of the IID structures and road improvements at
Highway 111.

22 **S-2 AESTHETICS:**

23 The Permittee shall design and maintain all permanent structures to be harmonious in appearance
24 and compatible with the approved landscaping plans for screening and restoration of laydown
25 areas, facility painting/treatment plan and lighting plan. The Permittee shall coordinate the painting
26 of all mineral production facilities and pipelines with the County and blend in with the existing
27 environment as discussed above.

28 Permittee shall install a six (6) foot (minimum) perimeter security fence. Landscaping will be
installed between the fence and the public roadway along the frontage of the property with special

1 attention at the entrance. The landscaping will need design approval from the Imperial County
2 Planning & Development Services Department prior to installation.

3 **Site Abandonment Plan:**

4 Within 90 days of the first building permit being issued, Energy Source Mineral LLC shall submit to
5 the County of Imperial Planning & Development Services Department, a Site Abandonment Plan
6 to return the property to its previous condition. The first building permit shall be exclusive of a
7 temporary electrical permit or the grading permit. The Site Abandonment Plan shall include a
8 reclamation cost estimate prepared by a California-licensed general contractor or civil engineer.
9 Permittee shall provide financial assurance/bonding in the amount equal to the reclamation cost
estimate to restore the site to its pre-construction condition including removal of all structures and
equipment, soil testing for and clean-up of contaminants in the soil and any other clean up and
repair necessary to return the land to its previous condition within 90 days of the first building permit
being issued. The term "building permit" shall not include a temporary power permit or a grading
permit.

10 **S-3 AGRICULTURE:**

11 **Agricultural Commission Conditions:**

12 The Project shall:

- 13
- 14 • Monitor for all pests including insects, vertebrates, weeds, and pathogens. Promptly control
or eradicate pests when found, or when notified by the Agricultural Commissioner's office
that a pest problem is present on the project site. A qualified applicator or a licensed pest
control operator must perform all treatments.
 - 15 • "Control" means to reduce the population of common pests below economically damaging
levels, and includes attempts to exclude pests before infestation, and effective control
methods after infestation. Effective control methods may include physical/mechanical
removal, biocontrol, cultural control, or chemical treatments.
 - 16 • Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys,
17 compliance inspections, eradication of exotic pests, and other official duties.

18 **Reimbursement:**

- 19
- 20 • The project shall reimburse the Agricultural Commissioner's office for the actual cost of
investigations, inspections, or other required non-routine responses to the site that are not
21 funded by other sources if the investigation shows that the Permittee created the problem
alleged in the complaint.

22 **S-4 AIR QUALITY:**

23 The project site shall comply with the Imperial County APCD (ICAPCD) Rule VIII regulations for
24 compliance with the following measures:

25 **Obtain Authority to Construct (ATC) and Permit to Operate (PTO):**

26 The Project shall submit, in a timely manner, an application for an Authority to Construct (ATC) and
27 an application for a Permit to Operate (PTO) to the ICAPCD prior to any construction and operation
of the Project as required by Rule 207, New and Modified Source Review. The Project shall comply
with all review design conditions contained in the ATC/PTO including but not limited to plant design,
28 which shall include a system that controls emissions assuring compliance with Federal and State
standards, testing and verification requirements. All harmful and noxious odors shall be controlled

1 according to the ATC/PTO conditions to ensure that quantities released because of plant
2 operations do not exceed Federal or State standards.

3 The Project will be required to comply with all offset requirements in the event that potential
4 emissions exceed Rule 207 thresholds.

5 Permittee shall submit two dust control plans. The first dust control plan shall be the "Construction"
6 Dust Control Plan and shall be submitted to and approved by the ICAPCD prior to issuance of any
7 construction permit. The second dust control plan shall be an "Operational" Dust Control Plan and
8 shall be submitted to and approved by the ICAPCD prior to the start of operations. Both Dust
9 Control Plans shall identify existing and potential sources of fugitive PM 10 and shall identify the
10 mitigation measures, which shall be applied to maintain visible dust emissions below 20% opacity
11 and where applicable, provide evidence that the area is stabilized.

12 NOx Controls, the project shall comply with all applicable standard mitigation measures for
13 construction combustion equipment for the reduction of excess NOx emissions:

- 14 a. Utilize all Tier 3 or Tier 4 construction equipment;
- 15 b. Prohibit idling of equipment not in use; for equipment in use reduce idling time to a
16 maximum of 5 minutes;
- 17 c. Where feasible replace fossil fuel burning equipment with electrically driven equivalents
18 provided they are not powered via a portable generator;
- 19 d. Register all portable engines 50 horse power or greater with the ICAPCD;
- 20 e. Submit to the ICAPCD prior to any earthmoving activity a complete list of all construction
21 equipment to be utilized during the construction phase identifying Make, Model, Year,
22 Horsepower, estimated hours of usage per equipment and total number of each piece of
23 equipment.

24 **S5** The project shall also apply enhanced dust control plan with measures to assure reduced
25 levels of NOx are maintained during the construction phase of the project: In the event, NOx
26 emissions are calculated to exceed ICAPCD thresholds for construction; the Permittee shall
27 provide for "offsite" mitigation or comply with Policy number 5. Policy number 5 allows a project to
28 pay in-lieu impact fees utilizing the most current Carl Moyer Cost Effective methodology to reduce
excess NOx emissions.

- 29 a. A construction Equipment List in Excel format detailing the equipment type, make, model,
30 year horsepower, hours of daily operation, date arrived onsite, and date removed from site
31 must be submitted to the Air District on a regular basis.
- 32 b. Formal written notification must be given to the Air District 10 days prior to the start of
33 construction.
- 34 c. Any generator greater than 50 brake horsepower must be permitted through the Permitting
35 and Engineering.
- 36 d. Watering must be performed continuously at all times on all roadways with record keeping
37 to document such.
- 38 e. Reduced speed for all vehicle types not to exceed 40 mph on paved surfaces/roadways and
no more than 15 mph on unpaved surfaces/roadways.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

S-6 BIOLOGICAL RESOURCES:

In order to minimize potential impacts to burrowing owl, the following shall be implemented prior to and during construction activities:

BIO-1: The Applicant shall ensure that prior to and during construction, onsite occupied burrows shall be avoided during nesting season (February 1 through August 31).

BIO-2: The Applicant shall conduct a preconstruction survey within 30 days of ground-breaking activities to identify any burrowing owls on site.

BIO-3: If burrowing owls are found within the Project site, a Burrowing Owl Mitigation Plan must be prepared by a qualified biologist and approved by CDFW prior to any ground-disturbing activities.

BIO-4: The construction or site manager shall ensure that no construction occurs within 250 feet of the artificial burrows or other active or occupied burrows unless active or occupied burrows are sheltered with hay bales and monitored by a qualified biologist; if this is done, work may occur within 20 feet of active or occupied burrows. If qualified biologists observe burrowing owls' agitation, work in the vicinity will stop. Additional shelter materials can be added until burrowing owls remain calm during construction activities.

BIO-5: If passive relocation is required, it shall be done by a qualified biologist from September 1 to January 31 and will follow the CDFW Staff Report on Burrowing Owl Mitigation Guidelines (CDFW 2012).

S-7 CONSTRUCTION STANDARDS:

The mineral extraction plant and other structures shall be built in accordance with the County Building Code requirements applicable to "Seismic Category D". All structures and facilities shall be designed in accordance with the publication entitled "Recommended Lateral Force Requirements and Commentary by the Structural Engineers Association of California". The structural components of the permitted facilities shall be reviewed by the County Building Official/Planning Director. Building permits shall be procured for all non-electric utility facilities from the County prior to commencement of any construction.

S-8 EMERGENCY RESPONSE PLAN (ERP):

An Emergency Response Plan shall be prepared covering possible emergencies, e.g. blow-outs, major fluid spills, earthquakes, fires, floods and other foreseeable accidents and emergencies. At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This Emergency Coordinator shall be thoroughly familiar with all aspects of the facility's Emergency Response Plan, all operations and activities at the facility, location of all records within the facility and the facility layout. This person shall have the authority to commit the resources needed to carry out the contingency plan to include appropriate first aid provisions during project construction and operation with appropriate first aid training for Project employees. Adequate personnel and equipment shall be available to respond to emergencies and to insure compliance with the conditions of the permit.

(a) The Emergency Response Plan shall be prepared in consultation with, but not be limited to, the Regional Water Quality Control Board (RWQCB), Imperial County Office of Emergency Services, and local emergency service agencies, and other appropriate state and county agencies and shall include information useful in combating the emergency. The Plan shall be available on-

1 site, and provided to agencies responsible for preparing for and addressing emergencies, on
2 request. The plan shall include a notification list of response agencies which shall be notified
3 immediately upon the discovery of a reportable unauthorized discharge and the list shall include:
4 Imperial Fire/Office of Emergency Services, Planning & Development Services Department,
5 Environmental Health Services/Health Department, RWQCB, Imperial Irrigation District (IID),
6 Department of Public Works (DPW), Sheriff's office, as applicable.

7 (b) A Hazardous Materials Business Plan shall be prepared and be submitted to the
8 Certified Unified Program Agency, Imperial County Hazardous Materials/Waste Unit and shall be
9 maintained by the Permittee. The Permittee shall provide adequate safety devices against the
10 hazard of fire and explosion for activities that involve the use and storage of flammable, explosive
11 or highly corrosive or reactive materials as well as adequate fire-fighting and fire suppression
12 equipment and devices standard in the industry with compliance with applicable state and local
13 laws as determined by the Imperial County Fire Chief.

14 (c) The Permittee shall meet all NFPA requirements, and also submit an Engineer-
15 certified (California-licensed Engineer) fire suppression/protection plan to the Imperial County
16 Fire/OES Department, prior to issuance of a building permit.

17 All designated employees shall be provided with communication devices, cell phones or walkie-
18 talkies, in the event of an emergency situation on-site.

19 **S-9 FIRST AID:**

20 Appropriate first aid provisions for facility operations shall be made for emergency response during
21 project construction and operation with appropriate first aid training for project employees. During
22 construction, a member of each working crew shall be trained in basic first aid and supplied with
23 necessary medical equipment to respond to emergencies as provided for in the Emergency
24 Response Plan required hereinabove.

25 **S-10 GEOTECHNICAL:**

26 The Permittee shall conduct applicable on-site geotechnical investigations of soil characteristics
27 affecting the permitted facilities by qualified persons at the Permittee's expense and any soil reports
28 shall be made available to the County.

29 **S-11 GEOLOGY & SOILS & GEOLOGIC HAZARDS:**

30 All grading operations and construction shall be conducted in conformance with the
31 recommendations included in the Preliminary Geotechnical Report on the Project site that has been
32 prepared by Land-Mark Geo-Engineers and Geologists (Land-Mark) in August 2020. Design,
33 grading, and construction shall be performed in accordance with the recommendations of the
34 project geotechnical consultant as summarized in a final written report, subject to review by the
35 County, prior to commencement of grading activities.

36 **Site Preparation:** The site shall be properly cleared and grubbed. Any excavations resulting from
37 site clearing shall be sloped to a bowl shape to the lowest depth of disturbance and backfilled under
38 the observation of the geotechnical engineer's representative.

- 39 1. Prior to placing any fills, the surface 12 inches of soil should be uniformly moisture
40 conditioned by disking and wetting to a minimum of optimum plus 2 to 8 percent and
41 compacted to a minimum of 90 percent of ASTM D1557 maximum density.

- 1 2. Onsite native clays placed as engineered fill should be uniformly moisture conditioned by
2 disking and wetting or drying to optimum plus 2 to 8 percent and compacted in 6-inch
3 maximum lifts to a minimum of 90-percent relative compaction.
- 4 3. Clods shall be reduced by diskling to a maximum dimension of 1.0 inch prior to being placed
5 as fill. The existing surface soil within the Project shall be removed to the appropriate
6 recommended depths.
- 7 4. An engineered building support pad shall be placed below mat foundations. Aggregate
8 shall be compacted to a minimum of 95 percent of ASTM D1557 maximum density at 2
9 percent below to 4 percent above optimum moisture. Imported fill soil shall be non-
10 expansive and should meet the Unified Soil Classification System (USCS) classifications
11 of ML (nonplastic), SM, SP-SM, or SW-SM with a maximum rock size of 3 inches and no
12 less than 5 percent passing the No. 200 sieve.
- 13 5. The geotechnical engineer should approve imported fill soil sources before hauling material
14 to the site. Imported fill should be placed in lifts no greater than 8 inches in loose thickness
15 and compacted to a minimum of 95 percent of ASTM D1557 maximum dry density at
16 optimum moisture ± 2 percent.
- 17 6. An engineered support pad consisting of 12 inches of Class 2 aggregate base shall be
18 placed below mat foundations. The aggregate base shall be compacted to a minimum of
19 95 percent of ASTM D1557 maximum density at 2 percent below to 4 percent above
20 optimum moisture.
- 21 7. Structures that are not sensitive to settlements, not heavy loaded, or that can be
22 economically replaced or repaired such as small tanks, pumps, and vessels, can be
23 supported on shallow foundations on reinforced structural fill. The performance of structural
24 fill with respect to resisting liquefaction failure mechanisms, and reducing some of the static
25 differential settlements can be enhanced by reinforced the structural fill with geo-grid
26 fabrics.
- 27 8. The native soils should be excavated from the designated foundation areas extending 5.0
28 feet beyond all exterior foundation lines to 3.0 feet below the planned bottom of foundation
level. Exposed subgrade should be inspected by the geotechnical engineer and if found to
be loose, shall be scarified to a depth of 8 inches, uniformly moisture conditioned to 2 to 8
percent above optimum and re-compacted to a minimum of 90 percent of the maximum
density determined in accordance with ASTM D1557 methods. A 6-ounce non-woven
separation fabric equivalent to Mirafi 160N or equivalent should be placed over the
subgrade prior to placing the reinforced structural fill.
9. In areas other than the basin backfill which are to receive housekeeping slabs or area
concrete slabs, the ground surface should be pre-saturated (20 percent minimum moisture
content) to a minimum depth of 24 inches and then scarified to 8 inches, moisture
conditioned to a minimum of 5 percent over optimum, and re-compacted to a minimum of
90 percent of ASTM D1557 maximum density just prior to concrete placement.
10. All site preparation and fill placement should be continuously observed and tested by a
representative of a qualified geotechnical engineering firm. Full-time observation services
during the excavation and scarification process is necessary to detect undesirable
materials or conditions and soft areas that may be encountered in the construction area.
11. Auxiliary structures such as free-standing or retaining walls should have footings extended
to a minimum of 30 inches below grade. The existing soil beneath the structure foundation
should be prepared in the manner described for the building pad except the preparation
need only to extend 24 inches below and beyond the footing.

• **Shallow Foundations, Structural Mats and Settlements:** The Project shall implement shallow spread footings and continuous wall footings to support the structures planned for offices, control rooms, and warehouses. Footings shall be founded on 3 feet of engineered granular fill as described in Appendix E. The foundations shall be designed using an allowable soil-bearing pressure of 2,000 pounds per square foot (psf.). The allowable soil pressure shall be increased by

1 one-third for short term loads induced by winds or seismic events. Resistance to horizontal loads
2 shall be developed by passive earth pressure on the sides of footings and frictional resistance
3 developed along the bases of footings and concrete slabs. Passive resistance to lateral earth
4 pressure shall be calculated using an equivalent fluid pressure of 300 equivalent fluid pressure
5 (pcf) (for imported sands) to resist lateral loadings. The top 1 foot of embedment shall not be
6 considered in computing passive resistance unless the adjacent area is confined by a slab or
7 pavement. An allowable friction coefficient of 0.35 (for imported sands) shall also be used at the
8 base of the footings to resist lateral loading. Foundation movement under the estimated static (non-
9 seismic) loadings and static site conditions shall not exceed 0.75 inch with differential movement
10 of about two-thirds of total movement for the loading assumptions stated above when the subgrade
11 preparation guidelines given above are followed. Seismically induced liquefaction settlement shall
12 be on the order of less than 0.75 inch. Mat foundations for lightly loaded structures like pumps,
13 small tanks, generators, etc., shall be designed using an allowable soil bearing pressure of 1,500
14 psf when the foundation is supported on 12 inches of compacted Class 2 aggregate base (95
15 percent of ASTM D1557 maximum density to ± 2 percent of optimum moisture). The native soils
16 supporting the concrete structural mat and compacted aggregate base shall be moisture
17 conditioned and re-compacted as specified in Appendix E. The allowable soil pressure shall be
18 increased by one-third for short-term loads induced by winds or seismic events. Design criteria for
19 these mat foundations are provided in Appendix E.

11 **Flexible Tank Foundations and Settlements:** The existing soils underlying the proposed tank
12 area shall be removed to a depth of 36 inches below ground surface or a minimum of 24 inches
13 below the bottom of the ring wall foundation (whichever is lower), extending to a minimum of 5 feet
14 beyond the perimeter of the tank. Exposed subgrade shall be scarified to a depth of 8 inches,
15 uniformly moisture conditioned to 2 to 8 percent above optimum moisture content, and re-
16 compacted to a minimum of 90 percent of the maximum density determined in accordance with
17 ASTM D1557 methods. If soft conditions are encountered at the bottom of the excavation and
18 subgrade compaction is not achievable, the native soil at the sub-excavation and footing
19 excavation level shall be overlain by a woven geotextile stabilizing fabric (Mirafi HP 370 or
20 equivalent). The area shall then be brought to finish grade with engineered fill consisting of the
21 following components:
22 o 36 inches of reinforced crushed aggregate base
23 o 8 inches of crushed rock (1" x No. 4)
24 o 4 inches of oiled sand
25 o 36 inches of reinforced crushed aggregate base
26 o 8 inches of crushed rock (1" x No. 4)
27 o 4 inches of oiled sand

1. The fill shall be crowned about 40 percent of the total center settlement to allow for differential settlement between the tank perimeter and center. If compaction of sub-excavation level is achievable, the 36 inches of aggregate base shall be placed in 8-inch maximum loose lifts and compacted to a minimum 95 percent of ASTM D1557 maximum density within 2 percent of optimum moisture. If bottom of excavation subgrade compaction is not achievable and the geotextile stabilizing fabric is utilized, the first 12-inch layer of aggregate base placed over the geotextile fabric shall be compacted to a minimum of 90 percent. The remaining engineered aggregate base fill shall be placed in 8-inch maximum loose lifts and compacted to a minimum 95 percent of ASTM D1557 maximum density within 2 percent of optimum moisture.
2. The crushed rock tank underlayment shall meet the gradation requirements of ASTM C33, Size 57 (1" x No. 4 rock). The tank shall have a perimeter ring wall foundation which supports the tank wall and roof. The interior footings and the ring wall may be proportioned for a net load (in addition to the uniform tank liquid load) for dead load of roof weight (plus sustained live load). The minimum depth of the ring wall footing shall be 24 inches below

1 the finished ground surface. The minimum footing width shall be 12 inches. Flexible
2 connections such "Flex-Tend" expansion joints shall be used to connect exterior piping with
3 the tank. The tank shall be preloaded and monitored for settlement prior to making piping
4 connections. It may be necessary to readjust piping connections after the loading
5 sequence.

- 6
- 7 3. The estimated settlement for the different proposed diameter tanks with an imposed
8 pressure load of 1,500 and 2,000 psf are included in Appendix E. If estimated settlements
9 are excessive even for the flexible steel tanks and connections supported by the engineered
10 fill, the existing soils underlying the clarifier tank shall be improved by soil mixing or soil
11 replacement (sand/cement) with 48-inch diameter shafts. The minimum surface area
12 replacement ratio shall be 20 percent. Following soil mixing, the area shall be brought to
13 finish grade with engineered fill consisting of the following components: The fill may be
14 crowned about 40 percent of the total center settlement to allow for differential settlement
15 between the tank perimeter and center. Tank settlements with soil mixing improvement
16 below the tank are shown in Appendix E.

17

- 18 • **Soil Mixing (Rigid Mats):** The use of soil improvement like soil mixing with cement or soil
19 replacement (sand/cement) shall be used to reduce settlement to tolerable limits. The highly plastic
20 native clays were found not to mix well with conventional soil mixing augers (Hudson Ranch 1 Plant
21 site), and imported sands may be required for soil-cement mixing. Structural mat foundations
22 placed over the improved soil shall be used to support the various structural elements of the plant.
23 Mats overlaying soil mixed columns shall be underlain by 3 feet of crushed aggregate base
24 (Caltrans Class 2, 1-1/2-inch or 3/4-inch grading). The existing soils shall be improved by soil mixing
25 or soil replacement (sand/cement) with 48-inch diameter shafts. The minimum surface area
26 replacement ratio shall be 20 percent. Soil-cement design shall be provided by a licensed specialty
27 contractor.

- 28 • **Auger Cast Piles:** Auger cast piles (cast-in-place grout with steel cage reinforcement) has been
used successfully to provide deep foundations for heavily loaded and critical elements of industrial
plants. Estimated capacities of 24- and 30-inch-diameter auger cast pile are provided in Appendix
E. The structural capacity of the piles shall be verified by the structural engineer. The geotechnical
engineer shall observe the auger cast pile drilling and electronic logs to evaluate each pile on a
case-by-case basis.

- **Driven Piles:** The use of driven steel pipes had been used successfully for elevated pipe rack
supports. Special provisions for corrosion protection due to the corrosive nature of the subsurface
soils shall be implemented. Steel-driven pipe for the elevated pipe rack supports have been
preliminarily sized as 10-inch-diameter with a 0.5-inch-thick wall. Axial and lateral loads were
applied at 2 feet above ground surface. Estimated axial and lateral capacities of a 10-inch-diameter
driven steel pipe are provided in Appendix E. Complete documentation of the proposed pile driving
hammer shall be submitted to the geotechnical engineer for approval prior to mobilization. Driving
records shall be maintained on each pile. The numbers of blows required to drive a pile each foot
shall be recorded. Driving energy necessary to insure development of full design capacity shall be
established after each selection of the pile driver. The geotechnical engineer shall observe pile
driving and evaluate each pile on a case-by-case basis. Pre-drilling of pilot holes for piles to a depth
of half the pile depth shall be allowed without reduction in pile capacity.

- **Concrete Mixes and Corrosivity:** A minimum of 6.5 sacks per cubic yard of concrete (4,500
pounds per square inch [psi]) of Type V Portland Cement with a maximum water/cement ratio of
0.45 (by weight) shall be used for concrete placed in contact with native soil on this Project
(sitework including sidewalks, housekeeping slabs, and foundations). Admixtures may be required
to allow placement of this low water/cement ratio concrete. Thorough concrete consolidation and
hard trowel finishes shall be used due to the aggressive soil exposure. No metallic water pipes or

1 conduits shall be placed below foundations. Foundation designs shall provide a minimum concrete
2 cover of 5 inches around steel reinforcing or embedded components (anchor bolts, etc.) exposed
3 to native soil. If the 5-inch concrete edge distance cannot be achieved, all embedded steel
4 components (anchor bolts, etc.) shall be epoxy coated for corrosion protection (in accordance with
5 ASTM D3963/A934) or a corrosion inhibitor, and a permanent waterproofing membrane shall be
6 placed along the exterior face of the exterior footings. Additionally, the concrete shall be thoroughly
7 vibrated at footings during placement to decrease the permeability of the concrete. A qualified
8 corrosion engineer shall evaluate the corrosion potential on metal construction materials and
9 concrete at the site to obtain final design recommendations.

10 • **Embankment Construction and General Site Fill:** All areas to receive new fill for the
11 embankments shall be stripped of all vegetation. The surface 12 inches of native soil shall be
12 uniformly moisture conditioned to 2 to 8 percent above optimum moisture by disking and
13 compacted in 6-inch maximum lifts to a minimum of 90 percent of ASTM D1557 maximum density.
14 The embankment slopes shall be constructed no steeper than 3:1 (unless lined with concrete or
15 high-density shall be overbuilt by 6 inches and subsequently cut to the plan line and grade to
16 remove loose material along the slope faces. Native cohesive soil from the site or adjacent land
17 areas shall be used as general and embankment fill and as pond liner material. The fill soils shall
18 consist of cohesive silty clay (CL) or clay (CH). The general and embankment fill shall be
19 pulverized/disked to less than 1 inch maximum clod size, uniformly moisture conditioned to 2 to 8
20 percent over optimum, placed in 6-inch maximum lifts, and compacted to a minimum of 90 percent
21 of ASTM D1557 maximum density.

22 • **Excavations:** All site excavations shall conform to California Division of Occupational Safety and
23 Health (Cal/OSHA) requirements for Type B soil. The contractor is solely responsible for the safety
24 of workers entering trenches. Temporary excavations with depths of 4 feet or less shall be cut
25 nearly vertical for short duration. Excavations deeper than 4 feet shall require shoring or slope
26 inclinations in conformance to Cal/OSHA regulations for Type B soil. Surcharge loads of stockpiled
27 soil or construction materials shall be set back from the top of the slope a minimum distance equal
28 to the height of the slope. All permanent slopes shall not be steeper than 3:1 to reduce wind and
rain erosion. Slopes protected with ground cover may be as steep as 2:1; however, maintenance
with motorized equipment shall not be implemented at this inclination.

18 • **Utility Trench Backfill:** Prior to placement of utility bedding, the exposed subgrade at the bottom
19 of trench excavations shall be examined for soft, loose, or unstable soil. Loose materials at trench
20 bottoms resulting from excavation disturbance shall be removed to firm material. If extensive soft
21 or unstable areas are encountered, these areas shall be over-excavated to a depth of at least 2
22 feet or to a firm base and replaced with additional bedding material. Pipe zone backfill (i.e., material
23 beneath and in the immediate vicinity of the pipe) shall consist of a 4- to 8-inch bed of ¾-inch
24 crushed rock, sand/cement slurry, and/or crusher fines (sand) extending to a minimum of 12 inches
25 above the top of the pipe. If crushed rock is used for pipe zone backfill for utilities, the crushed rock
26 material shall be completely surrounded by a 6-ounce non-woven filter fabric such as Mirafi 160N
27 or equivalent. The filter fabric shall cover the trench bottom, sidewalls, and over the top of the
28 crushed rock to inhibit the migration of fine material into void spaces in the crushed rock, which
may create the potential for sinkholes or depressions to develop at the ground surface. Pipe
bedding shall be in accordance with the pipe manufacturer's recommendations and local codes
and/or bedding requirements for specific types of pipes. Native backfill shall be placed and
compacted only after buried pipes are encapsulated with suitable bedding and pipe envelope
material. Mechanical compaction is recommended; ponding or jetting shall not be allowed,
especially in areas supporting structural loads or beneath concrete slabs supported on grade,
pavements, or other improvements. All trench backfill shall be placed and compacted in
accordance with recommendations provided above for engineered fill. The pipe zone material
(crusher fines, sand) shall be compacted to a minimum of 95 percent of ASTM D1557 maximum

1 density. Pipe deflection shall be checked not to exceed 2 percent of pipe diameter. Soils used for
2 trench backfill shall be placed in maximum 6-inch lifts (loose) and compacted to a minimum of 90
3 percent of ASTM D1557 maximum density at a minimum of 4 percent above optimum moisture.
4 Granular trench backfill used in building pad areas shall be plugged with a solid (no clods or voids)
5 2-foot width of native clay soils at each end of the building foundation to prevent landscape water
6 migration into the trench below the building. Backfill soil of utility trenches within paved areas shall
7 be uniformly moisture conditioned to a minimum of 4 percent above optimum moisture, placed in
8 layers not more than 6 inches in thickness, and mechanically
9 compacted to a minimum of 90 percent of the ASTM D1557 maximum dry density, except that the
10 top 12 inches shall be compacted to 95 percent (if granular trench backfill).

11 • **Seismic Design:** Designs shall comply with the latest edition of the CBC for Site Class D using
12 the seismic coefficients given in Appendix E.

13 • **Laydown Yard:** The new laydown yard shall consist of a minimum of 8.0 inches of Caltrans Class
14 2 aggregate base placed over 12 inches of moisture-conditioned native clay soil (minimum of 2
15 percent above optimum moisture) compacted to a minimum of 90 percent of the maximum dry
16 density determined by ASTM D1557. Alternately, the access roads shall consist of 6 inches of
17 aggregate base placed over 9 inches of lime-treated soil compacted to a minimum of 90 percent.
18 Preliminary estimates of lime content required to stabilize the clay soils is 6 percent hydrated lime
19 by weight of soil.

20 • **Pavements:** Pavements shall be designed according to the 2020 Caltrans Highway Design
21 Manual or other acceptable methods. The public agency or design engineer shall decide the
22 appropriate traffic index for the site.

23 • The Project structural engineer shall confirm whether an ASCE 7-16 Section 11.4.8 exception
24 applies to the Project. If none of the exceptions apply, a qualified geo-engineer shall be consulted
25 to perform a site-specific ground motion hazard analysis.

26 • Development of building foundations and concrete flatwork shall include provisions for mitigating
27 potential swelling forces and reduction in soil strength, which can occur from saturation of the soil.
28 Typical measures considered to remediate expansive soil include:
o Capping silt/clay soil with a
non-expansive sand layer of sufficient thickness (3 feet minimum) to reduce the effects of soil
shrink/swell

o Moisture conditioning subgrade soils to a minimum of 5 percent above optimum moisture (ASTM
D1557) within the drying zone of surface soils

o Designing foundations to be resistant to shrink/swell forces of silt/clay soil

o A combination of the methods described above

Reduce Soil Erosion:

Erosion potential shall be managed by implementing standard industry methods such as BMPs for
dust suppression and for preventing surface water runoff and erosion impacts that are in place at
the time of improvement plan review. Compliance with storm water NPDES criteria is required,
including preparation of a Storm Water Pollution Prevention Plan (SWPPP) and the inclusion of
BMPs to control erosion and the off-site transport of soils. The recently adopted State General
Permit imposes more minimum BMPs and requirements than were previously required only as
elements of the SWPPP or were suggested by guidance. Additionally, erosion control shall be

1 accomplished, in part, through compliance with Imperial County Air Pollution Control District
2 (ICAPCD) Rule 801 requirements (see Section 4.1, Air Quality) which require the preparation of a
3 dust management control plan. Compliance with these procedures shall ensure that potential
4 erosion is controlled during the construction process. Additional information on the Project's
5 NPDES permitting requirements, as well as SWPPP requirements, is available in Section 4.8,
6 Hydrology and Water Quality.

7 In order to minimize potential impacts to paleontological resources, the following mitigation
8 measures shall be implemented:

9 **PALEO-1:** Developer shall retain the services of a qualified paleontologist and require that all initial
10 ground-disturbing work be monitored by someone trained in fossil identification in monitoring
11 contexts. The consultant shall provide a supervising paleontological specialist and a
12 paleontological monitor to be present at the Project construction phase kickoff meeting.

13 **PALEO-2:** On the first day of construction and thus prior to any ground disturbance in the Project
14 site, the supervising cultural resources specialist and cultural resources monitor shall conduct initial
15 Worker Environmental Awareness Program (WEAP) training to all construction personnel,
16 including supervisors, present at the outset of the Project construction work phase, for which the
17 lead contractor and all subcontractors shall make their personnel available. This WEAP training
18 will educate construction personnel on how to work with the monitor(s) to identify and minimize
19 impacts to paleontological resources and maintain environmental compliance and will be
20 performed periodically for new personnel coming onto the project as needed.

21 **PALEO-3:** The contractor shall provide the supervising paleontological resources specialist with a
22 schedule of initial potential ground-disturbing activities. A minimum of 48 hours shall be provided
23 to the consultant of commencement of any initial ground-disturbing activities such as vegetation
24 grubbing or clearing, grading, trenching, or mass excavation.

25 A paleontological monitor shall be present on site at the commencement of ground-disturbing
26 activities related to the Project. The monitor, in consultation with the supervising paleontologist,
27 shall observe initial ground-disturbing activities and, as they proceed, make adjustments to the
28 number of monitors as needed to provide adequate observation and oversight. All monitors shall
have stop-work authority to allow for recordation and evaluation of finds during construction. The
monitor shall maintain a daily record of observations as an ongoing reference resource and to
provide a resource for final reporting upon completion of the Project.

The supervising paleontologist, paleontological monitor, and the lead contractor and
subcontractors shall maintain a line of communication regarding schedule and activity such that
the monitor is aware of all ground-disturbing activities in advance in order to provide appropriate
oversight.

PALEO-4: If paleontological resources are discovered, construction shall be halted within 50 feet
of any paleontological finds and shall not resume until a qualified paleontologist can determine the
significance of the find and/or the find has been fully investigated, documented, and cleared.

PALEO-5: At the completion of all ground-disturbing activities, the consultant shall prepare a
Paleontological Resources Monitoring Report summarizing all monitoring efforts and observations,
as performed, and any and all prehistoric or historic archaeological finds, as well as providing
follow-up reports of any finds to the SCIC, as required.

1 **S-12 HAZARDS & HAZARDOUS MATERIALS:**

2 A comprehensive Hazardous Materials Business Plan shall be prepared for the project in
3 accordance with the California Accidental Release Prevention Program. The Hazardous Materials
4 Management Plan (HMMP) shall include (1) an Inventory and Site Map, (2) an Emergency
5 Response Plan (ERP) and Owner/Operator Identification, and (3) employee training.

6 The HMMP will be prepared and submitted to the California Department of Toxic Substances
7 Control (DTSC), as the Certified Unified Program Agency (CUPA) for Imperial County. The HMMP
8 will be maintained and revised as necessary.

9 The DTSC ICUPA understands that you are conducting a business in Imperial County (Email from
10 Nyein Aung/Roger Vintze, DTSC Imperial CUPA, dated May 8, 2014)

11 California Health and Safety Code, Chapter 6.95, Section 25500 requires you to establish an
12 implement Hazardous Materials Release Response Plan and Inventory (Business Plan) for
13 emergency response to any hazardous material mishap, if at any one time your facility handles a
14 hazardous waste in quantities equal to or greater than 55 gallons for liquids, 500 pounds for solids,
15 and 200 cubic feet for compressed gases. With the passage of Assembly Bill (AB) 408 on October
16 8, 2011, the inventory reporting quantities were changed as follows:

17 For a solid or liquid hazardous material that is classified as a hazard solely as an irritant or
18 sensitizer, the new reporting quantity is 5,000 pounds;

19 For a hazardous material that is a gas, at standard temperature or pressure, and for which the
20 only health and physical hazards are simple asphyxiation and the release of pressure, the new
21 reporting quantity is 1,000 cubic feet (Reporting of gases in a cryogenic state remains unchanged);

22 For oil-filled electrical equipment that is not contiguous to an electrical facility, the new reporting
23 quantity for the oil is 1,320 gallons. Moreover, if you generate, store or handle any amount of
24 hazardous waste at any one time must report to DTSC ICUPA and register for hazardous waste
25 generator program.

26 **S-13 LAND USE:**

27 The Permittee shall prepare an appropriate parking plan for the permitted facilities and any signs
28 shall require compliance with the Land Use Ordinance provisions and provide the necessary
laydown/staging areas for permitted facilities.

S-14 HYDROLOGY AND WATER QUALITY:

The Permittee shall furnish a Drainage and Grading Plan/Study to provide for property grading and
drainage control, which shall also include prevention of sedimentation of damage to off-site
properties. The Study/Plan shall be submitted to the Department of Public Works for review and
approval. The Permittee shall implement the approved plan. Employment of the appropriate Best
Management Practices (BMP's) shall be included.

Implementation of a SWPPP:

The project could violate water quality standards or waste discharge requirements unless mitigated
as follows:

1. Prior to the issuance of grading permits, Permittee shall obtain coverage under the
SWRCB's General Permit for Stormwater Discharges Associated with Construction Activity

1 Permittee shall prepare a SWPPP to be administered during grading and Project
2 construction. The SWPPP must contain BMPs and construction techniques accepted by
3 the County for use in the Project area at the time of construction that meet the technical
4 standards of the General Construction Permit to ensure: That potential water quality impacts
(including on- and off-site erosion) during construction phases are minimized, that shall
5 reduce the potential for runoff, and the release, mobilization, and exposure of pollutants
6 from the construction area, and that no water quality standards are violated.

- 7 2. The SWPPP must address spill prevention and include a countermeasure plan
8 describing measures to ensure proper collection and disposal of all pollutants
9 handled or produced on the site during construction, including sanitary wastes,
10 cement, and petroleum products. Countermeasures may include measures to
11 prevent or clean up spills of hazardous waste and of hazardous materials used for
12 equipment operation, and emergency procedures for responding to spills. BMPs
13 included in the SWPPP must be consistent with the California Stormwater Best
14 Management Practices Handbook for Construction.
- 15 3. The SWPPP must be submitted to California RWQCB CRB and Imperial County for
16 review prior to the issuance of grading permits.
- 17 4. The SWPP shall identify and specify the pollutants that are likely to be used during
18 construction that could be present in stormwater drainage and non-stormwater
19 discharges, including fuels, lubricants, and other types of materials used for
20 equipment operation and the means of waste disposal.
- 21 5. The SWPPP shall specify personnel training requirements and procedures that shall be
22 used to ensure that workers are aware of permit requirements and proper installation
23 methods for BMPs specified in the SWPPP.
- 24 6. The SWPPP shall also specify the appropriate personnel responsible for
25 supervisory duties related to implementation of the SWPPP.
- 26 7. Permittee shall file a Notice of Intent with the SWQCB to comply with the NPDES
27 General Stormwater Permit and prepare a SWPPP that meets the
28 Linear/Underground Overhead provisions in Attachment A of the General Permit.
8. A copy of the approved SWPPP(s) shall be maintained and available at all times on
the construction site(s).

19 **S-15 NOISE STANDARDS:**

20 Restricted Work Hours on Saturdays:

21 Energy Source Mineral project construction activities would be restricted to daytime hours from
22 9:00 a.m. to 5:00 p.m. including Saturdays, in compliance with County of Imperial Construction
23 Noise Standards, as established in the General Plan Noise Element. Planning Director may
24 approve modification of the above measures, provided that after such modification, the permitted
25 activities still complies with the applicable noise standards.

26 **S-16 ODOR CONTROL:**

27 The Permittee shall control hydrogen sulfide and other non-condensable emissions to insure that
28 quantities released do not exceed the mandatory standards. The Permittee shall control all harmful
or noxious emissions and the odors shall be controlled to insure that quantities or air contaminants
released as a result of the permitted facilities do not exceed State or Federal standards.

S-17 OPERATIONS:

1 Permittee shall have a responsible agent on-site whose name, title, e-mail address and telephone
2 number (office & cell #'s) shall be provided to the CUPA (Imperial County Hazardous
3 Materials/Waste Unit), Department of Toxic Substances Control, County Department of Public
4 Works, County Fire/OES Department, County Environmental Health Services/Health Department,
5 Sheriff's Department and the County Planning & Development Services Department.

6
7 **S-18 PERMITS:**

8 Except as specifically authorized in this permit, separate permits shall be required for any
9 supplemental activities required to operate the mineral extraction facilities.

10
11 **S-19 PROJECT DESIGN:**

12 The following shall be the Project design:

13 (a) Construction and maintenance activities relating to the brine pipelines to and from
14 the geothermal resource shall be coordinated.

15 (b) All facility access on public rights-of-way and visitor parking areas within the plant
16 site shall be constructed to standards approved by the ICPDSD and/or DPW.

17 (c) Shrubs, trees and ground cover shall be planted and maintained to compliment the
18 appearance of permitted facilities, in accordance with any landscaping plan approved by the
19 County Planning and Development Services Department. The exterior finish of building materials
20 shall be painted an earthtone color to blend into the background. Exterior finishes shall be limited
21 to non-reflective materials such as concrete, masonry, or stucco, though metal or synthetic wall
22 panels with similar appearance to the aforementioned materials may also be acceptable as
23 determined by the Planning and Development Services Department.

24 (d) All equipment, pipes, tanks and lines used at the mineral production facilities to
25 handle, transfer or pump geothermal fluids and on-site hazardous materials shall be maintained in
26 a manner that prevents leaking and spilling, e.g. effective performance, adequate funding, operator
27 staffing and training, and adequate laboratory and process controls, including appropriate quality
28 assurance procedures, with the operation of back-up or auxiliary facilities when necessary to
achieve compliance with the permit conditions.

(e) The facility shall be designed to retain the maximum amount of usable agricultural
land and the site shall not interfere with the irrigation and drainage pattern, and shall comply with
the requirements and regulations of the Imperial Irrigation District.

(f) All permanent sumps, brine ponds, waste holding ponds, and any other pond, shall
be designed and constructed to meet sound engineering standards and the regulations and
requirements of the RWQCB under the supervision of a California-licensed Civil Engineer.

(g) Prior to site restoration and abandonment, it shall be the Permittee's responsibility
to comply with all regulations of the County and state, including the purging of on-site brine ponds
when the project ceases, salts removed from the dikes and bottoms and the berms then leveled to
the satisfaction of the landowners and the County Planning and Development Services
Department.

(h) Permittee shall utilize and comply with applicable California Building Code
requirements for the mineral extraction plant and related power distribution lines.

1 **S-20 RETURN OF SPENT BRINE:**

2 Any fluids to be injected into the reservoir shall be sent back to the geothermal resource plant.

3 **S-21 SPILLS AND RUNOFF:**

4 The Permittee shall design and construct the permitted facilities to prevent spills from endangering
5 adjacent properties and waterways, and to prevent runoff from any source being channeled or
6 directed in an unnatural way so as to cause erosion, siltation, or other detriments. The plant site
7 shall be graded and constructed so that all spills shall drain into the on-site ponding areas.

8 **S-22 SYSTEM CLOSURE AND SITE RESTORATION:**

9 The Permittee shall comply with all closure requirements and site restoration, when operation of
10 the permitted facilities herein authorized has ceased. All plant facilities shall be dismantled, all
11 brine pipelines and related CP-1 facilities shall be demolished and the site restored as required by
12 the County and the land involved be made compatible with the surrounding uses or as requested
13 by the landowner and as agreed to by the County Planning Director. In the event that some
14 structures are still viable for a permitted use on-site, such as the manufacturing facilities, office,
15 warehouse, maintenance shop and other potentially usable structures, the structures may remain
16 on-site if the Permittee and landowner so request and Planning Director so approves.

17 **S-23 TRANSPORTATION AND CIRCULATION:**

18 In order to prevent traffic delays related to the Project, the Applicant shall construct a two-way
19 stop control at the intersection of Highway 111 and McDonald Road in compliance with mitigation
20 measure TRA-1.

21 The Applicant shall construct a two-way stop control at the intersection of Highway 111 and
22 McDonald Road in compliance with mitigation measure TRA-1. A two-way stop control will provide
23 for safe future expansion if travel demand increases.

24 A Commute Trip Reduction (CTR) program shall be implemented to discourage single-occupancy
25 vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit,
26 walking, and biking. The CTR program could include features such as carpooling encouragement,
27 ride-matching assistance, preferential carpool parking, half-time transportation coordinator,
28 vanpool assistance, and bicycle end-trip facilities (parking, showers, and lockers) and provide
employees with assistance in using alternative modes of travel.

Highway 111/McDonald Road intersection shall be improved to Caltrans' satisfaction prior to the
Project's certificate of occupation, including the installation of a northbound left-turn pocket prior to
the Project's opening, utilizing one of the four intersection control methods (existing two-way stop,
all-way stop, signal, roundabout) which was analyzed in an Intersection Control Evaluation (ICE)
analysis.

S-24 WATER CONSERVATION:

The Permittee shall consult with the Imperial Irrigation District and comply with the approved water
contract. If the IID does not receive its annual 3.1 maf water apportionment according to the QSA
obligations of Colorado River water during the Project's 30-year lifespan, the Applicant shall work
with IID to ensure any reduction in water availability can be managed by the Project.

S-25 WATER FACILITIES:

1 The Permittee shall obtain and comply with applicable General NPDES Permit for Discharges of
2 Water Associated with Construction and Waste Discharge Requirements for permitted facilities as
3 well as developing and implementing an applicable Storm Water Pollution Prevention Plan for the
4 facilities. The Permittee shall prepare and implement a Drainage, Erosion and Sedimentation
5 Control Plan relating to the permitted facilities.

6
7 **S-26 WASTE DISPOSAL:**

8 The Permittee shall insure that all wastes, liquid or solid, shall be disposed in compliance with
9 appropriate local, state, and federal regulations, in effect or subsequently duly and legally enacted.

10 (a) Any discharge of wastes into surface water shall meet all requirements of the
11 Regional Water Quality Control Board, e.g. National Pollution Discharge Elimination System permit
12 restrictions to include a water quality monitoring program as approved by applicable law.

13 (b) All solid wastes shall be disposed of in any approved solid waste disposal site in
14 accordance with County, State and Federal regulations. However, nothing herein is intended to
15 define any portion of the geothermal brine resource as a waste or to prohibit the extraction of
16 resources from spent geothermal brine or materials for useful purposes as either allowed herein or
17 later applied for and approved.

18
19 **S-27 SALES TAXES BENEFIT**

20 To the extent permitted by applicable law, Developer will require that all qualifying contractors and
21 subcontractors exercise their option to obtain a California Department of Tax and Fee
22 Administration ("CDTFA") sub-permit for the job site, allocate all eligible sales, and use tax
23 payments to County and the Local Transit Authority ("LTA"). Prior to commencement of any
24 construction activity on-site, Developer shall require that the contractor or subcontractor provide
25 County with a copy of their CDTFA account number and sub-permit. Developer shall either cause
26 its construction contractor to treat the Project in accordance with California Sales and Use Tax
27 Regulation 1521(b)(2)(B); California Sales and Use Tax Regulation 1521(c)(13)(B), and California
28 Sales and Use Tax Regulation 1826(b) for sales and use tax purposes. Or, form a "Buying
Company" as defined in the California Sales and Use Tax Regulation 1699(h). Developer may
adopt an alternate methodology to accomplish this goal if such methodology is approved by the
County's Executive Officer prior to issuance of any building permit. No later than forty-five (45) days
after the due date for filing sales and use tax returns for each calendar quarter, occurring after the
commencement of any construction activity on-site through and including the first anniversary of
commercial operating date ("COD"), Developer shall report, or cause its general contractor to report
to County, the total amount of sales and use taxes related to the Project that are allocated to the
County, and reported on Developer's, general contractor's and subcontractors' applicable
California sales and use tax returns. The obligations of Developer under this Section III A are
hereinafter referred to as the "Developer Sales and Use Tax Responsibilities."

29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

Guarantee Amounts. Prior to the issuance of any building permit for the Project, Developer shall
provide County with a guarantee of the minimum sales and use taxes (based on a total output
capacity of XX megawatts ["XX MW"] for the Project) that will be received by County and LTA under
existing applicable sales and use tax laws. Developer warrants that the sales/use tax guarantee
amounts to be provided to County as mandated in this paragraph shall be true and accurate
estimates of the projected sales and use taxes that will be generated for this Project. Developer
shall provide County with evidence of the projected sales/use taxes for the Project, including but
not limited to sales tax receipts, and executed or anticipated engineering contracts, procurement
contracts, and construction contracts. If the Parties are unable to agree upon a guarantee amount,
then the dispute shall be referred to an independent accountant mutually acceptable to both

1 Parties. The costs for such nonbinding mediation shall be borne by Developer. Developer warrants
2 that the sales/use tax guarantee amounts to be provided to County as mandated in this paragraph
3 will incorporate any and all sales/use tax exemptions that Developer and/or its contractors and
4 subcontractors intend to utilize, and that such exemptions will be disclosed to County fully and in
5 good faith prior to the issuance of any building permit for this Project. Developer understands and
6 acknowledges that the sales/use tax guarantee amounts to be provided to County as mandated by
7 this paragraph are a part of the consideration to be received by County in return for entering into
8 this Agreement, and further understands and acknowledges that County would not enter into this
9 Agreement but for said guarantee from Developer. In the event that County and / or LTA receives
10 less than the amount of sales / use taxes guaranteed pursuant to this paragraph, then Developer
11 shall pay, as and when provided below, to County or LTA as applicable, the amount of the
12 applicable shortfall.

8 Adjustments to Guarantee Amounts.

9 The amount of sales and use tax anticipated to be generated is based on the projected construction
10 of a XX megawatt (XX MW) alternating current solar generation facility with a battery storage
11 system. Construction of any additional output capacity beyond the XX MW output or storage
12 capacity now projected will require the sales / use tax guarantee amounts to be adjusted based on
13 the actual output from solar generation facilities of the Project as evidenced by any power purchase
14 agreement subsequently entered into by Developer related to this Project.

15 To the extent of any reduction in the size of the Project as the result of any final ruling, stipulated
16 judgment, or settlement, the sales / use tax guarantee amounts mandated shall be reduced pro
17 rata based on the size of such reduction.

18 Should Developer become aware of a change in circumstances that would materially affect the
19 sales/use tax guarantee amount, then Developer shall, within forty-five (45) days of learning of
20 such change in circumstances, inform the County in writing of the change in circumstances. If the
21 County determines that such change in circumstances warrants an adjustment to the sales/use tax
22 guarantee amount, then County shall negotiate in good faith with Developer in revising the
23 sales/use tax guarantee amount. If the Parties are unable to agree upon a revised guarantee
24 amount, then the dispute shall be referred to an independent accountant mutually acceptable to
25 both Parties. The costs for such nonbinding mediation shall be borne by Developer. Failure of the
26 Developer to inform the County of the change in circumstances shall constitute a waiver of
27 Developer's ability to seek any adjustment to the sales/use tax guarantee based on such change
28 in circumstances.

29 The complete sales / use tax guarantee amount due to County and LTA for the Project must be
30 received within one (1) year after COD for this Project, or such later date as any applicable sales /
31 use tax is due or is transmitted from the CDTFA, unless it is delayed due to causes beyond
32 Developer's control or for which Developer is not responsible. If, within one (1) year after issuance
33 of the final certificate of occupancy, or such later date as any applicable sales / use tax is due or is
34 transmitted from the CDTFA, the sales / use taxes received by the County are less than the sales
35 / use tax guarantee amounts mandated under paragraph B, then Developer shall pay the difference
36 to the County.

37 Payments to County and LTA as a result of a shortfall shall be due within forty-five (45) calendar
38 days of Developer's receipt of written notice of shortfall from the County. Failure to make such
39 payment within the forty-five (45) day timeframe shall be considered a default pursuant to section
40 VI paragraph Q. of this Agreement, and may lead to termination of this Agreement. Developer
41 hereby agrees to pay interest at the rate of six percent (6%) per annum of the payment due for any
42 payment received by County beyond the forty-five (45) day due date. The obligation to pay interest
43 shall survive the termination of this Agreement. The obligation to pay interest shall be stayed for

1 up to thirty (30) calendar days when such amounts are disputed in good faith, so long as Developer
2 submits the payments "under written protest" with a complete explanation of the reasons for the
3 protest. Upon resolution of the protested payment, such late charges may be assessed if it is
4 determined by County that the dispute was not made in good faith. Repeated protests of the same
5 point rejected in a prior protest shall be considered a protest in bad faith. Any such payments later
6 found not to be due by Developer shall be refunded by County promptly, and in all events within
7 thirty (30) calendar days after the determination of the amounts owing is made.

8 In the event that Developer repowers or replaces the equipment onsite, to the extent permitted
9 under then applicable law, each site shall be designated as the "point of sale" so as to create an
10 additional local tax-funding source for the County of Imperial.

11 1. To cover operation and maintenance associated with Fire Department/OES:

12 The Permittee shall provide to the County Fire Department, on behalf of the Niland Fire
13 District an amount equal to \$50,000 to assist in providing fire and medical services to both
14 facilities during the construction phases of both plants since insufficient property taxes are
15 generated to fully offset such costs during the period that construction occurs. This funding
16 is to be provided within 90 days of the first building permit being issued. The first building
17 permit shall be exclusive of a temporary electrical permit or the grading permit. This funding
18 is conditioned on being used exclusively for fire department uses, and Permittee shall be
19 entitled to verification of use of funds should they so request.

20 2. Permittee shall contract with an environmental consultant and pay for a Compliance
21 Construction Manager for overseeing all the required mitigation and conditional use permit
22 conditions during the construction of project. This Compliance Construction Manager shall
23 oversee and manage the entire team of specialists needed for the environmental
24 compliance of project, i.e. biologist, cultural experts, burrowing owls monitoring, etc.

25 3. Energy Source Mineral LLC shall be the master developer and shall be responsible as for
26 all improvements, septic, water plant, roads and other improvements, Conditional Use
27 Permit Application and Conditions, MND, and MM&RP.

28 4. If Energy Source Minerals LLC. sells all or part of this project, an approved agreement
shall be in place for new owner to build and maintain as agreed to by the previous
conditions. The Planning and Development Services Director shall approve of any
agreement between permittee and a new master developer.

5. Prior to the issuance of the first grading permit for the Project, Permittee shall pay all up-
front fire capital costs that are a direct impact of Project. The capital costs nexus is
determined on an individual, project basis with the nexus supported in the record of
approval. Additionally, Permittee agrees provide to County Fire Department the necessary
personal protection equipment that would be needed for the types of hazardous materials
used at this plant.

6. Applicant/Permittee will offer to County Fire the opportunity to participate in annual
or as necessary/required update training on the handling of Hazardous Materials
at such times as it is offered to staff. This offer extends to first responders as
determined by County Fire.

1 7. Applicant/ Permittee will provide appropriate training for the handling of the various
2 materials, chemicals and/or hazardous materials that may be used at the plant.
3 This training would include first responder training to an incident. This training will
4 be made available to County Fire Department personnel and such other personnel
as deemed necessary by County Fire, including but not limited to first responders,
mutual aid responders etc.

5 **S-28 DURATION OF THIS PERMIT:**

6 The time limit under condition G-10 shall allow for the plant to be constructed and the 30 years
7 shall commence upon issuance of the Certificate of Occupancy and/or the official starting date of
commercial operations, whichever is later.

8
9 **S-29 JOINT USE FACILITIES:**

10 Permittee may construct and/or operate certain facilities within the project area of both the HR-1
11 and Energy Source projects that are of a common use, including but not limited to the storm-water
12 retention basin, the wastewater treatment system, and/or the potable water treatment system.
13 Additionally, Permittee may construct connection, interconnection and/or return lines, including
communication, power and control systems, between the Energy Source and HR-1 projects, which
may be necessary and incidental to the operation of the facilities.

14 **S-30 EXTRACTION OF MINERALS**

15 Nothing in this CUP shall be construed as limiting or prohibiting the extraction of commercially
16 viable minerals from geothermal resource brine either before or after having been processed for
generation of steam.

17 **S-31 POTABLE WATER TREATMENT PLANT:**

18 Permittee shall provide potable water meeting California state standards. At a minimum this
19 includes obtaining a State Domestic Water Supply Permit for a non-transient non-community public
water system through the Imperial County Public Health Department (ICPHD). Permittee under
CUP #14-0006 may provide potable water under one of the following options:

- 20 (a) The Hudson Ranch I Power Plant would expand its existing water system, located within
21 the footprint of the HR-1 property, to provide water for both facilities;
- 22 (b) HR-1 and Energy Source would form a separate corporate entity to provide potable water
23 to both plants. Under this option, the HR-1 water treatment system would be expanded to
provide potable water to both facilities,
- 24 (c) HR-1 and Energy Source would form a special district, which then can provide potable water
25 to anyone within that district. Formation of the "special district" would require approval from
the Imperial County Local Agency Formation Commission (LAFCO);
- 26 (d) Energy Source would build a water treatment facility for the facility on the Permittee property
27 (APN 020-100-046-000), or the current HR-1 parcel (APN 020-100-044-000)
- 28

1 **NOW THEREFORE**, County hereby issues the Conditional Use Permit #20-0008 and Permittee
2 hereby accepts permit upon the terms and conditions set forth herein.

3 **IN WITNESS THEREOF**, the parties hereto have executed this Agreement the day and
4 year first written.

5 **PERMITTEE**

6 

7 Energy Source Mineral, LLC

8 30 Sep 2021
Date

9
10 **COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA**

11 
12
13 Jim Minnick, Director
14 Planning & Development Services

15
16
17
18
19
20
21
22
23
24
25
26
27
28 10/18/21
Date

1 **PERMITTEE NOTARIZATION**

2
3 A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

4
5 STATE OF CALIFORNIA

6 COUNTY OF Imperial } S.S.

7 On Sept. 30, 2021 before me, Esther Gomez Aleman,

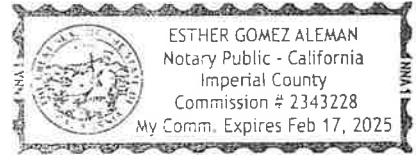
8 a Notary Public in and for said County and State, personally appeared
9 Derek W. Dawson, personally known to me (or
10 proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s)
11 is/are subscribed to the within instrument and acknowledged to me that he/she/they
12 executed the same in his/her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s), or the entity upon behalf of which the
person(s) acted, executed the instrument.

13 I certify under PENALTY OF PERJURY under the laws of the State of California that the
14 foregoing paragraph is true and correct.

15 WITNESS my hand and official seal

16 Signature

[Handwritten signature of Esther Gomez Aleman]



17 ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could
18 prevent fraudulent attachment of this certificate to unauthorized document.

19 Title or Type of Document Agreement for California Oklahoma Energy Services, LLC

20 Number of Pages _____ Date of Document 09-30-2021

21 Signer(s) Other Than Named Above N/A

22 Dated 9-30-2021

1 **COUNTY NOTARIZATION**

2
3 A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

4
5 STATE OF CALIFORNIA

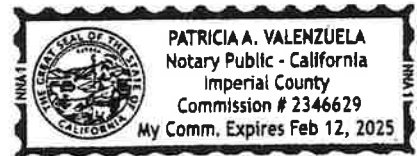
6 COUNTY OF IMPERIAL } S.S.

7 On OCTOBER 18, 2021 before me, PATRICIA A. VALENZUELA
8 a Notary Public in and for said County and State, personally appeared
9 JAMES A. MINICK, proved to me on the basis of
10 satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within
11 instrument and acknowledged to me that he/she/they executed the same in his/her/their
12 authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
13 person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

14 I certify under PENALTY OF PERJURY under the laws of the State of California that the
15 foregoing paragraph is true and correct.

16 WITNESS my hand and official seal

17 Signature Patricia A. Valenzuela



18 ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could
19 prevent fraudulent attachment of this certificate to unauthorized document.

20 Title or Type of Document Conditional Use Permit # 20-0008
21 Number of Pages 28 Date of Document 9/30/2021
22 Signer(s) Other Than Named Above _____

23 S:\AllUsers\APN\020\100\044\CUP20-0008\PC\CUP\CUPconditions.docx