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AGENDA ITEM NO.: 5(Action Item – Public Hearing)

PLANNING COMMISSION MEETING DATE: October 12, 2022

SUBJECT: Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC.

EXECUTIVE SUMMARY

Southwest Pumice (SWP) was awarded a pumice materials sales contract from the Bureau of Land Management and has applied for a reclamation plan(REC) as required by the Surface Mining and Reclamation Act. The proposal consists of a previously approved 12.23 exploratory drilling project that will transition into an active open-pit pumice mine. The applicant is also proposing to expand to an additional 11.98 acres for a total disturbance of 25 acres. Approximately 700,000 cubic yards of material will be extracted from the site over seven years. Mining operations required mitigations and will include the relocation of access road (SE431); relocation and transplanting of eight Joshua trees and three primrose shrubs under the supervision of a qualified biologist; and. the excavation and final slope configuration for reclamation.

PROJECT INFORMATION

Supervisory District: 5

Applicants: Southwest Pumice, LLC (SWP).

Property Owner: Bureau of Land Management (BLM)

Address/Community: Approximately 5.4 miles northeast of the intersection of U.S. 395 and Gill Station Coso Road, approximately 2.5 miles north of Gill Station Coso Road.
(SWP) P.O. Box 174 Apple Valley, CA 92307

A.P.N.: 037-270-02

General Plan: State and Federal Lands (SFL)

Zoning: Open Space (OS)

Surrounding Land Use:

Location:	Use:	Gen. Plan Designation	Zoning
Site	Mine	State And Federal Land (SFL)	Open Space with a 40 Acre minimum (OS-40)
North	Vacant Public Land	State And Federal Land (SFL)	Open Space with a 40 Acre minimum (OS-40)
East	Vacant Public Land	State And Federal Land (SFL)	Open Space with a 40 Acre minimum (OS-40)
South	Vacant Public Land	State And Federal Land (SFL)	Open Space with a 40 Acre minimum (OS-40)
West	Vacant Land	Natural resources (NR)	Open Space with a 40 Acre minimum (OS-40)

Recommended Action:

1.) Certify the Mitigated Negative Declaration of Environmental Impact pursuant to the California Environmental Quality Act, prepared for Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC.
2.) Make certain Findings with respect to, and approve, Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC.

Alternatives:

1.) Deny Reclamation Plan 2020-01/Makayla II – Southwest Pumice LLC., thereby not allowing the applicant to update its Reclamation Plan, or move forward with the proposed expansion.

2.) Continue the public hearing to a future date, providing specific direction to staff regarding what additional information and analysis is needed.

Project Planner: Ryan Standridge, Associate Planner

STAFF ANALYSIS

Background and Overview

Project Description

The General Mining Law of 1872 authorizes and governs the prospecting and mining for economic minerals on federal public lands, and the BLM is the federal agency responsible for administering the Law. The Multiple Surface Use Act of 1955 removed common varieties of sand, gravel, cinders, pumice, or pumicite from the locatable minerals category and placed them under the Materials Act as salable minerals. Crownite Corporation established several pumice claims in this area, prior to 1955, in 1940. Crownite Corporation continued to operate under the general mining laws and leased these claims to an operator, California Lightweight Pumice, Inc. (CLP), and failed to file a required affidavit of assessment work on December 30, 1982. Based on this oversight, BLM issued a decision on June 14, 1983, finding the claims null & void. CLP was in violation of penal code 602(trespassing)for operating a mineral material site without a sales contract. BLM held a public sale auction on January 16, 1990. No bids were received and CLP was required to pay monthly installments toward fines and subsequently issued a sale contract.

SWP acquired all the assets and liabilities of CLP in 2014 and has continued pumice mining CLP's previously approved Makayla 1 mine site, which included the 12.2 acres of exploration for Makayla 2.CLP failed to complete the required reclamation from their exploration activities, leaving massive 50-75-foot high walls. SWP has removed the high walls under the supervision of BLM on the sampling areas by cutting a 3:1 slope into the high walls. Due to the extensive cost of reclamation for the high walls it was not feasible to expand Makayla 1. SWP subsequently decided to pursue the quality pumice material found during exploration and started the BLM process in August 2019 to obtain a sales contract for the Makayla 2 site. BLM went through the National Environmental Protection Act (NEPA) process and was awarded a sales contract with stipulations on January 5, 2022 (Attachment 3). The issued sales contract allows for 25-acres of disturbance which makes the proposed reclamation plan necessary per SMARA and the County's Surface Mining and Land Reclamation Ordinance; and requires approval by the Planning Commission.

Inyo County Code

Surface Mining and Land Reclamation in Inyo County is governed by Chapter 7.70 of the Inyo County Code which incorporates California's Surface Mining and Reclamation Act of 1975("SMARA", Public Resource Code Section [PRC] 271 et seq. and California Code of Regulations Section 3500 et seq.) The County is the "lead agency"(ref. PRC Section 2728) with State Mining and Geology Board-certified surface mining and reclamation Ordinance (ref. PRC Section 2774.)

Planning Staff received a comment Letter from the California Department of Mine Reclamation (DMR), dated June 6, 2022, in response to the County's request to review the Mine REC(Attachment 4). DMR staff provided substantial comments to be addressed.

The first comment was on Public Resource Code (PRC) Section 2772(c)(5)(A), stating the operator has listed the incorrect Public Land Survey System section number for the Makayla II mine. Accompanying, PRC 2772(c)(5)(B) requires clearly defined and accurately drawn property lines, setbacks, and reclamation boundaries. According to recent NAIP aerial imagery (dated 2020), the proposed boundaries are inconsistent with the current disturbance. The proposed boundary does not include all recent disturbances between the 2017 Google Earth imagery and 2020 NAIP aerial images. Furthermore, PRC 2772(c)(5)(D) requires a geologic description of the area of the surface mining operation.

SWP corrections are in Figures 2 and 3, Section 1.3, page 6, and Section 2.1, page 12. The reclamation boundaries have been addressed in Figures 2 and 3 and noted in Paragraph 3.1, page 16. The geologic descriptions have been added in Paragraphs 1.2 and 3.7.

The second comment is with regard to PRC Section 2772(c)(3) that requires the proposed dates for the initiation and termination of mining. The reclamation plan does not include the start date. The termination date of mining has two different ranges. The reclamation plan (General Information & Section 2.1) states the termination date will be within 5-7 years. However, Map 2 Makayla Mine, Mine Plan & Map 3 Makayla II Mine, Reclamation Plan state the estimated operation life will be in 30 years.

SWP has updated the mining start dates and termination dates. The Mine has 30 years of material available. However, since this is BLM land, they must get a plan of operation or a sales contract. BLM requires a sales contract renewal every 5 to 7 years. Additionally, Inyo County will be conditioning the reclamation plan with a requirement to provide the County with the current sales contract within 30 days of obtaining the agreement with BLM. If SWP can't get a sales contract agreement before the contract's expiration date, reclamation must start immediately.

The third comment is based on California Code of Regulations Section 3706(e) . It requires that where natural drainages are covered, restricted, rerouted, or otherwise impacted by surface mining activities, mitigating alternatives shall be proposed and specifically approved in the reclamation plan to assure that runoff shall not cause increased erosion or sedimentation. DMR reviewed 2017 GE imagery and 2020 NAIP aerial imagery determined recent disturbance outside of the proposed northwest reclamation plan boundary. The disturbance in the images appears to be overburden placed as fill in two natural drainage systems. The reclamation plan does not address the reclamation of this disturbance.

California Lightweight Pumice(CLP) caused the disturbance depicted in the aerial imagery under their permitted exploration. However, CLP lost its sales contract and left 50-75-foot high walls adjacent to access roads traversed by the public, leaving this liability hazard. Mining Safety and Health Administration required the hazard to be handled immediately or close down the site. Under the supervision of BLM, overburden was used to backfill to meet the 3:1 slope. SWP will install berms and retention basins during mining activities to disallow any materials to flow offsite. SWP will contour the prior disturbed desert washes during final reclamation. Inyo County will condition SWP to get the appropriate permits through the California Department of Fish and Wildlife (CDFW) to restore the desert washes.

Comment four addresses CCR Section 3705(g) states, "Native plant species shall be used for revegetation, except when introduced species are necessary to meet the end uses specified in the approved reclamation plan." The REC (pg. 16) mentions a "suggested seed mix"; however, SWP did not include a specific seed mix in the REC.

SWP has amended the reclamation plan text in Paragraph 3.2; page 17, to specify the seed mix per pound.

Comment five is from CCR Section 3703, requiring species of special concern to be preserved or mitigated, mainly if the end use is wildlife habitat. The 2019 Rare Plant and Wildlife Survey Report (Survey Report) included with the RP (Appendix B, pg. 20) states that Booth's Evening Primrose (Eremothera boothii ssp. boothii) was found on site. Mitigation measures to protect this rare, threatened, or endangered species (California Rare Plant Rank 2.B.3) include avoidance and salvage prior to ground disturbance, as well as relocation (pg. 20). While the RP has mitigation measures for other species of special concern, it lacks any mitigation measures for Booth's Evening Primrose.

SWP has updated theREC text to include the BLM requirement to have a biologist present during the relocation. Additionally, Inyo County will be conditioning SWP with getting the appropriate permit through CDFW to relocate the Booth's Evening Primrose.

General Plan Consistency

The proposed project is consistent with the County General Plan designation of 'State and Federal Land' (SFL) as the SFL designation allows for Mining uses under the approval of BLM and is accompanied by a REC pproved by Inyo County under a Memorandum of Understanding with the BLM. The County is responsible for ensuring that all mining projects comply with the requirements of SMARA therefore, an approved reclamation plan is required to be consistent with the General Plan. Also, Section 08.4.4 of the General Plan's Goals and Policies states: 'protect the current and future extraction of mineral resources that are important to the County's economy while minimizing impacts on the public and the environment' restoration of the land through reclamation minimizes the impact to the environment.

Zoning Ordinance Consistency

The proposed project is consistent with the County Zoning Ordinance designation of Open Space (OS) as the OS designation allows mining uses, as a conditional use, or when managed by the BLM with an approved plan of operations or sales contract. These uses include mining and processing of natural resources, including borrow pits. The proposed reclamation plan consists of restoring land through reclamation on a BLM approved pumice borrow pit is a mining use.

ENVIRONMENTAL REVIEW

Staff prepared a Draft Mitigated Negative Declaration and Initial Study for Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC. and circulated it for a 30-day review and comment (Attachment 5). The review period closed on February 18, 2022 with no comments received. The Initial Study identified two potentially significant impacts: air quality, and

biological. The applicant provided information addressing these potential impacts and mitigation measures were developed to reduce the potential impacts to a level of insignificance and are included as conditions of approval for the project.

Air Quality

- The proposed project anticipates new disturbance of large particle greater than 10 Microns, the applicant will follow best management practices and be subject to Great Basin Unified Air Pollution Control District (GBUAPCD)regulations regarding dust mitigation during operations and shall be required to obtain all necessary permits from GBUAPCD.

Biological

A Biological Technical Report was prepared by RCA Associates for the project (Attachment 6). Two sensitive species were found during the May 23, 2019 and May 28, 2019 studies, the consultant proposed avoiding when possible or relocating under BLM approval. BLM conducted an environmental assessment and issued stipulations (Attachment 3). SWP shall be required to obtain all necessary permits from California Department of Fish and Wildlife (CDFW).

TRIBAL CONSULTATION

Prior to the Environmental review, consultation invitations were sent to the: Twenty Nine Palms Band of Mission Indians; Torres Martinez Desert Cahuilla Indians; Bishop Paiute Tribe; Fort Independence Indian Community of Paiutes; Big Pine Paiute Tribe of the Owens Valley; Timbisha Shoshone Tribe; and, the Lone Pine Paiute-Shoshone Tribe per Tribal requests.

None of the Tribes requested consultation.

NOTICING

Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC. was noticed in the Inyo Register and sent to all property owners 300-feet of the project, ten days before the Planning Commission Hearing. No public comments have been received to date.

RECOMMENDATIONS

Planning Department staff recommends the approval of Reclamation Plan 2020-01/Makayla II – Southwest Pumice LLC. with the following Findings and Conditions of Approval:

Findings:

Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC.

1. Based upon the Initial Study and all oral and written comments received, adopt the Mitigate Negative Declaration of Environmental Impact and certify that the provisions of the California Environmental Quality Act have been satisfied. *[Evidence: An Initial Study and Draft Mitigated Negative Declaration of Environmental Impact were prepared and circulated for public review and comment pursuant to the provisions of the California Environmental Quality Act. The 30-day public comment*

period ended on February 18, 2022. The Planning Department received no comments on the ISMND and no additional potentially significant environmental impacts from the proposed mining operation were determined in the course of the ISMND circulation. Based upon the environmental evaluation of the proposed project, the Planning Department finds that the project does not have the potential to create a significant adverse impact on flora or fauna; natural, scenic and historic resources; the local economy; public health, safety, and welfare.

2. The proposed Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC. is consistent with the Inyo County General Plan Land Use designation of State and Federal Land (SFL).
   [Evidence: The proposed reclamation plan is consistent with the County General Plan designation of SFL as the SFL designation allows for mining uses, under the approval of BLM and accompanied by a reclamation plan (REC), approved by Inyo County, under a Memorandum of Understanding with the BLM. The General Plan Goals and Policies state: 'protect the current and future extraction of mineral resources important to the County's economy while minimizing impacts on the public and the environment. SWP mining currently plays a role in the County's production of pumice screened to various sizes depending on product demand for materials used for landscaping, soil amendment, de-icing of roads, and other uses. The proposed REC offers restoration of the land caused by disturbance from the pumice borrow pit, which is considered a "Mining Use" No conflicts exist with policies and objectives in the other adopted elements of the General Plan.]

3. The proposed Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC. is consistent with the Inyo County Zoning Ordinance, which permits "Mining Uses" as a Conditional Use in the Open Space Zoning District.
   [Evidence: The REC is consistent with the County Zoning Ordinance designation of Open Space (OS) as the OS designation allows mining uses, as a conditional use, or when managed by the BLM with an approval of a plan of operation or sales contract. These include Mining and processing of natural resources, including borrow pits. The proposed REC plan consists of rehabilitating the land from the disturbance caused by the pumice borrow pit and is a mining use.]

4. The proposed Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC. is necessary or desirable.
   [Evidence: General Plan Policy MER-1.1-Support mineral resource production where it would not significantly impact sensitive resources as defined by CEQA and this General Plan. Reclamation of the pumice pit is a requirement of the Surface Mining Reclamation Act of 1975. The BLM-issued sales contract allows the pumice pit to offer an essential service by providing materials used for landscaping, soil amendment, road de-icing, and other uses; therefore, this is a necessary and desirable use.]

5. The proposed Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC. is appropriately related to other uses and transportation and service facilities in the vicinity.

[Evidence: The applicant has an existing mine (Makayla I). The applicant has stopped pumice production and is currently reclaiming the Makayla I site. Production will resume after the approval of the Makayla II expansion reclamation plan, and vehicle miles traveled will remain the same.]

6. The proposed Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC. would not, under all the circumstances of this case, affect adversely the health or safety of persons living or working in the vicinity or be materially detrimental to the public welfare.
   [Evidence: The proposed expansion is approximately 12 miles away from the nearest town. No chemicals or chemical processing will be used on-site only and processing will be limited to crushing and screening. There will be no chemical waste or pollution from the mining operation. The applicant shall be subject to the requirements set by the GBUAPCD during the operation of the site for dust mitigation, and subject to Certified Unified Program Agency requirements specified by the Inyo County Environmental Health Department.]

7. Operating requirements necessitate the Reclamation Plan 2020-01/Makayla II – Southwest Pumice LLC. located within the Open Space (OS-40) zoning district.
   [Evidence: BLM awarded a sales contract that allows for 25 acres of disturbance which is considered substantial and makes this REC necessary per the County's Surface Mining and Land Reclamation Ordinance.

CONDITIONS OF APPROVAL

Term of Plan and Timing of Reclamation

1. The term of the reclamation plan shall not exceed thirty years from the date of approval, or no later than September 28, 2052. The total amount of usable aggregate and waste material that can be removed from this pit is 700,000 cubic yards. If the 700,000 cubic yards are removed prior to the termination date, reclamation shall proceed with in six months of termination of the sales contract. The Planning Commission may grant a time extension. The applicant must first submit a complete reclamation plan application for an amended reclamation plan. To assure continued operation, the above application should be received prior to the expiration date.

Interim Management Plan

2. Throughout the 30-year life of this mine site, the interim management plan shall be implemented during periods of "idle" operation. If zero production occurs for a period of five consecutive years, the reclamation plan shall be implemented immediately. Mining cannot occur until an amended reclamation plan is submitted and approved by the Inyo County Planning Commission.

Mapping

3. Operator shall provide the County with a mine site map illustrating the approved area and any completed mining activity. The map shall include two-foot contours and is due every three years prior to the required yearly SMARA inspection or on the day of the inspection.

Conditions of Mitigated Negative Declaration

4. All conditions outlined in the Mitigated Negative Declaration are hereby considered conditions of this reclamation plan.

5. SWP or current operator shall be required to obtain all necessary permits from Great Basin Unified Air Pollution Control District. Operator shall provide a copy of active permits to the Inyo County, and BLM.

6. SWP or current operator shall be required to obtain all necessary permits from California Department of Fish and Wildlife. Operator shall provide a copy of all active permits to the Inyo County, and BLM.

7. SWP or current operator shall work with the County Environmental Health Department to prepare an emergency response plan to control toxic substance contaminating soils (CUPA).

8. A focused survey of native, breeding, birds shall be conducted annually prior to April 15th by a qualified biologist to determine presence/absence of migratory birds. Operator shall provide a copy of the report to the Lead Agency, BLM, and CDFW.

Conditions of Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC.

9. All mining procedures and reclamation outlined in Makayla II Mine Expansion Reclamation plan revised November 15, 2021 shall be recorded by the Planning department upon approval. The recorded copy shall be the official reclamation plan that both the lead agency and operator will follow.

10. The applicant shall submit a notarized letter to the Planning Department accepting responsibility for reclaiming the mined lands as conditioned by the Planning Commission.

11. The operator shall provide the Inyo County Planning Department with a copy of the most current sales contract with BLM within 30 days of any renewal or amendment. The applicant shall adhere to all requirements set forth in the contract and a breach of contract stipulations will void this permit and reclamation shall start immediately.

Financial Assurances

12. Financial assurances in the sum of $35,000 are required in the form of a surety bond, irrevocable letter of credit, cash or certificate of deposit. Government agencies may also use budget set asides, or pledge of revenue to post their financial assurances. Financial assurances shall be posted with the Inyo County Planning Department. Said assurances shall be made payable to the County of Inyo and the Director of the California Department of Conservation and The Bureau of Land Management.

Financial Assurance Recalculation

13. Financial assurances shall be recalculated each year in accordance with Section 2773. l(a)(3) of SMARA and the Inyo County Code. This shall occur at the time of annual inspection.

Release of Financial Assurances

14. As required reclamation standards are achieved, that portion of financial assurances covering the completed activity may be released. The remainder of financial assurances covering revegetation and monitoring shall not be released until the revegetation performance standards is met. BLM must be present during final inspection and concur with Inyo County that all performance standards have been achieved.

Inyo County Roads

15. All vehicles servicing the mine are not allowed to trim, clean or dump on or along the county maintained roadway. This includes the shoulder of the road. Any material spilled on the road/shoulder will be immediately removed by SWP or the current operator without damaging the road surface or altering the profile of the shoulders. No release agent such as diesel fuel or other non-authorized liquid may be sprayed on vehicles or equipment while on county maintained roadways.

16. SWP or current operator shall be responsible for the repair of extensive, damage to the existing roadway. The operator shall collaborate with the County of Inyo Road department before, during, and after any mining activity directly affecting a county-maintained road.

Compliance with County Code

17. The applicant/Operator shall conform to all applicable provisions of Inyo County Code, County Ordinances, State laws and regulations, and Federal laws and regulations.

Hold Harmless

18. The applicant/operator shall defend, indemnify and hold harmless Inyo County agents, officers, and employees from any claim, action or proceeding against the County or its agents, officers, or employees to attack, set aside, void or annul an approval of the county, its advisory agencies, its appeals board, or legislative body concerning Reclamation Plan 2020-01/Makayla II –Southwest Pumice LLC. The County reserves the right to prepare its own defense.

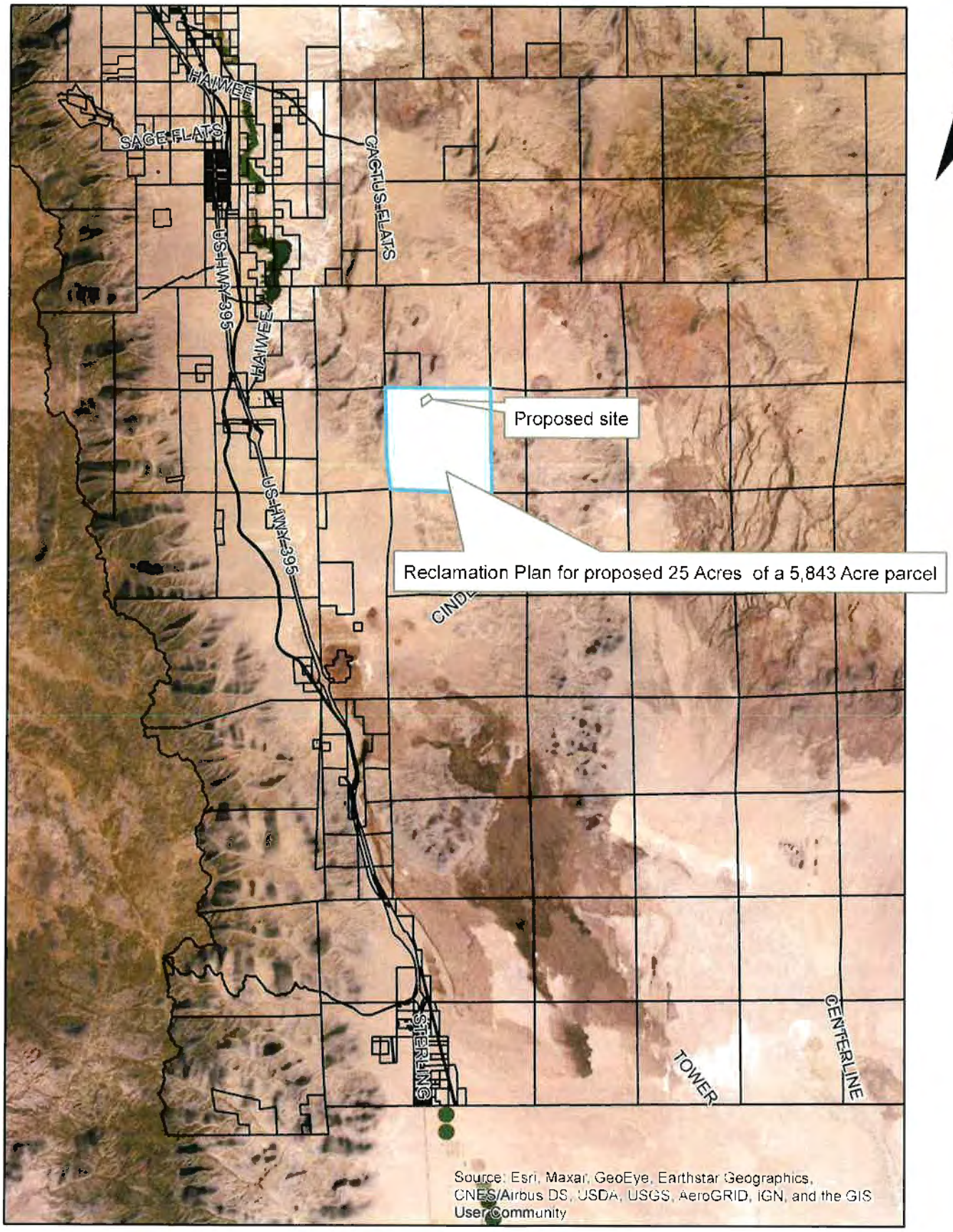
ATTACHMENTS:

1. Vicinity Map
2. Reclamation Plan Maps
3. BLM sales contract with environmental assessment and issued stipulations
4. DMR Response
5. Mitigated Negative Declaration

6. Biological studies
7. Reclamation Plan

Attachment 1

REC Plan 2020-01/Makayla II –SWP LLC Vicinity

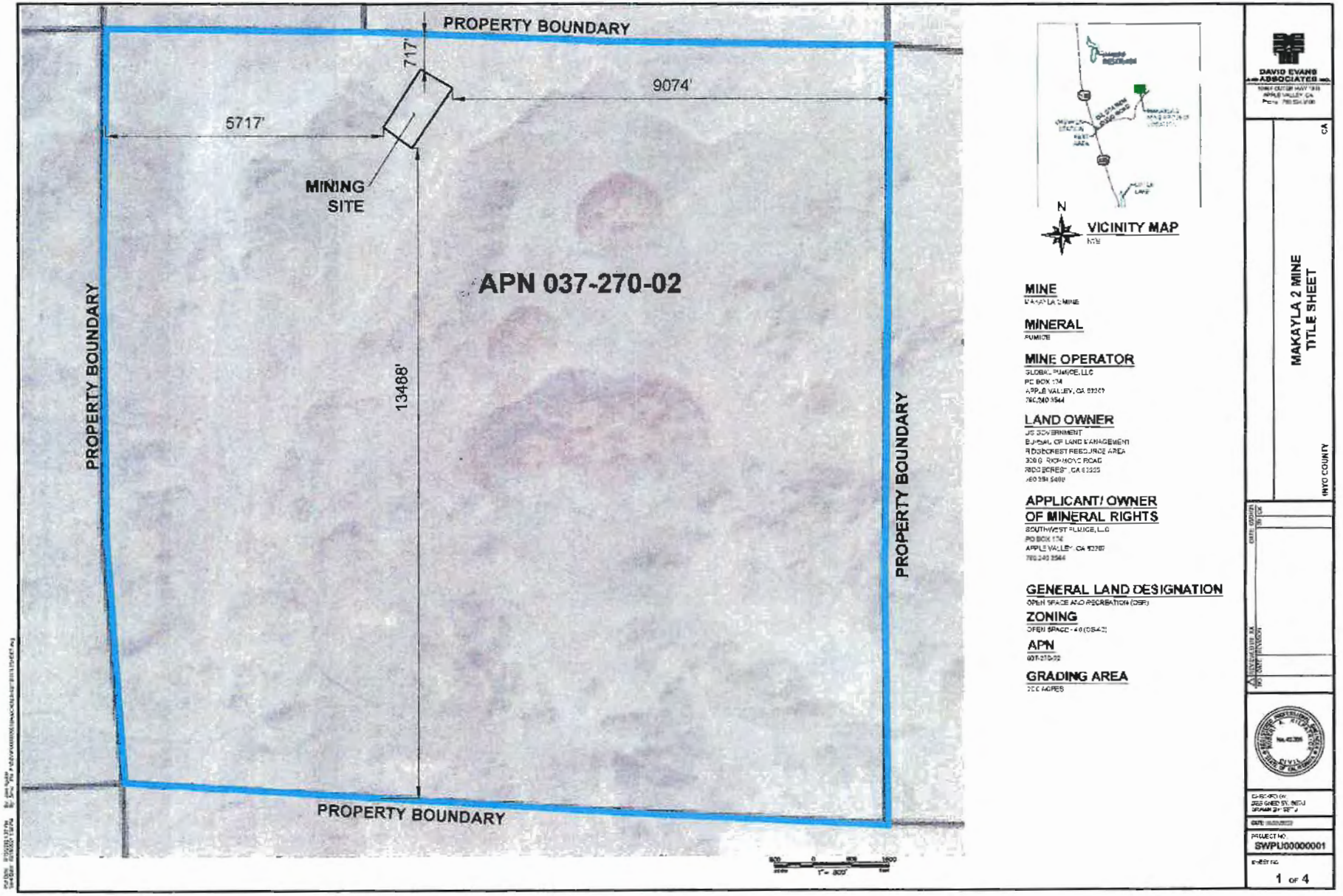


N

0 2.25 4.5 9 Miles

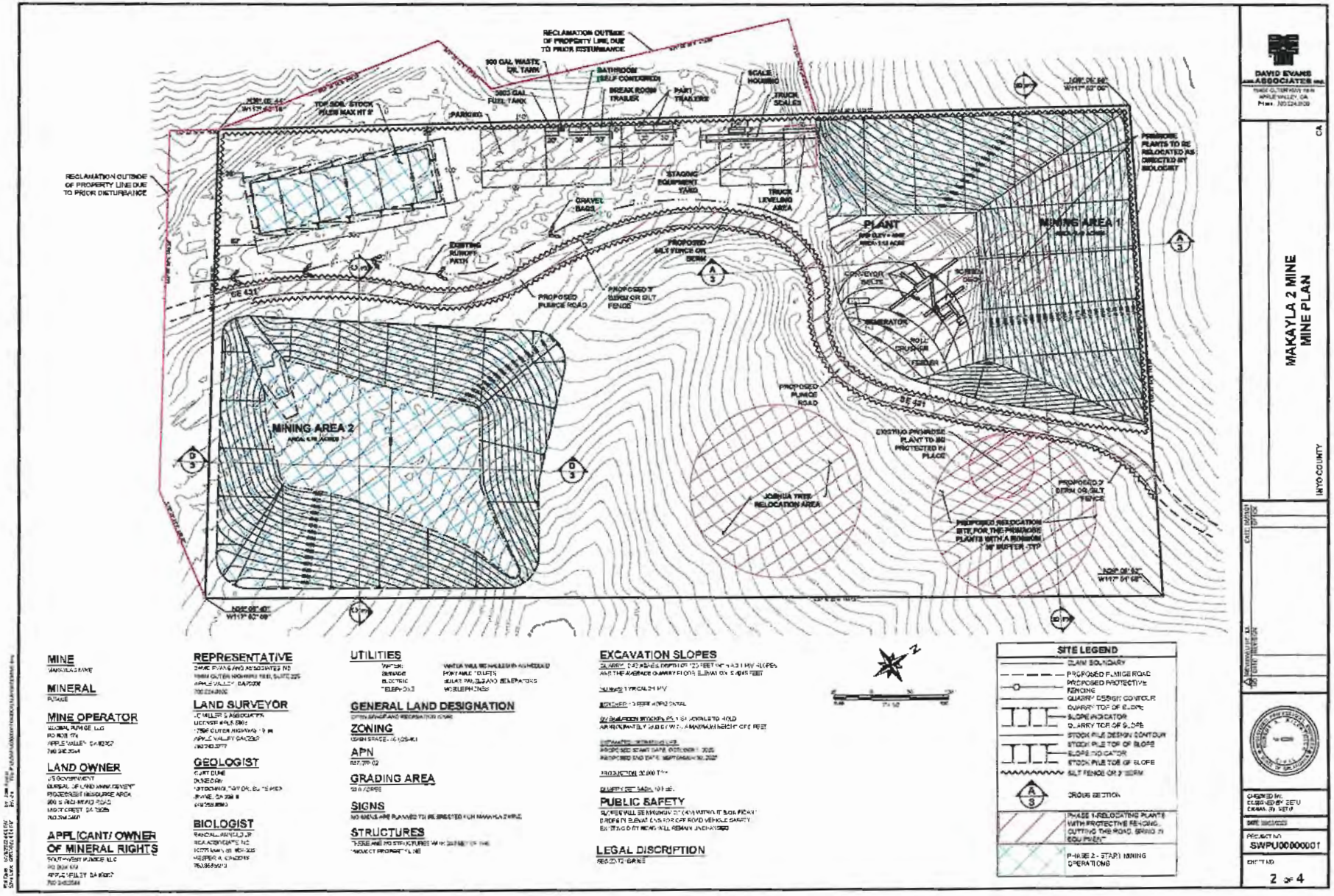
Attachment 2

FIGURE 1



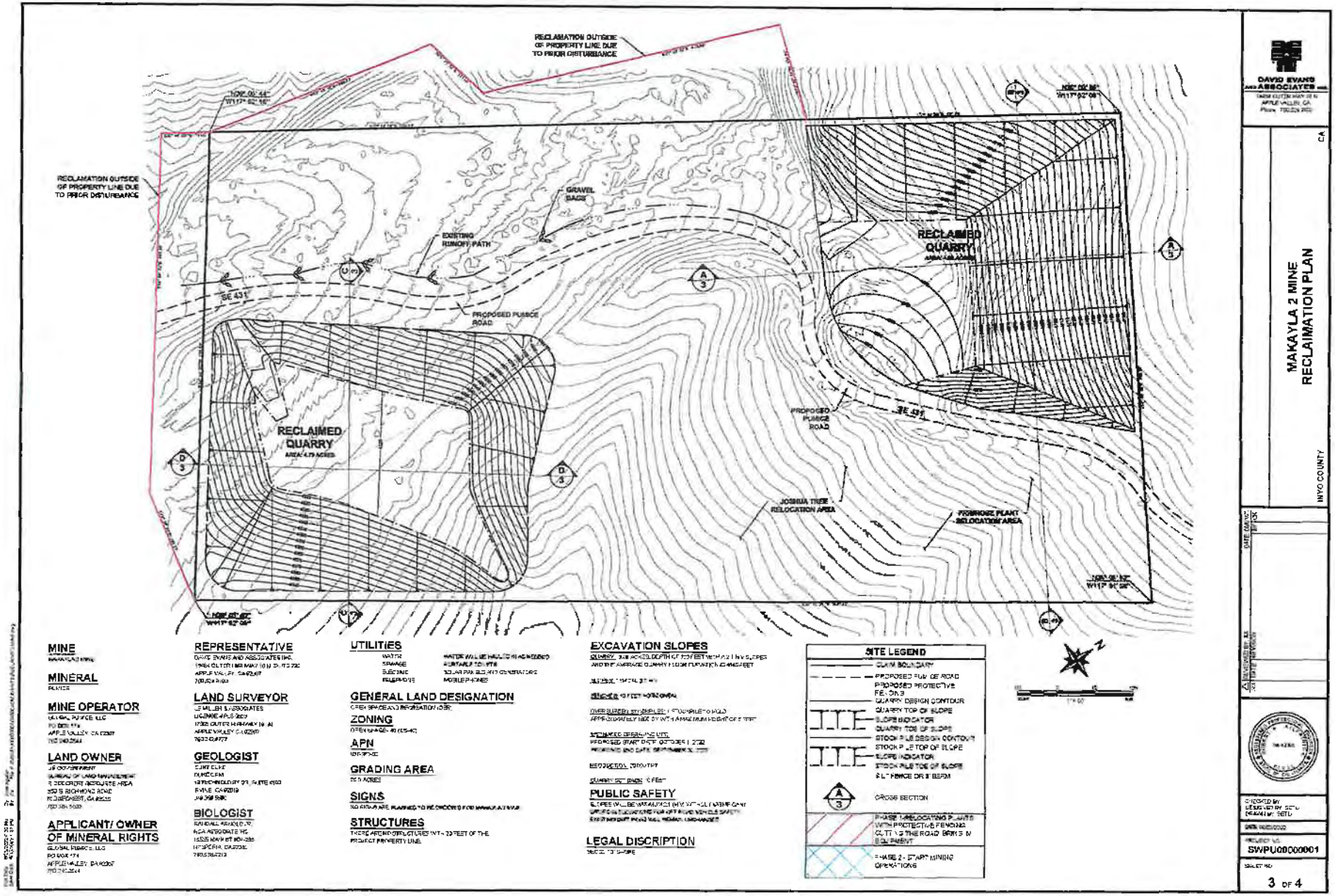
Attachment 2

FIGURE 2



Attachment 2

FIGURE 3



MINE

MINERAL
PUMICE

MINE OPERATOR

LAND OWNER

APPLICANT/ OWNER OF MINERAL RIGHTS

REPRESENTATIVE
DAVID EVANS AND ASSOCIATES INC.

LAND SURVEYOR
LE MILLER & ASSOCIATES

GEOLOGIST

BIOLOGIST

UTILITIES
WATER
SEWAGE
ELECTRIC
TELEPHONE
WATER WILL BE HAULED IN AS NEEDED
PORTABLE TOILETS
SOLAR PANELS WITH GENERATORS
MOBILE PHONES

GENERAL LAND DESIGNATION
OPEN SPACE AND INFORMATION (OSR)

ZONING
OPEN SPACE - 40 (OS-40)

APN

GRADING AREA
65.0 ACRES

SIGNS
NO SIGNS ARE PLANNED TO BE ERECTED FOR MAKAYLA 2 MINE

STRUCTURES
THERE ARE NO STRUCTURES WITHIN 30 FEET OF THE PROJECT PROPERTY LINE.

EXCAVATION SLOPES

PUBLIC SAFETY

LEGAL DISCRIPTION

DAVID EVANS AND ASSOCIATES
APPLE VALLEY, CA

MAKAYLA 2 MINE
RECLAIMATION PLAN

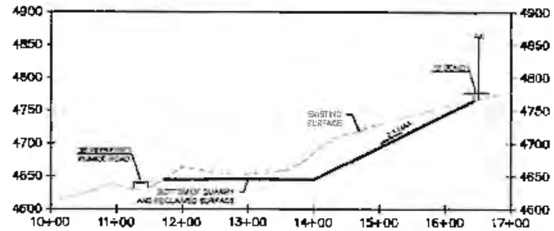
INYO COUNTY

PROJECT NO.
SWPU0000001

SHEET NO.
3 OF 4

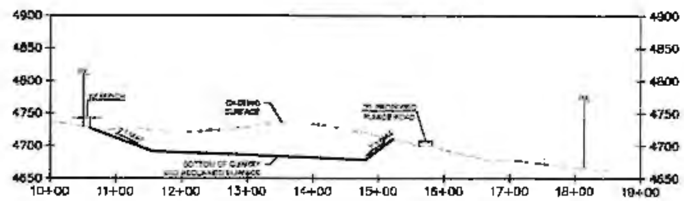
Attachment 2

FIGURE 4



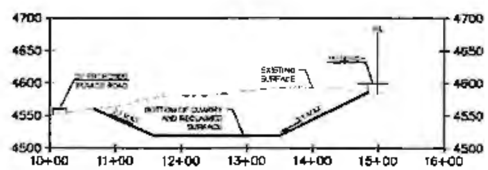
SECTION A

MINING AREA 1 QUARRY - LOOKING WEST



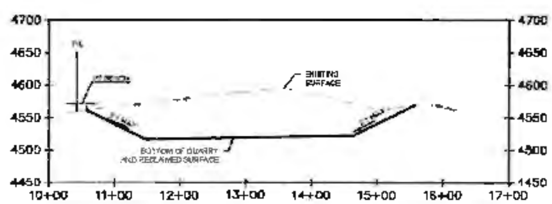
SECTION B

MINING AREA 1 QUARRY - LOOKING NORTH



SECTION C

MINING AREA 2 QUARRY - LOOKING NORTH



SECTION D

MINING AREA 2 QUARRY - LOOKING WEST

DAVID EVANS AND ASSOCIATES

MAKAYLA 2 MINE CROSS SECTIONS

INYO COUNTY

CA

SWPU00000001

4 OF 4

Attachment 2

FIGURE 5

RCA

LOCATION: Section 22, Township 21 South, Range 38 East, Inyo County, CA, (USGS Cactus Peak, CA 7.5-minute quadrangle).

25-acres

RCA ASSOCIATES, INC.
SOURCE: GOOGLE EARTH

FIGURE 10: LOCATION OF JOSHUA TREES

Attachment 3

Form 3600-9
(October 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTRACT FOR THE SALE OF MINERAL MATERIALS

FORM APPROVED
OMB NO. 1004-0103
Expires: February 29, 2024

Office
RIDGECREST FIELD OFFICE

Contract Serial Number
CACA-58637

The UNITED STATES OF AMERICA acting through the Bureau of Land Management (BLM), and SOUTHWEST PUMICE LLC _____ you, the purchaser, make this AGREEMENT, under the authority of the Act of July 31, 1947 (61 Stat. 681), as amended at 30 U.S.C. 601 through 604, and the regulations at 43 CFR Group 3600.

We agree:

Sec 1. *Contract area* - Under the terms and conditions of this contract, the United States sells to you and you buy the mineral materials listed in Section 2 and contained in the following lands as shown on the map and mining plan attached to this contract:

COUNTY	STATE	TOWNSHIP	RANGE	SECTION	ALIQUOT PARTS	MERIDIAN	ACREAGE
INYO	CA	21 SOUTH	38 EAST	22	25 ACRES WITHIN THE NW 1/4 (MAP ATTACHED)	MOUNT DIABLO	25.00

Pit Name (if any): MAKAYLA 2

☐ **BLM will check this box if this contract is in a Community Pit. Community Pit Serial Number:**

Sec. 2. *Amount and price of materials* - The United States determines the total purchase price by multiplying the total quantity of mineral material designated by the unit price given below, or as changed through reappraisal.

KIND OF MATERIAL *You may list only one material commodity per contract*	QUANTITY *(Unit of Measure must be specified in next column)*	UNIT OF MEASURE ☐ Cubic Yards OR ☑ Tons *(Choose only 1)*	PRICE PER UNIT	TOTAL PRICE
Pumice, Pumicite	100,000.00		[redacted]	[redacted]
Reclamation Fee, if in a Community Pit:				$0.00
TOTAL PURCHASE PRICE				[redacted]
PERFORMANCE BOND				See Supulation 1

BLM's determination of the amount of materials that you have taken under the contract is binding on you. You may appeal this determination as provided in Section 19.

You are liable for the total purchase price, even if the quantity of materials you ultimately extract is less than the amount shown above. You may not mine more than the quantity of materials shown in the contract.

☐ **If you pay in full in advance, BLM will check this box, and Subsections 3(a) through 3(e) do not apply to your contract.** ***You must pay in full for all sales of $2,000 or less.***

Sec. 3. ***Payments, title, and reappraisals*** **– You may not extract the materials until you have paid in advance for them in full $_____, or paid the first installment of $[redacted]**

(a) If you pay in installments, you must pay the first installment before BLM approves the contract.

(b) Once you start removing material, you must pay each subsequent installment payment monthly in an amount equal to the value of materials removed in the previous month. Payment must be made by the 15th day following the end of the month for which you are reporting. **You must pay the total purchase price not later than 60 days before the contract expires.**

(Continued on page 2)

(c) The United States will retain the first installment as security for your full and faithful performance and will apply it to the last installment required to make the total payment equal to the total price given in Section 2.

If you are late making an installment payment, you must not remove any more material until you have paid. Removing material you have not paid for is trespass, and for trespass you must pay at triple the appraised unit price, or at triple the reappraised unit price if BLM has made a reappraisal. To resume removal operations after you were late making payments, you must obtain BLM's written approval.

(d) You must annually produce an amount sufficient to pay to the United States a sum of money equal to the first installment identified in this section. In lieu of such production, you may make an annual payment in the amount of the first installment. If in any contract year you make production payments that are less than the first installment, you must pay the difference between the production payments and the amount of the first installment. These annual payments are due on or before each anniversary date of the contract.

(e) You receive title to the mineral materials only after you have paid for them and extracted them.

Sec. 4. ***Bonds*** **- (a) You must furnish BLM with a performance bond in the amount of $** see Stipulation 1 **as a condition of issuing this contract.**

(b) If you do not perform all terms of the contract, BLM will deduct an amount equal to the damages from the face amount of the bond. If the damages exceed the amount of the bond, you are liable for the excess. BLM will cancel the bond or return the cash or U.S. bonds you supplied when you have completed performance under this contract.

(c) BLM will require a new bond when it finds any bond you furnish under this contract to be unsatisfactory.

Sec. 5. ***Risk of loss*** - You assume complete risk of loss for all materials to which you have title. If material covered by this contract is damaged or destroyed before title passes, you are liable for all loss suffered if you or your agents are directly or indirectly responsible for the damages. If you are not responsible for the damage or destruction, you are liable only to the extent that the loss was caused by your failure to remove the material under the terms of this contract. You are still liable for breach of contract or any wrongful or negligent act.

Sec. 6. ***Liability for damage to materials not sold to you*** - You are liable for loss or damage to materials not sold to you if you or your agents are directly or indirectly responsible for the damage or loss. You are also liable if you fail to perform under the contract according to BLM's instructions and the United States incurs costs resulting from your breach of any contract term or your failure to use proper conservation practices. If the damage resulted from willful or gross negligence, you are liable for triple the appraised value of the damaged or destroyed materials. If the damage or destruction did not result from willful or gross negligence, you are liable for lesser charges, but not less than the appraised value of the materials.

Sec. 7. ***Stipulations and reserved terms*** - Your rights are subject to the regulations at 43 CFR Group 3600 now or hereafter in force and to any stipulations and the mining plan attached to this contract.

☑ **BLM will check this box if there are stipulations attached to this contract.**

Sec. 8. ***Notice of operations*** - You must notify BLM immediately when you begin and end operations under this contract. If BLM has specified a time frame for notification, you must comply with that time frame.

Sec. 9. ***Assignments*** - You may not assign this contract without BLM's written approval.

Sec. 10. ***Modification of the Approved Mining or Reclamation Plan*** - You or BLM may initiate modification of these plans to adjust for changed conditions, or to correct any oversight. The conditions for BLM requiring you to modify these plans, or approving your request for modification are found in the regulations at 43 CFR 3601.44.

Sec. 11. ***Expiration of contract*** **- This contract will expire 5 years, - months, - days from its approval date, unless BLM extends the term or renews the contract.**

Sec. 12. ***Extensions of time*** - BLM may grant you an extension of time in which to comply with contract provisions under the regulations at 43 CFR 3602.27. For contracts with terms over 90 days, you must apply in writing no less than 30 or more than 90 days before your contract expires. For contracts with terms of 90 days or less you must apply no later than 15 days before your contract expires.

☐ **BLM will check this box if this contract is a renewable competitive contract.**

Sec. 13. ***Renewal of renewable competitive contract*** - BLM will renew your renewable competitive contract if you apply in writing no less than 90 days before your contract expires and you meet the conditions in the regulations at 43 CFR 3602.47.

Sec. 14. ***Time for removing personal property*** **- You have 90 days (not to exceed 90) from the date this contract expires to remove your equipment, improvements, and other personal property from United States lands or rights-of-way.** You may leave in place improvements such as roads, culverts, and bridges if BLM consents. Any property remaining after this period ends, including extracted materials, becomes the property of the United States. You will remain liable for any costs of removing and disposing of the property and restoring the site.

Sec. 15. ***Violations and cancellations*** - (a) If you violate any terms or provisions of this contract, BLM may cancel your contract following the regulations at 43 CFR 3601.60 et seq., and recover all damages suffered by the United States, including applying any advance payments you made under this contract toward the payment of the damages.

(b) If you extract any mineral materials sold under this contract during a suspension period, or after the contract has expired or been canceled, you have committed, and may be charged with, willful trespass.

Sec. 16. ***Responsibility for damages suffered or costs incurred by the United States*** - If you, your contractors, subcontractors or employees breach this contract or commit any wrongful or negligent act, you are liable for any resulting damages suffered or costs incurred by the United States. You must pay the United States within 30 days after receiving a written demand from BLM.

Sec. 17. ***Equal opportunity clause*** - The actions you take in hiring must comply with the provisions of Executive Order No. 11246 of Sept. 24, 1965, as amended, which describe the non-discrimination clauses. You may get a copy of this order from BLM.

(Continued on page 3)

Sec. 18. *Effective date* - This contract becomes effective as indicated below.

☐ **If this contract becomes effective on the date BLM signs the contract, BLM will check this box.**

☑ **If this contract becomes effective only after certain conditions are met, BLM will check this box, list the conditions below, and indicate the effective date.**

THE RIGHT TO MINE MATERIALS AT THIS SITE BECOMES EFFFECTIVE WHEN THE OPERATION HAS COMPLIED WITH STIPULATINS 1 AND 4 OF THIS SALE CONTRACT (SEE STIPULATINS ATTACHED).

Sec. 19. *Appeal* - You may appeal any decision that BLM makes in regard to this contract under Parts 4 and 1840 of Title 43 of the Code of Federal Regulations.

The following parties have executed this contract as of:

PURCHASER	THE UNITED STATES OF AMERICA
SOUTHWEST PUMICE LLC	
(Individual or Firm Name)	By L.B. SYMON (Print Name of BLM Official)
P.O. BOX 174 APPLE VALLEY, CA 92307 (Address)	(Signature of BLM Official)
(760) 240-3544 (Phone Number – include area code)	RIDGECREST FIELD MANAGER (Title)
(Signature)	1/5/2022 (Date)
(Signature)	

If you are a corporation, affix corporate seal here:

Title 18 U.S.C. 1001, makes it a crime for any person knowingly or willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction, subject to a fine of up to $10,000 and imprisonment up to 5 years.

NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 601 et seq.; 43 CFR Group 3600
PRINCIPAL PURPOSE: BLM uses this information to identify the parties entering into contracts for disposing of mineral materials.
ROUTINE USES: BLM will transfer information from the record or the record itself to appropriate Federal, State, local, or foreign agencies, when relevant to criminal, civil, or regulatory investigations or prosecutions.
EFFECT OF NOT PROVIDING INFORMATION: If you do not provide this information to BLM, we will not be able to process your application for a contract.

The Paperwork Reduction Act requires us to inform you that:
The BLM is collecting this information to process your application and effect a binding contract.
The BLM will use this information to identify and communicate with applicants.
You must respond to this request to get a benefit.
You do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average about 1 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. You may submit comments regarding the burden estimate or any other aspect of this form to: U.S. Department of the Interior, Bureau of Land Management (1004-0103), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Room 2134LM, Washington, D.C. 20240.

REQUIRED STIPULATIONS for BLM Sale Contract CACA-58637

1. The operator shall have and maintain an authorized Reclamation Plan in conformance with the California Surface Mining and Reclamation Act and ordinances of the County of Inyo. Before commencing any operations other than reclamation, the operator shall supply BLM with a copy of the appropriate authorization required ordinances of the County of Inyo, and a copy of reclamation bond/performance guarantee complying with county, state & federal requirements. The operator named on the financial instrument (Surety bond, certificate of deposit or other financial instrument) shall conform with that of the authorized operator.

2. **Air Quality Control Measures**.

   a. The operator will employ reasonably available measures to control PM10 emissions including:

Emission Source	*Mitigation Measure*
Disturbed Surface Area	Apply water and/or dust suppressants as required. Re-vegetate finished areas using native seeds and/or stockpiles topsoil.
Open storage piles	Continuously apply water and/or dust suppressants to produce a surface crust.
Loading/Hauling	Apply water to all stockpiles before loading. Cover loads prior to transport. Remove spilled materials from the loading area to maintain a lower-dust driving surface.
Mobile Equipment	Operate equipment when wind speed is low (25mph or less), at a speed of 15mph or that which produces a maximum of 20% opacity.
Unpaved road(s)	Improve road surface. Control vehicular traffic speed. Continuously apply water and/or dust suppressants. Track out onto paved road Sweep the paved road to reduce entrainment dust.

Other air quality protection measures include:

- The permittee shall have and implement the correct state Air Pollution Control District (APCD) permits before excavating any material. The permittee is required to comply with Rules 400 and 401 of the Great Basin Unified Air Pollution Control District.

- Operations that generate fugitive dust emissions shall be curtailed when wind velocities exceed 25 MPH. Dust-suppressing procedures shall be used on unpaved roads (that is, improving the road surface, applying dust suppressants or water, and/or limiting vehicle speeds to 15 MPH)

- Similar dust suppression measures will be used on open storage piles as needed; particularly if the silt content of such piles exceed 5%. The operation will be modified or additional mitigation applied if fugitive dust emissions exceed APCD standards.

3. Biological Resources

a) CDFW shall be contacted and any regulations or mitigations proposed by this agency shall be completed, including an incidental-take permit authorizing the take of the Mohave ground squirrels. Further mitigation to reduce the impacts to less than significant levels would be specified in the 2081 Incidental Take Permit issued by CDFW.

b) All native breeding birds, (except game birds) regardless of their listing status, are protected under the Migratory Bird Treaty Act (MBTA). Potential impacts to nesting birds are significant. When mining occurs between April 15th and July 15th, a survey (within three days prior to work in those areas) is required and must be conducted by a qualified biologist to determine presence/absence of active nests within or adjacent to the area to be mined. This stipulation prevents killing the young of federally and state protected migratory birds. If no nesting activities are detected within 200 feet of the proposed work area, mining activities may proceed. If nesting activity is confirmed, work activities within 200 feet of the active nest shall be delayed until the young birds have fledged and left the nest. Work shall proceed in another location that is at least 200 feet from the nest. A pre-mining survey will not be required if mining activities take place between July 16th and April 14th.

c) All applicable DRECP Conservation Management Actions (Appendix E of EA) related to minimizing impacts to sensitive plant species, features, communities, or alliances will be implemented, including but not limited to the following:

1 LUPA-BIO-7 Salvage and relocate cactus, nolina, and yucca (e.g., Joshua tree) from the site prior to disturbance using BLM protocols. To the maximum extent practicable for short-term disturbed areas (see Glossary of Terms), the cactus and yucca will be re-planted back to the original site.

2 LUPA-BIO-VEG-5 All activities will follow applicable BLM state and national regulations and policies for salvage and transplant of cactus, yucca, other succulents, and BLM Sensitive plants (e.g., Booth's evening-primrose).

4. **Lands and Access**
    a. Prior to hauling any material from the Makayla 2 project area, the operator will obtain a BLM-authorized road right-of-way for commercial access between the Makayla 2 minesite and the Gill Station/ Coso Junction (county) Road. This right-of-way will include necessary portions of already-existing BLM travel routes SE-431, SE-435 and (if BLM judges necessary) SE-430.

    b. BLM route SE-435 presently averages approximately 30 feet from berm-to-berm. No widening, re-routing or expansion SE-435 is authorized.

    c. The proposed action includes rerouting4 a small portion of BLM Route SE-431 in order to mitigate conflict between heavy equipment usage within the Makayla 2 pit and recreational traffic on SE-431 (see above *Design Features/Environmental Protection Measures*). Such rerouting will be done in a way that retains visitor enjoyment and retains safe access.

5. **Soils.**
    The operator will ensure compliance with the existing reclamation plan and California Surface Mining and Reclamation Act, including:
    a. Scraping topsoil from the top 6 inches of the area to be mined prior to mining operations;

    b. stockpiling, labeling, and protecting removed soil during the operation;

    c. spreading that soil over the re-contoured areas when reclaiming the site to a uniform depth of not less than 6 inches and then stabilized in a manner that retains the material in place and will insure maximum seed-bed preparation.

    d. Ensure that topsoil is not be compacted or stabilized to the degree that the topsoil is not a viable growing medium. Upon completion of operations, reclaim the area to simulate natural contours and native vegetative cover.

6. **Special Areas- ACEC and CDNCL**

    a. For the portion of the proposed activity that is located on undisturbed land (12.8 acres), the required disturbance mitigation ratio is 3:1 (per DRECP), therefore 38.4 acres will need to be mitigated. It takes decades for arid environments such as this area to fully restored, but active rehab will assist with this process.

    Following reclamation, the abundance and diversity of plants would be lower than prior to the operation. Pioneer species would colonize the sites. These plants, in turn, would be followed by short-lived shrubs and eventually long-lived shrubs. The site would not return to its pre- disturbance species mix and biomass for at least 50 years.

b. Ground disturbance mitigation must occur within the management unit within which it occurs. Mitigation opportunities would be investigated and decided on in consultation with the BLM and other agencies or parties as required. Ground disturbance mitigation is required to be completed within 12 months of disturbance. Southwest Pumice would remain in communication with the BLM regarding project progress and actual disturbance of the chosen alternative to ensure the correct acreage of ground disturbance mitigation is completed within the required time frame. The BLM must approve any restoration and revegetation techniques.

c. In addition, the Design Features and Environmental Protection Measures in Section 2.1 will minimize impacts to both the CDNCL and ACEC units. Some important measures include resource setbacks to avoid Focus and BLM special status species, no surface disturbance is authorized outside of the proposed operational areas, and weed management including but not limited to monitoring of non-native invasives and cleaning vehicles, which would assist with re-vegetation of natives in the future.

7. **Applicant Design Features/Environmental Protection Measures.** The following measures of the applicant are accepted and made part of the stipulations of this contract, as:

- A biologist would be on-site during excavations and equipment movement as needed to ensure avoidance and minimization measures are appropriately implemented;
- Pre-construction surveys for special status wildlife species will be conducted prior to activities to establish resource avoidance areas such as.
- The presence of a biological monitor would be used to establish sensitive resource avoidance areas as needed.
- Resource setbacks would be identified to avoid and minimize adverse effects to specific biological resources such as suitable habitat for Focus and BLM special status species, if present;
- Seasonal restrictions would be implemented or visual barriers installed for activities which may impact BLM special status species, if present;
- Worker education would be implemented to cover topics including, but not limited to, biological resource identification and protections, avoidance, reporting, and protection measures; the described predator subsidy management standards would be implemented as part of the Project design including, but not limited to, controlling food subsidies, water subsidies, and breeding site
- Subsidized predator standards will be implemented-All trash and food items shall be promptly contained within closed, raven-proof containers or placed out of site in vehicles with closed windows.

- Check under vehicles and equipment for tortoises before moving. If a tortoise is found underneath one, operator must wait until it leaves on its own accord.

- Vehicular traffic will not exceed 15 miles per hour on BLM access roads.

- All native breeding birds, (except game birds) regardless of their listing status, are protected under the Migratory Bird Treaty Act (MBTA). Potential impacts to nesting birds are significant. When mining occurs between April 15th and July 15th, a survey (within three days prior to work in those areas) is required and must be conducted by a qualified biologist to determine presence/absence of active nests within or adjacent to the area to be mined. This stipulation prevents killing the young of federally and state protected migratory birds. If no nesting activities are detected within 200 feet of the proposed work area, mining activities may proceed. If nesting activity is confirmed, work activities within 200 feet of the active nest shall be delayed until the young birds have fledged and left the nest. Work shall proceed in another location that is at least 200 feet from the nest. A pre-mining survey will not be required if mining activities take place between July 16th and April 14th.

- Weed management practices would be implemented as part of the Proposed Action operations including but not limited to vehicle cleaning, use of weed-free materials, and monitoring for weeds;

- Proposed Action activities would be confined to the designated routes and mine site.

- CDFW shall be contacted and any regulations or mitigations proposed by this agency shall be completed, including an incidental-take permit authorizing the take of the Mohave ground squirrels, Joshua trees, etc. Further mitigation to reduce the impacts to less than significant levels would be specified in the 2081 Incidental Take Permit issued by CDFW.

- The described closure and decommissioning measures would be covered by the site reclamation activities which will be approved by BLM

- The operator will obtain and adhere to the required permits or authorizations from the Great Basin Unified Air Pollution Control District (GBUAPCD). The operator will adhere to the required GBUAPCD prohibitions including fugitive dust precautions such as road watering or chemical applications for dust control, particulate matter standards, and nitrous oxide emission standards. A fugitive dust control plan would be prepared. Measures include covering loads and removing spilled materials from the loading area to maintain a lower-dust driving surface.

- Up-to-date industry practices would be used to prevent toxic substances from leaching into the soils;

- An emergency response plan would be prepared for the control of spills prior to Project initiation;

Attachment 3

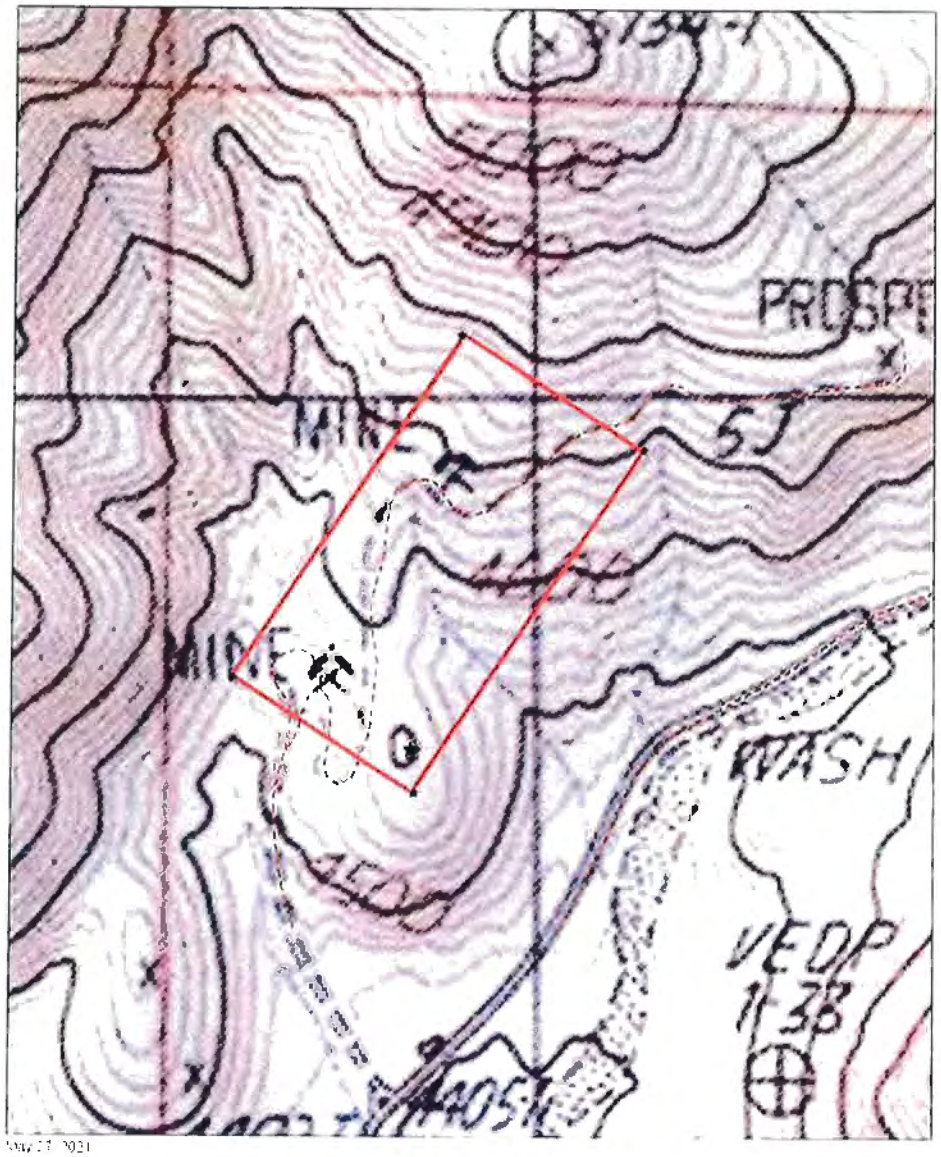
- The proponent will be required to follow all federal and state laws and regulations, including the Clean Air Act and the California Surface Mining and Reclamation Act, with site reclamation to be guaranteed by a reclamation bond mutually acceptable to the Bureau of Land Management, the County of Inyo and the State of California.

- No surface disturbance is authorized outside of the proposed operational areas.

- Rerouting of a small portion of BLM Route SE-431 will be done to mitigate conflict between heavy equipment usage within the Makayla 2 pit and recreational traffic on SE-431.

Attachment 3

Makayla 2 Pumice Sale CACA-58637



Attachment 3

FINDING OF NO SIGNIFICANT IMPACT

Makayla 2 Pumice Mine
Plan of Operations CACA-58637
and
Right-of-Way CACA-56716

Environmental Assessment
DOI-BLM-CA-D050-2021-0019-EA

Introduction:
The Bureau of Land Management (BLM) has conducted an environmental assessment (DOI-BLM-CA-D050-2021-0019-EA) to analyze the potential effect(s) of authorizing Southwest Global Pumice LLC to mine approximately 25 acres and remove 100,000 tons of pumice from BLM-managed public lands located in the Coso Mountains north and east of Coso Junction, Inyo County, California. See location map attached below.

The need for this action is established by the BLM's responsibility under FLPMA to respond to a request for mineral materials made under Title 43, Part 3600 of the Code of Federal Regulations. These regulations specify that: **(1)** it is BLM's policy to make mineral materials available unless it is detrimental to the public interest to do so (43 CFR 3601.6(a)), and; **(2)** that BLM will not dispose of mineral materials if it is determined that the aggregate damage to public lands and resources will exceed the expected public benefits (43 CFR 3611).

Plan Conformance and Consistency:
The proposed authorization is consistent with the California Desert Conservation Area Management Plan of 1980 (CDCA Plan) and its amendment, the Desert Renewable Energy Conservation Plan (DRECP) because:

The involved lands are within the Mohave Ground Squirrel Area of Critical Environmental Concern, which objective(s) include to "Support the national need for reliable and sustainable domestic minerals while protecting the sensitive resources in the area." See Appendix B of the *Desert Renewable Energy Conservation Plan* Amendment of the California Desert Conservation Area Management Plan.[1]

The proposed project site is within California Desert National Conservation Lands (CDNCL). The Desert Renewable Energy Conservation Plan Land Use Plan Amendment provides that CDNCL land may be made available for mineral material sales subject to mitigation requirements, including compensatory mitigation (reference Conservation Management Action NLCS-MIN-3).

[1] Available at https://eplanning.blm.gov/eplanning-ui/project/66459/510

Finding of No Significant Impact:
Based on a review of the Environmental Assessment and supporting referenced documents, I have determined the project is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27 and none exceed those effects as described in the California Desert Conservation Area Management Plan of 1980, as amended. An environmental impact statement is not required and will not be prepared.

This finding is based on the context and intensity of the project as explained below.

Context:
This project involves an area of up to 25 acres to be mined for pumice, and a right-of-way for access to the site. 'Significance' in this context means effects in the locale rather than in the world as a whole (40 CFR 1508.27(a)). The impacts associated with this project are short-term and local, and not likely in & of themselves to have international, national, regional or statewide impacts.

Intensity:
Intensity refers to the severity of impact. The NEPA criteria for evaluating intensity under 43 CFR 1508.27(b) include:

1. *Impacts may be both beneficial and adverse.*

   The proposed action may have impacts to resources as described in Environmental Assessment DOI-BLM-CA-DOI-D050-2021-0019-EA. The proponent has incorporated measures to reduce or mitigate impacts into the proposed action, with further stipulations recommended by BLM in Chapter 3 of the Environmental Assessment (*Affected Environment and Environmental Consequences*).

2. *The degree to which the selected alternative will affect public health or safety.*

   No potentially hazardous substances will be left on or in the vicinity of the project area. No hazard to the general public is anticipated from this action.

3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas.*

   The action has no effect to any prime farm lands, wilderness, or wild/scenic rivers. A class III cultural survey was completed for the project in accordance with Conservation Management Action CMA-LUPA-CUL-4. The Area of Potential Effect was surveyed by Duke Resources Cultural Management. Four prehistoric archeological sites identified, chiefly of lithic debitage, recommended as ineligible for the National Register of Historic Places, and BLM concurs with this recommendation. Approval of this project will not cause any adverse effects to any National Register eligible Historic Properties.

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

   BLM received many comments expressing concern or opposition to the project, and also received a comment expressing support. Controversy in this context means disagreement about the nature of the effects, not expressions of opposition to the proposed action or preference among the alternatives.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

   The pumice mining program is not unique or unusual. The effects to the human environment are fully analyzed and disclosed in this environmental assessment. No unique or unknown risks are identified by this assessment. The likely effects of the proposed action to air quality, water, wildlife, heritage resources, Native American values and recreation are adequately disclosed in the Environmental Consequences chapter of this Environmental Assessment. No unique, unusual or unknown risks to these resources are identified by this assessment.

6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

   The proposed action (including issuance of a mineral material sale contract and a right-of-way for access) are common actions on public land and would not set a precedent for future actions with significant impact.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

   The proposed action was considered by the interdisciplinary team with the context of past, present and reasonably foreseeable actions. Significant cumulative effects are not anticipated. An analysis of the effects of the proposed action is described in the EA.

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.*

   The project will not adversely affect scientific, cultural, or historic resources, including those eligible for listing in the National Register of Historic Places. An analysis of the effects of alternatives is described in the EA.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

   The area is not within designated critical habitat for any species listed as threatened or

endangered under the Endangered Species Act of 1973. The BLM has made a No Effect call for federally listed species, so long as the proposed protective measures found in the EA and Decision Record are followed.

10. *Whether the action threatens violation of a federal, state, local, or tribal law, regulation or policy imposed for the protection of the environment.*
BLM's authorization of the proposed action will not violate any federal, state, local, or tribal laws, regulation or policy imposed for protection of the environment.

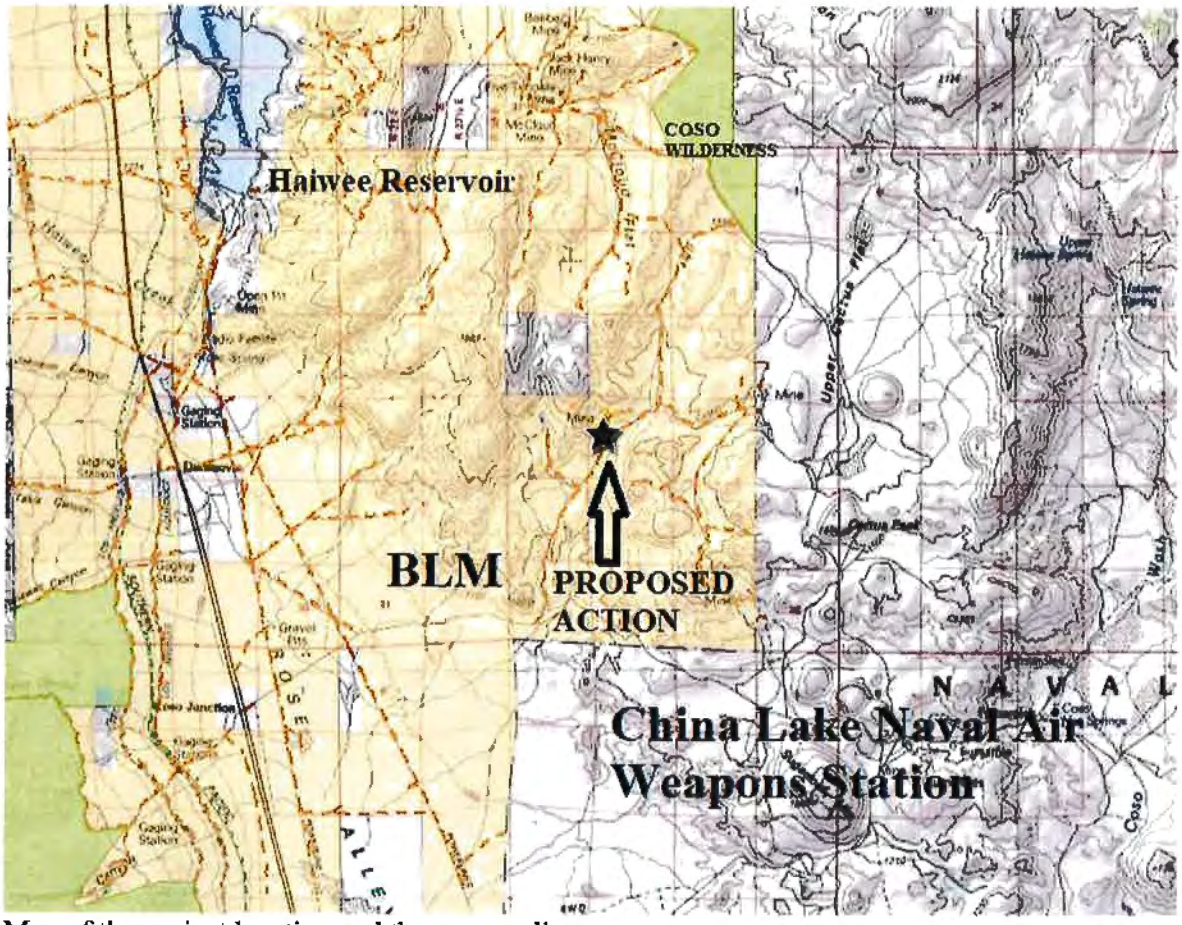
FONSI for DOI-BLM-CA-D050-2021-0019-EA

Signed: CARL SYMONS Digitally signed by CARL SYMONS Date: 2021.07.19 07:20:27 -07'00'

Carl B. Symons
BLM, Ridgecrest Field Manager

Date

Attachment 3



Map of the project location and the surrounding area.

Attachment 3

United States Department of the Interior
Bureau of Land Management

Decision Record

for

Environmental Assessment

DOI-BLM-CA-D050-2021-0019-EA

For

Pumice Material Sale Contract CACA-58637

and

Right-of-Way CACA-56716

Located approximately within:

NW¼ of Section 22,
Township 21 South, Range 38 East
of the
Mount Diablo Meridian,
Inyo County, California

Applicant:
Southwest Global Pumice, LLC
of
Apple Valley, California

Office of Record:

Bureau of Land Management
Ridgecrest Field Office
300 South Richmond Road
Ridgecrest, CA 93555
(760) 384-5400
Fax: (760) 384-5499
http://www.blm.gov/ofice/ridgecrest-field-office

Attachment 3

Decision Record
for
Pumice Material Sale Contract CACA-58637
and
Right-of-Way CACA-56716

I. SUMMARY OF THE PROPOSED ACTION

Southwest Global Pumice, LLC requests authorization to mine approximately 25 acres and purchase 100,000 tons of pumice from BLM-managed public lands within the Coso Mountains of Inyo Cunty, California, and a right-of-way authorizing road access to the same site. The proposed road right-of-way coincides with portions of BLM Routes SE-431 and SE-435 in order to provide access to the Inyo County's Coso Junction/Gill Station Road. No widening or rerouting of SE_435 is proposed. A segment of route SE-431 would be rerouted sufficiently to maintain safety and avoid conflict with the proposed 25-acre affected area. The proposed action is within Section 22 of Township 21 South, Range 38 East of the Mount Diablo Meridian and is described by Environmental Assessment DOI-BLM-CA-D050-2021-0019-EA.

PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the above environmental assessment and this Decision is to respond to an application to purchase mineral material from public lands, and the incident need for access to the sitc. The BLM's need to do so is established by the Federal Land Policy and Management Act of 1976 (FLPMA) and BLM policy set by federal regulation 43 CFR 3601.6. That regulation states it is BLM policy to make mineral materials available unless it is detrimental to the public interest to do so, and to protect public land resources and the environment during the removal of such minerals. BLM's need to respond to a road right-of-way application is established by Title V of the Federal Land Policy & Management Act of 1976 (43 USC 1761). BLM is required to respond to these applications while ensuring compliance with applicable land management plans, protection of resources, and compliance with Federal and State laws related to environmental protection.

II. DECISION

It is my decision to approve the proposed action subject to certain measures and stipulations designed to assure reclamation, protect environmental and wildlife resources and conform with California state law (see MITIGATION AND BLM-REQUIRED STIPULATONS, below).

III. ALTERNATIVES CONSIDERED INCLUDING THE PROPOSED ACTION

A. PROPOSED ACTION

The Proposed Action concerns a sales contract authorizing Southwest Global Pumice to purchase 100,000 tons of pumice from a 25-acre site on public lands, along with a road right-of-way providing terms of access from the mine site(s) to the Gill Station /Coso Road, both with

stipulations as dictated by the applicable Conservation Management Actions (CMAs) from the Desert Renewable Energy Conservation Plan (DRECP) (Appendix E of the EA), which is an amendment of the California Desert Conservation Area management plan of 1981. The proposed minesite is at or above 4500 feet in elevation. The involved BLM route network already exists and is at or above 3900 feet in elevation. The Coso Junction/Gill Station Road is below 3900 in elevation and is a public county highway outside BLM's jurisdiction.

The action includes removal of overburden from the affected area, stockpiling and loading material on trucks for transport on certain parts of the BLM transportation network to the Coso Junction/Gill Station Inyo County Road and delivery to market. The proposal is stipulated to comply with California state law as a condition of sale, including but not limited to the California Surface Mining and Reclamation Act.

Applicant Design Features/Environmental Protection Measures/CMAs

- A biologist would be on-site during excavations and equipment movement as needed to Ensure avoidance and minimization measures are appropriately implemented (CMA LUPA-BIO-2, LUPA-BIO-13).

- Pre-construction surveys for special status wildlife species will be conducted prior to activities to establish resource avoidance areas such as.

- Resource setbacks would be identified to avoid and minimize adverse effects to specific biological resources such as suitable habitat for Focus and BLM special status species if present (LUPA-BIO-3).

- Seasonal restrictions would be implemented, or visual barriers installed for activities which may impact BLM special status species, if present (LUPA-BIO-4).

- Worker education would be implemented to cover topics including, but not limited to, biological resource identification and protections, avoidance, reporting, and protection measures; the described predator subsidy management standards would be implemented as part of the Project design including, but not limited to, controlling food subsidies, water subsidies, and breeding site (LUPA-BIO-6).

- Subsidized predator standards will be implemented-All trash and food items shall be promptly contained within closed, raven-proof containers or placed out of site in vehicles with closed windows (LUPA-BIO-6).

- Check under vehicles and equipment for tortoises before moving. If a tortoise is found underneath one, operator must wait until it leaves on its own accord (LUPA-BIO-IFS-8).

- Vehicular traffic will not exceed 15 miles per hour on BLM access roads (LUPA-BIO-IFS-9).

- Weed management practices would be implemented as part of the Proposed Action operations including but not limited to vehicle cleaning, use of weed-free materials, and monitoring for weeds;

- Proposed Action activities would be confined to the designated routes and mine site.

- CDFW shall be contacted, and any regulations or mitigations proposed by this agency shall be completed, including an incidental-take permit authorizing the take of the Mohave ground squirrels, Joshua trees, etc. Further mitigation to reduce the impacts to less than significant levels would be specified in the 2081 Incidental Take Permit issued by CDFW (LUPA-BIO-IFS-39, 41).

- The described closure and decommissioning measures would be covered by the site reclamation activities which will be approved by BLM.

- The operator will obtain and adhere to the required permits or authorizations from the Great Basin Unified Air Pollution Control District (GBUAPCD). The operator will adhere to the required GBUAPCD prohibitions including fugitive dust precautions such as road watering or chemical applications for dust control, particulate matter standards, and nitrous oxide emission standards. A fugitive dust control plan would be prepared before project initiation. Measures include covering loads and removing spilled materials from the loading area to maintain a lower dust driving surface.

- Up-to-date industry practices would be used to prevent toxic substances from leaching into the soils;

- An emergency response plan would be prepared for the control of spills prior to project initiation;

- The proponent will be required to follow all federal and state laws and regulations, including the Clean Air Act and the California Surface Mining and Reclamation Act, with site reclamation to be guaranteed by a reclamation bond mutually acceptable to the Bureau of Land Management, the County of Inyo and the State of California.

- No surface disturbance is authorized outside of the proposed operational areas.

- Rerouting of a small portion of BLM Route SE-431 will be done to mitigate conflict between heavy equipment usage within the Makayla 2 pit and recreational traffic on SE-431.

BLM-REQUIRED STIPULATIONS (in addition to ones above)

1. The operator shall have and maintain an authorized Reclamation Plan in conformance with the California Surface Mining and Reclamation Act and ordinances of the County of Inyo.

Before commencing any operations other than reclamation, the operator shall supply BLM with a copy of a County Use Permit authorized by the County of Inyo, and a copy of reclamation bond/performance guarantee complying with county, state & federal requirements. The operator named on the financial instrument (Surety bond, certificate of deposit or other financial instrument) shall conform with that of the authorized operator.

2. **Air Quality Control Measures**.

   a. The operator will employ reasonably available measures to control PM10 emissions including:

Emission Source	*Mitigation Measure*
Disturbed Surface Area	Apply water and/or dust suppressants as required. Re-vegetate finished areas using native seeds and/or stockpiles topsoil.
Open storage piles	Continuously apply water and/or dust suppressants to produce a surface crust.
Loading/Hauling	Apply water to all stockpiles before loading. Cover loads prior to transport. Remove spilled materials from the loading area to maintain a lower-dust driving surface.
Mobile Equipment	Operate equipment when wind speed is low (25mph or less), at a speed of 15mph or that which produces a maximum of 20% opacity.
Unpaved road(s)	Improve road surface. Control vehicular traffic speed. Continuously apply water and/or dust suppressants. Track out onto paved road Sweep the paved road to reduce entrainment dust.

Other air quality protection measures include:

- The permittee shall have and implement the correct state Air Pollution Control District (APCD) permits before excavating any material. The permittee is required to comply with Rules 400 and 401 of the Great Basin Unified Air Pollution Control District.

- Operations that generate fugitive dust emissions shall be curtailed when wind velocities exceed 25 MPH. Dust-suppressing procedures shall be used on unpaved roads (that is,

improving the road surface, applying dust suppressants or water, and/or limiting vehicle speeds to 15 MPH)

- Similar dust suppression measures will be used on open storage piles as needed; particularly if the silt content of such piles exceed 5%. The operation will be modified, or additional mitigation applied if fugitive dust emissions exceed APCD standards.

3. Biological Resources

a) All native breeding birds, (except game birds) regardless of their listing status, are protected under the Migratory Bird Treaty Act (MBTA). Potential impacts to nesting birds are significant. When mining occurs between February 1 to August 31, a survey (within three days prior to work in those areas) is required and must be conducted by a qualified biologist to determine presence/absence of active nests within or adjacent to the area to be mined. This stipulation prevents killing the young of federally and state protected migratory birds. If no nesting activities are detected within 200 feet of the proposed work area, mining activities may proceed. If nesting activity is confirmed, work activities within 200 feet of the active nest shall be delayed until the young birds have fledged and left the nest. Work shall proceed in another location that is at least 200 feet from the nest. A pre-mining survey will not be required if mining activities take place between February 1 to August 31 (LUPA-BIO-4).

b) DRECP Conservation Management Actions (Appendix E of EA) related to minimizing impacts to sensitive plant species, features, communities, or alliances will be implemented, including but not limited to the following:

- LUPA-BIO-7 Salvage and relocate cactus, Nolina, and Yucca (e.g., Joshua tree) from the site prior to disturbance using BLM protocols. To the maximum extent practicable for short-term disturbed areas (see Glossary of Terms), the cactus and yucca will be re-planted back to the original site.
- LUPA-BIO-VEG-5 All activities will follow applicable BLM state and national regulations and policies for salvage and transplant of cactus, yucca, other succulents, and BLM Sensitive plants (e.g., Booth's evening-primrose).

4. Lands and Access

a. Prior to hauling any material from the Makayla 2 project area, the operator will obtain a BLM-authorized road right-of-way for commercial access between the Makayla 2 minesite and the Gill Station/ Coso Junction (county) Road. This right-of-way will include necessary portions of already-existing BLM travel routes SE-431, SE-435 and (if BLM judges necessary) SE-430.

b. BLM route SE-435 presently averages approximately 30 feet from berm-to-berm. No widening, re-routing or expansion SE-435 is authorized.

c. The proposed action includes rerouting4 a small portion of BLM Route SE-431 in order to mitigate conflict between heavy equipment usage within the Makayla 2 pit

and recreational traffic on SE-431 (see above *Design Features/Environmental Protection Measures*). Such rerouting will be done in a way that retains visitor enjoyment and retains safe access.

5. **Soils.**
The operator will ensure compliance with the existing reclamation plan and California Surface Mining and Reclamation Act, including:
   a. Scraping topsoil from the top 6 inches of the area to be mined prior to mining operations;

   b. Stockpiling, labeling, and protecting removed soil during the operation;

   c. Spreading that soil over the re-contoured areas when reclaiming the site to a uniform depth of not less than 6 inches and then stabilized in a manner that retains the material in place and will insure maximum seed-bed preparation.

   d. Ensure that topsoil is not compacted or stabilized to the degree that the topsoil is not a viable growing medium. Upon completion of operations, reclaim the area to simulate natural contours and native vegetative cover.

6. **Special Areas- ACEC and CDNCL**

   a. For the portion of the proposed activity that is located on undisturbed land (12.8 acres), the required disturbance mitigation ratio is 3:1 (per DRECP), therefore 38.4 acres will need to be mitigated. It takes decades for arid environments such as this area to fully restored, but active rehab will assist with this process.

      Following reclamation, the abundance and diversity of plants would be lower than prior to the operation. Pioneer species would colonize the sites. These plants, in turn, would be followed by short-lived shrubs and eventually long-lived shrubs. The site would not return to its pre- disturbance species mix and biomass for at least 50 years.

   b. Ground disturbance mitigation must occur within the management unit within which it occurs. Mitigation opportunities would be investigated and decided on in consultation with the BLM and other agencies or parties as required. Ground disturbance mitigation is required to be completed within 12 months of disturbance. Southwest Global Pumice would remain in communication with the BLM regarding project progress and actual disturbance of the chosen alternative to ensure the correct acreage of ground disturbance mitigation is completed within the required time frame. The BLM must approve any restoration and revegetation techniques.

   c. In addition, the Design Features and Environmental Protection Measures in Section 2.1 will minimize impacts to both the CDNCL and ACEC units. Some important measures include resource setbacks to avoid Focus and BLM special status species, no surface disturbance is authorized outside of the proposed operational areas, and

weed management including but not limited to monitoring of non-native invasives and cleaning vehicles, which would assist with re-vegetation of natives in the future.

B. NO ACTION ALTERNATIVE

In the No-Action Alternative, no sales contract or ROW would be issued. Southwest Global Pumice would be required to complete reclamation at the Makayla II site as required by CACA-47476 (i.e., the 2006 exploration project).

IV. RATIONALE FOR DECISION

The FONSI for this action determined that the proposed action will not affect the quality of the human environment and that preparation of an Environmental Impact Statement is not required. The proposed action conforms with BLM policy in 43 CFR 3601.6, which states that mineral materials will be made available unless it is against the public interest to do so. In my opinion the required stipulations and mitigation measures are sufficient to ensure protection of public land resources and the environment during the removal of these minerals.

V. COMPLIANCE WITH LAWS, REGULATIONS, POLICIES AND LAND USE PLANS

- BLM works cooperatively with lead agencies for the California Surface Mining and Reclamation (SMARA) to ensure that operators minimize adverse environmental impacts in conformance to applicable local, State and Federal regulations (October 1992). BLM shares a Memorandum of Understanding with the County of Inyo which outlines this cooperation. For that reason, BLM stipulates conformance with State and County requirements pertinent to mining, reclamation and bonding.

- This action complies with provisions of the Desert Renewable Energy Conservation Plan, which is an amendment of the California Desert Conservation Area Plan of 1980, as amended. Conservation Management Actions pertaining to this action are contained in Appendix E of Environmental Assessment DOI-BLM-CA-DOI-D050-2021-0019-EA.

VI. PUBLIC INVOLVEMENT

The EA for this action was placed on BLM's public ePlanning NEPA website at https://eplanning.blm.gov/ June 8, 2021 for 15 days of public input and comment (BLM press. release 6/8/2021). The public comments received by the BLM and the agency's responses are included in APPENDIX A of this decision.

VII. APPEALS

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1.

If an appeal is taken, your Notice of Appeal must be filed in this office at

Ridgecrest Field Manager
Ridgecrest Field Office
300 South Richmond Road
Ridgecrest, California 93555

within 30 days from the receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993 or 43 CFR 2804.1) for a Stay of this decision during the time that your appeal is being reviewed by the Board, the Petition for Stay must accompany your Notice of Appeal. A Petition for Stay is required to show sufficient justification based on the standards listed below. Copies of the Notice of Appeal and Petition for Stay must also be submitted to each party named in this decision, to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a Stay, you have the burden of proof to demonstrate that a Stay would be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law and other pertinent regulations, a Petition for a Stay of decision pending appeal shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the Stay is granted or denied;
2. The likelihood of the appellant's success on the merits;
3. The likelihood of the immediate and irreparable harm if the Stay is not granted; and
4. Whether the public interest favors granting a Stay.

Comments, including names and street addresses of respondents, will be available for public review at the above address during regular business hours (7:30 am – 4:00 pm), Monday-Friday, except holidays, and maybe published as part of this environmental assessment. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public review in their entirety.

CARL SYMONS

Digitally signed by CARL SYMONS
Date: 2021.07.19 07:18:54 -07'00'

Authorized Officer

Date

Attached:

Appendix A, Public Comments and Responses for DOI-BLM-CA-D050-2021-0019-EA

Appendix A: Public Comments and Responses

The Makayla 2 Pumice Mine Environmental Assessment (EA), DOI-BLM-CA-D050-2021-0019 -EA)[1], was posted for public review on the project ePlanning site for a 15-day period from June 8, 2021 through June 23, 2021. Comment letters were received from 1 individual, The Desert Tortoise Council, The Defenders of Wildlife, The Fort Independence Paiute Tribe, and the Great Basin Air Pollution Control District either by email or in ePlanning.

A federal agency, such as the BLM, may choose to respond to substantive and timely comments, although it is not required by regulation for an EA. Substantive comments-1) question, with reasonable basis, the accuracy of information in the EA; 2) question, with reasonable basis, the adequacy of, methodology for, or assumptions used for the environmental analysis; 3) present new information relevant to the analysis; 4) present reasonable alternatives other that those analyzed in the EA; and/or 4) cause changes or revisions in one or more of the alternatives (BLM's National Environmental Policy Act Handbook H-1790-1, Section 6.9.2.)

[1] Available at https://eplanning.blm.gov/eplanning-ui/project/2013862/510

Attachment 3

All comments submitted were reviewed; substantive comments were separated from non-substantive; and the BLM responses are below. Comments were summarized as multiple comments from different commenters were similar or identical. If a response resulted in the modifications to the EA, it is noted.

Scoping and Issues:

Comment 1: Commenter states that the source of the identified issues included in Table 1-1 should be disclosed so the public can assess the methodology used and the credibility of the source.
Response: Comment noted and added statement to Section 1.5: Scoping of Issues of EA pages 5. "An environmental resources analysis was conducted through coordination with the BLM Ridgecrest Interdisciplinary Team. Substantive issues discussed and potential impacts resulting from the Proposed Action and alternatives are summarized in Table 1.1 below."

Alternatives

Comment 2: Commenter believes the range of alternatives is insufficient and that BLM should analyze an alternative that would confine authorized pumice mining and associated activities to existing disturbed areas. Here, the applicant can extract a smaller quantity of pumice commensurate with an approved, reduced acreage, and which would allow for more efficient restoration of the open mine pit and vertical sidewall slopes.
Response: The purpose of this EA is to consider is to consider the applicant's request to purchase and remove 100,000 tons of pumice from certain public lands. It is BLM's policy to make mineral materials available unless it is detrimental to the public interest to do so. BLM will not dispose of mineral materials if it is determined that the aggregate damage to public lands and resources will exceed the expected public benefits (see EA Section 1.2, *Purpose and Need*). The EA did not consider confining the proposal to previously-disturbed lands because it would not be responsive to the purpose and need for this EA. That is, the smaller size and irregular boundaries of that alternative would make it problematic that 100.000 tons could be disposed here. Decreasing the surface area would also mean increasing the pit depth in order to obtain the same volume, which risks making final reclamation of the site more problematic. See Section 2.3, *Alternatives Considered but not Analyzed in Detail.*

Biological Resources: Special Status Species

Comment 3: Commenters are concerned that BLM made an No Effect determination for tortoises. They state tortoises have been observed in nearby Rose Valley and although the EA indicates a tortoise survey of the project site was performed in May 2019, no documentation of the survey methods and findings are included in the EA. They are concerned it is over a year old. Also, commenter concerned that tortoises are along the route leading from Hwy 395 to the Mine site.

Response: In addition to focused surveys, two general biological surveys were conducted at the site which consisted of initial meandering transects throughout the site to collect data on the plant and wildlife communities and potential food sources for sensitive species. Following completion of the initial reconnaissance surveys, comprchensive (i.e., 100 percent coverage) pedestrian surveys were performed throughout the site and periphery to document the vegetation present on the property and the wildlife species that inhabit the area. The surveys were conducted as per the survey protocol requirements for NEPA/ESA compliance for BLM special status plant species, and as required by CDFW for special status plant and animal species. Zone of influence surveys were also performed in the surrounding area. No desert tortoise individuals, or sign, were observed on site, or within an observable radius, during these surveys. Based off of these initial habitat surveys and literature reviews (primarily CNDDB, CALFLORA, and BIOS), focused surveys were then performed for species that had a moderate-to-high probability of site use or habitation. According to these sources, desert tortoises have a moderate probability of occurrence on site. Therefore, in accordance with USFWS protocol, a desert tortoise focused survey was conducted. No desert tortoise individuals, or sign, were observed on site, or within an observable radius, during these surveys.

Comment 4: Commenter points out that following statement appcars on page 10: "CDFW shall be contacted, and any regulations or mitigations proposed by this agency shall be completed, including an incidental-take permit authorizing the take of the Mohave ground squirrels. Further mitigation to reduce the impacts to less than significant levels would be specified in the 2081 Incidental Take Permit issued by CDFW." They recommend that the sentence should be amended to include Mojave desert tortoise, as it is state-listed as a Threatened species, which requires that any take of tortoises, including handling, must be authorized by CDFW.
***Response*:** The proponent has submitted the application for CESA Section 2081 Incidental Take Permit (ITP) for the incidental take of Mojave desert tortoise, Mohave ground squirrel, and western Joshua tree.

Comment 5: Commenter reminds BLM that the development of the site will require acquisition of a 2081 incidental take permit for MGS prior to ground disturbance since the DRECP does not authorize take.
***Response*:** See response to Comment 4.

Comment 6: Commenter concerned there is no mention of Golden Eagles in the EA. They recommend a survey be completed and conservation management actions be applied.
Response: In addition to focused surveys, two general biological surveys were conducted at the site which consisted of initial meandering transects throughout the site to collect data on the plant and wildlife communities and potential food sources for sensitive species. Following completion of the initial reconnaissance surveys, comprehensive (i.e., 100 percent coverage) pedestrian surveys were performed throughout the site and periphery to document the vegetation present on the property and the wildlife species that inhabit the area. Zone of influence surveys were also performed in the surrounding area. The surveys were conducted as per the survey protocol requirements for NEPA/ESA compliance for BLM special status plant species, and as required by CDFW for special status plant and animal species. No golden eagles were observed on site, or within an observable radius, during these surveys. Based off of these initial habitat surveys and literature reviews (primarily CNDDB, CALFLORA, and BIOS), focused surveys

were then performed for species that had a moderate-to-high probability of site use or habitation. According to these sources, golden eagles have a low probability of occurrence on site.

Comment 7: Commenter concerned that nesting bird surveys will only be required for ground disturbance that occurs between April 15 and July 15, but there is no reference supporting this time period for surveys. It is the commenters understanding for years that the effective dates for nesting bird surveys should be between March 15 and September 15, therefore they ask that BLM ensure the effective dates for nesting bird surveys are also discussed with knowledgeable agency biologists.
Response: Nesting bird surveys will be required within the recognized nesting period of all birds inhabiting, or potentially inhabiting the project area. Appropriate surveys will be conducted as part of the required pre-project clearance surveys and will be performed by a credentialed, agency-approved biologist (and/or USFWS Authorized Biologist).

Comment 8: Commenter states that BLM should inform the pumice mining permit applicant that it will have to contact the California Department of Fish and Wildlife (CDFW), Inland Deserts Region, to apply for and obtain an Incidental Take Permit for western Joshua trees.
Response: The proponent has submitted the application for CESA Section 2081 Incidental Take Permit (ITP) for the incidental take of Mojave desert tortoise, Mohave ground squirrel, and western Joshua tree. As part of the ITP application process, focused surveys were conducted for western Joshua trees. Data was collected include the following: individual location, size (height & DBH), number of branches, health of the tree, and any apparent damage to the trunk and/or root system. There are eight western Joshua trees that occur within the mine footprint, and which are suitable for transplanting. If project is approved, these individuals will be relocated to an area along the southern and eastern boundaries of Makayla 2 Mine. The remaining four trees, which are not suitable for transplanting, will be discarded as directed by the County and CDFW.

Comment 9: Commenters are concerned about BLM sensitive plants and the plant surveys that were undertaken and mention that the Barstow Woolly Sunflower was located 9.5 miles to the northwest of the project.
Response: Barstow woolly sunflower is not known to occur in or near the project site. In addition to focused surveys, two general biological surveys were conducted at the site, which consisted of initial meandering transects throughout the site to collect data on the plant and wildlife communities and potential food sources for sensitive wildlife species. Following completion of the initial reconnaissance surveys, comprehensive (i.e., 100 percent coverage) pedestrian surveys were performed throughout the site and periphery to document the vegetation present on the property and the wildlife species that inhabit the area. The surveys were conducted as per the survey protocol requirements for NEPA/ESA compliance for BLM special status plant species, and as required by CDFW for special status plant and animal species. A total of 50 plant species were identified during the field investigation. No Barstow woolly sunflowers were observed.

Geology, Mineral Resources and Energy Production:

Comment 10: Commenter asks if this mining is going to be "strip" mining and where will the slag go?
Response: The proposed action involves removing surface material in order to reach underlying pumice, stockpiling/saving that surface material and replacing it as part of reclamation. "Slag" is the non-metallic waste left after metallurgical operations. This is not a metallic mine, and no metallurgical operations are involved.

Comment 11: Commenter states that the entry into Table 1-1 for geology, mineral resources and energy production indicates there are no issues to these features from the proposed pumice mining. The rationale given is that "The 4/21/2020 Record of Decision for the Haiwee Geothermal Leasing Area Environmental Impact Statements explicitly removes any No Surface Occupancy requirements for this area. This being so, the proposed action poses no conflict with current land use plans." This rationale is misplaced because the No Surface Occupancy requirement is applicable to mineral leasing (e.g., geothermal, oil and gas) to protect sensitive public land resources from potential land surface impacts associated with mineral extraction activities. It is not applicable to mineral material sales. Furthermore, the rationale given, although incorrect, implies that approving the pumice mining action does not conflict in any manner with the California Desert Conservation Area Plan (as amended), which is also an incorrect conclusion.
Response: Section 1.2 of the EA explains that it is BLM's policy to make mineral materials available unless it is detrimental to the public interest to do so (43 CFR 3601.6(a). The prevailing land use plan does not prohibit mineral material disposal in this area. The Desert Renewable Energy Conservation Plan[2] (an amendment of the California Desert Conservation Area Plan) classifies this general area as part of the Mohave Ground Squirrel Area of Critical Environmental Concern (ACEC). Appendix B of the DRECP states it is an objective of the Mohave Ground Squirrel ACEC to support the national need for reliable and sustainable domestic minerals while protecting the sensitive resources in the area, with new proposals to be analyzed on a case-by-case basis to assess whether the proposal can be accommodated. Environmental Assessment DOI-BLM-CA-D050-2021-0019 -EA is part of that assessment process.

Cultural/Archaeological/Tribal

Comment 12: Commenters recommend that government-to-government consultation between the Bureau of Land Management (BLM) and Native American Tribe(s) whose ancestral homeland overlaps with the proposed pumice mine occur before BLM concludes that the only cultural resources needing to be addressed are "four lithic scatters that need formal National Register eligibility determination before permit approval." Consultation with Native American Tribes on federal undertakings or actions is required under the National Historic Preservation Act to identify cultural values, religious beliefs, traditional practices and the legal rights of affected Native American by BLM actions on public lands.
Response: The BLM Ridgecrest Field Office has been in continuous government to government consultation with many of the Tribes and Tribal communities within the region for the past

[2] Availabe at https://eplanning.blm.gov/eplanning-ui/project/66459/510

fifteen years (2006-2021). Significant consultations took place between the BLM and these Tribes, with the locations of important Tribal resources that occur within the greater Rose Valley-Coso Range locale being made know to the BLM, between 2006 and 2008 for the Hay Ranch water pipeline construction project that is located just two miles south of the Makayla-2 APE. Between 2009 and 2020 there were additional and frequent consultations between the BLM and the local Tribes regarding the Haiwee Geothermal Leasing Area (HGLA) initiative on how to address potential effects to important Tribal resources that could be caused by geothermal explorations within the Leasing Area. The APE of the proposed Makayla-2 mining undertaking occurs within the boundary of the HGLA. The BLM also conducted Tribal consultations during 2004-2005 for the original Makayla-1 pumice mine development, to the immediate west of the Makayla-2 APE; and also contacted the State of California, Native American Heritage Commission, (NAHC) during 2006 and again in 2020 as to whether the project area was associated with any entry in the NAHC Sacred Lands database. The NAHC replied both times that there were no entries in the Sacred Lands database near or associated with this project location. The cumulative result of these Tribal consultations is that of the important and significant Tribal resources, sites, locations, and features that have been made know to the BLM by the Tribes and their representatives, none occur within the Makayla-2 APE.

Comment 13: Commenter states that the area is also a historical corridor for Kawaiisu seasonal migration, and known sites exist through the area. It seems in conflict with the spirit of the area's cultural history to introduce any more destructive projects. Commenter asks if any "ethnographic interviews" are going to be conducted to determine the significance of the area to any tribes that may have used or continue to use to this area for cultural / spiritual purposes.
Response:- It is true that numerous prehistoric sites occur within the immediate vicinity of this proposed undertaking. The goal of the BLM Class III-level intensive field coverage by Duke Cultural Resource Management during the summer of 2020 of the proposed 25 acre Area of Potential Effects (APE), which is also the project area, was specifically conducted to ascertain what types of cultural resource occur within the APE so that their significances and importance could be identified and taken into consideration by the BLM prior to any project or permit approval. This field survey identified four prehistoric lithic scatter sites and the remanent of a 1950s era pumice mining quarry within the APE. Under the provisions of the BLM-SHPO Statewide Heritage Protocol Agreement, May 2019 edition, all five sites were evaluated for their eligibility potential for the National Register of Historic Places (NRHP). This evaluation examined whether the pumice mine had any association with events or persons important to American History or had any architectural or engineering contributions. The finding was Not Eligible on all three criteria. The pumice mine and the four prehistoric sites were then evaluated for their ability to contribute important scientific data to archeological research question, such as the use of the locale by the Kawaiisu peoples and limited archeological excavations of the four prehistoric sites failed to document any scientific data that would be a new significant contribution to the existing scientific data set already known for the Coso Range locale. The pumice mine did not contain any significant data either. Thus, all five sites were determined by the BLM as Not Eligible for the NRHP. Regarding ethnographic-ethnohistoric interviews or investigations, none are planned for this undertaking, primarily because of its relatively small size and project footprint. If a larger project should be proposed by the applicant, this request will indeed be given serious consideration.

Comment 14: Commenter asks if there is a treatment plan for artifacts and inadvertent discoveries? Is there an education plan for cultural awareness for the people conducting the work and which CRM firm has been hired to do the "pre-survey" work?
Response:
All artifacts collected, specifically from the Nation Register eligibility evaluation test excavations, are being curated at the Maturango Museum in Ridgecrest. Regarding inadvertent discoveries, the standard BLM requirements and those contain in the Federal regulation 36 CFR 800 for inadvertent discoveries will be follow and complied with. Regarding an education plan for the mine employees, this is indeed a requirement that the BLM can have included in the stipulations related to the approval of the applicant's plan of operation. Duke Cultural Resource Management of Irvine, CA, is the applicant retained heritage resource consultant.

Air Quality/Soil Erosion

Comment 15: Commenter concerned that these types of projects are degrading the area is through the light-colored dust.
Response: Comment noted. Fugitive dust emissions were included in the analysis of this project (See Section 3.1 of the Environment Assessment). The operator will be required to maintain appropriate permits of the Great Basin Unified Air Pollution Control District and to comply with dust control mitigation measures.

Comment 16: Commenter notes that Section 2.1 of the EA (page 11) states that "The operator would obtain and adhere to the required permits or authorizations from the Great Basin Unified Air Pollution Control District (GBUAPCD)". Commenter feels the assessment would be more complete if that statement were repeated in EA Section 3.1.
Response: BLM states in Environmental Assessment Section 3.1.3 that "The permittee shall have and implement the correct state Air Pollution Control District (APCD) permits before excavating any material." And states in Section 3.1.5 that "The Design Features and Environmental Protection Measures in Section 2.1 will minimize impacts to Air Quality and GHG Emissions." The above statements in Sections 2.0 and 3.1 convey the same meaning.

Comment 17: Commenter feels that EA Section 3.1 should state that all operations, whether requiring air permits or not, must comply with GBUAPCD rules, especially Rule 401 - Fugitive Dust.
Response: EA Section 2.1 (page 11) states that "the proponent will be required to follow all federal and state laws and regulations, including the Clean Air Act"-. Appendix E further states at LUPA-AIR-2 that "Because project authorizations are a federal undertaking, air quality standards for fugitive dust may not exceed local standards and requirements." These requirements to follow state laws & standards include compliance with GBUAPCD Rule 401. BLM's authorization for this action will stipulate the proponent's need to comply with state laws and requirements, including GBAPCD standards and requirements.

Comment 18: Commenter notes that on page 15, under "Mobile Equipment" the speed for mobile equipment is limited to 15 mph. However, on Page 17 (under section 3.1.3), a speed limit

of 20 mph is mentioned. The District recommends a consistent speed limit of 15 mph in the document.
Response: Thank you for this input. Mobile equipment will be limited to 15 mph in conformance with GBUAPCD standards and added to EA Section 3.1.1.

Comment 19: Commenter notes that the first bullet point on page 17 uses the term "state Air Pollution Control District", which is confusing. It seems like it should say either the "local Air Pollution Control District" or spell out the name of Great Basin Unified Air Pollution Control District. There may be other relevant state compliance measures, but these would be implemented by the California Air Resources Board (CARB).
Response: The State of California has 22 Air Pollution Control Districts, 12 Air Quality Management Districts and 1 Air Resources District for a total of 35 districts. The Great Basin Unified Air Pollution Control District covers Alpine, Mono and Inyo Counties and is included within the term "state Air Pollution Control District."

Comment 20: Commenter notes that the EA has no mention of Diesel Engines for power generation, but based on the operations at Makayla 1, it seems likely that diesel powered generators will be utilized at the site. Commenter feels that if diesel engines will be used, they should be included in the evaluation, and it should be mentioned that proper permits from GBUAPCD will need to be obtained.
Response: The EA states that the operator must comply with pertinent state & federal laws, including compliance with required permits and prohibitions of the Great Basin Unified Air Quality Control District (EA Section 2.1, page 11). Any BLM authorization will stipulate that compliance with State and Federal standards, including the GBUAPCD, is required as a condition of operation on public lands.

Visual Resources:

Comment 21: Commenter is concerned that an expansion over 25 acres would make more of the operation visible and leave more of a large scar on the surrounding hills.
Response: The EA notes that the project is located within a Class III visual resource management area with an objective of. EA p.22, 30. The visual resource classification was established in the DRECP. Visual resource class values are not however the sole determinant of how visual resources on public lands are managed, rather, public lands are managed for a variety of purposes. Most of the trail is on the back (east side) of the crest, but there is a short ¾ mile section that wraps around the west side.

Comment 22: Commenter concerned that other Project Proponents should be made to clean up the remainders of what is there from other mining endeavors, i.e., the pipes and other hardware from the former project crossing over into upper McCloud Flat.
Response: This comment is outside the scope of this EA. Furthermore, the other mining hardware that has been left does not belong to the Proponent of the proposed Makayla 2, Southwest Global Pumice, LLC.

Ground Disturbance Mitigation:

Comment 23: Commenter states that the project is within the Mohave Ground Squirrel ACEC and recommends that the specific ground disturbance mitigation selected for proposed pumice mining be included in the EA. If restoration of disturbed areas within the ACEC unit is selected, the exact location and condition of the selected areas to be restored should be documented and included in the EA, as well as adequately monitored to determine the degree of restoration success.
Response: Comment noted. The specific ground disturbance rehab site will be within the MGS ACEC as per DRECP CMA (ACEC-DIST-1, 2, etc.) and please see EA Section *3.6.4: Mitigation* on page 29 for more details.

Land Status and Designations:

Comment 24: Commenter states that Variance Lands are a category of public lands associated with solar energy generation facilities and have no relationship to mineral material sales. "The rationale for this feature not being an issue is that it does not apply to mineral material sales… since is doesn't apply, it can be eliminated from the EA."
Response: Variance lands were not analyzed in depth in the EA: See Table 1.1 page 8.

Attachment 3

Form 1842-1
(September 2006)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS
1. This decision is adverse to you,
AND
2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL

A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the *Notice of Appeal* in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a *Notice of Appeal* in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).

2. WHERE TO FILE

NOTICE OF APPEAL

RIDGECREST FIELD OFFICE
300 SOUTH RICHMOND ROAD
RIDGECREST, CA 93555

WITH COPY TO SOLICITOR

U.S. DEPARTMENT OF THE INTERIOR, OFFICE OF THE SOLICITOR,
PACIFIC SOUTHWEST REGION
2800 COTTAGE WAY, ROOM E-2753
SACRAMENTO, CA 95825-1890

3. STATEMENT OF REASONS

Within 30 days after filing the *Notice of Appeal*, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the *Notice of Appeal*, no additional statement is necessary (43 CFR 4.412 and 4.413).

WITH COPY TO SOLICITOR

U.S. DEPARTMENT OF THE INTERIOR, OFFICE OF THE SOLICITOR,
PACIFIC SOUTHWEST REGION,
2800 COTTAGE WAY, ROOM E-2753
SACRAMENTO, CA 95825-1890

4. ADVERSE PARTIES

Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the *Notice of Appeal*, (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413).

5. PROOF OF SERVICE

Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).

6. REQUEST FOR STAY

Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a *Notice of Appeal* (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your *Notice of Appeal* (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the *Notice of Appeal* and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

Attachment 3

Makayla 2 Environmental Assessment

DOI-BLM-CA-DOI-D050-2021-0019

Case Numbers
CACA-58637
and
CACA-56716

Bureau of Land Management
Ridgecrest Field Office
300 S. Richmond Road
Ridgecrest, CA 93555

Attachment 3

Table of Contents

1.0 Introduction

This Environmental Assessment (EA) has been prepared in conformance with the Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) (40 Code of Federal Regulations [CFR] § 1500-1508) and the BLM NEPA Handbook H-1790-1. This document further describes the applicant's committed environmental protection measures specifically designed to eliminate or reduce potential environmental impacts and summarizes the conservation management actions (CMAs) relevant to the proposed activities and locations.)

1.1 Summary of Proposed Project

Southwest Pumice LLC proposes to mine approximately 25 acres and remove 100,000 tons of pumice from BLM-managed public lands located in the Coso Mountains north and east of Coso Junction, Inyo County, California (see Figure 1 for a Project Vicinity Map). The Proposed Action is approximately 5.4 miles northeast of the intersection of U.S. 395 and Gill Station Coso Road, approximately 2.5 north of Gill Station Coso Road. The legal land description is within the NW¼ of Sec. 22, T21S, R38E of the Mount Diablo Meridian. The site is also approximately 2 miles west of the China Lake Naval Weapons Center, 10 miles east of the Sequoia National Forest, 35 miles north of the City of Ridgecrest, and 20 miles southwest of Death Valley National Park (see Appendix D, Maps 1,2 and 3 for the Project location and size).

1.2 Purpose and Need

The purpose of this action is to respond to permit application CACA-58637, submitted by Southwest Pumice LLC for development of pumice deposits. The need for this action is established by the BLM's responsibility under FLPMA to respond to a request for mineral materials made under Title 43, Part 3600 of the Code of Federal Regulations. These regulations specify that: **(1)** it is BLM's policy to make mineral materials available unless it is detrimental to the public interest to do so (43 CFR 3601.6(a)), and; **(2)** that BLM will not dispose of mineral materials if it is determined that the aggregate damage to public lands and resources will exceed the expected public benefits (43 CFR 3611). The area of the proposed action is largely described by previous environmental assessment CA 650-2005-101. That previous environmental assessment was an analysis of exploration rather than mining and assessed disturbance of a smaller area. The present environmental assessment analyzes the acreage of land to be affected by a mining operation.

Southwest Pumice LLC has also submitted road right-of-way application CACA-56716. This application concerns commercial usage and maintenance for portions of the BLM public route system providing access from the proposed minesite to the Gill Station- Coso Road (a County road of Inyo County). That access route is part of the West Mojave Route Network Project, Environmental Impact Statement DOI-BLM-CA-D080-2018-0008-EIS, Record of Decision October 3, 2019, available online at https://eplanning.blm.gov/eplanning-ui/project/93521.

This EA is intended to assist the BLM in project planning, to help compose appropriate management stipulations, and to ensure compliance with the National Environmental Policy Act

(NEPA).

1.3 Decision to be Made

BLM will decide whether to issue, or not issue a sales contract to Southwest Pumice LLC for 100,000 tons of pumice along with a right-of-way allowing Southwest Pumice use of the access roads, or alternatively that the aggregate damage to public lands and resources exceeds the public benefits that BLM expects from the proposed contract. Per 43 CFR 3601.11, BLM will not issue a sales contract if the agency decides that the aggregate damage to public lands is greater than the public benefit from the disposal of mineral materials.

1.4 Land Use Plan Conformance and Relationships to Statutes, Regulations and Other Plans

Applicable BLM land use plans for the project include the California Desert Conservation Area (CDCA) Plan of 1980, as amended. The latest amendment to the CDCA Plan (DRECP) was approved in September 2016. The Desert Renewable Energy Conservation Plan Amendment is publicly available online at https://eplanning.blm.gov/eplanning-ui/project/66459/510. The DRECP plan amendment balances land conservation and outdoor recreation with the growing demand for renewable energy, including identifying requisite Conservation and Management Actions(CMAs). an Area of Critical Environmental Concern and National Conservation Lands. The project would comply with all applicable statutes and regulations and all applicable DRECP CMAs. For a consistency analysis of the project relative to the DRECP's CMAs, see Appendix E.

The area covered by this EA is immediately contiguous to the area covered by Environmental Assessment CA650 -2005-101. The proposed area has similar resources and issues for wildlife, air quality, heritage resources and compliance with State/Federal reclamation requirements. Therefore, this present EA incorporates by reference both these EAs listed above. An electronic copy of each is available on request. The proposed action is within the Haiwee Known Geothermal Resource Area CACA-3769, Environmental Impact Statement DOI-BLM-CA-D050-2017-0002-EIS (Record of Decision April 24, 2020). The requested road right-of-way for access to the minesite is along BLM Routes SE431 and SE435 of the West Mojave Route Network Project, Environmental Impact Statement DOI-BLM-CA-D080-2018-0008-EIS, Record of Decision October 3, 2019. Copies of both Environmental Impact Statements are available at https://eplanning.blm.gov.

The alternatives are consistent and comply with the following federal laws and regulations:

- Mineral Materials Act, 30 USC 601
- Mineral Material Disposal Regulations 43 CFR 3600
- California Surface Mining & Reclamation Act Public Resources Code, Sec. 2710

- Inyo County Mining Ordinance 7.70
- *
- Section 102(a)(12) of the Federal Land Policy and Management Act of 1976 (FLPMA) states it is the policy of the United States that the public lands be managed in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands, including implementation of the Mining and Minerals Policy Act of 1970 (84 Stat. 1876, 30 U.S.C. 21a) as it pertains to the public lands.

- The National Historic Preservation Act (NHPA; 16 USC 470) requires federal agencies to consider the effect of federal undertakings (including federal authorizations) on sites that may be eligible for inclusion in the National Register of Historic Places (NRHP).

- The Endangered Species Act (ESA) (16 USC 1536) requires federal agencies to ensure that federally authorized actions are not likely to jeopardize the continued existence of any threatened or endangered species.

- Clean Air Act of 1970 (Public Law 88-206) as amended; The Great Basin Valleys Unified Air Pollution Control District has state air quality jurisdiction over the project area. See section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.).

1.5 Scoping and Issues

The issues analyzed in this EA have been identified based on the potential for the project to cause an impact on the human and physical environment at the site of the project. An environmental resources analysis was conducted through coordination with the BLM Ridgecrest Interdisciplinary Team. Substantive issues discussed and potential impacts resulting from the Proposed Action and alternatives are summarized in Table 1.1 below.

Table 1-1, *Issues*, identifies the issues raised by the project and presents a rationale for which resource/environmental factors warrant further analysis in this EA. An evaluation of these issues is presented in *Section 3.0, Affected Environment and Environmental Consequences.*

TABLE 1-1: ISSUES

Resource/ Environmental Factor	Further EA Analysis Warranted?	Issues
Air Quality	**Yes**	The proposed project will consist of mobile and stationary pumice dust emissions, dust emissions from maintenance of unpaved access routes, and dust emissions from vehicle traffic on these routes. This resource is further analyzed in Section 3.0, *Affected Environment and Environmental Consequences.*
Biological Resources	**Yes**	The proposed project is in an area having potential for occurrence of Joshua Tree and Booth's Evening

Resource/ Environmental Factor	Further EA Analysis Warranted?	Issues
		Primrose, Mohave Ground Squirrel, desert tortoise, and other special status species. Therefore, Biological resources are analyzed in Chapter 3 *Affected Environment and Environmental Consequences of the Proposed Action.*
Cultural Resources	**Yes**	Cultural study by Duke CRM identified four lithic scatter sites that need formal National Register eligibility determination before permit approval. This is further analyzed in Section 3.0, *Affected Environment and Environmental Consequences of the Proposed Action.*
Environmental Justice	**No**	There are no identified minority income populations in the project area. No further analysis is warranted in this EA.
Floodplains	**No**	The project is not located within any 100-year flood zones or other identified floodplain. No further analysis is warranted in this EA.
Farmland (Prime or Unique)	**No**	The project is not located within any Prime or Unique Farmlands as designated by the U.S. Department of Agriculture. No further analysis is warranted in this EA.
Fuels and Fire Management	**No**	With implementation of Mitigation Measures, the project operator would implement a Fire Safety Plan to minimize potential for ignition and spread of wildland fire during construction, operation and decommissioning of the project., adherence to building codes relevant to fire safety and other applicable laws and regulations would reduce wildfire ignition potential and project-related wildfire risk. No further analysis is warranted in this EA.
Greenhouse Gas Emissions	**Yes**	The project would generate greenhouse gas (GHG) emissions during construction, operation and decommissioning activities. This environmental factor is further analyzed in Section 3.0, *Affected Environment and Environmental Consequences.*
Geology / Mineral Resources/ Energy Production	No	The 4/21/2020 Record of Decision for the Haiwee Geothermal Leasing Area Environmental Impact Statements explicitly removes any No Surface Occupancy requirements for this area. This being so, the proposed action poses no conflict with current land use plans.
Invasive Plants /	**No**	The project will fully comply with DRECP CMA LUPA-BIO-10, which establishes standard practices for weed management; therefore, there will be no substantial impacts or extraordinary

Resource/ Environmental Factor	Further EA Analysis Warranted?	Issues
Noxious Weeds		circumstances with respect to the management of invasive species/noxious weeds. No further analysis is warranted in this EA.
Lands/Access	**Yes**	The road(s) connecting the Makayla 2 site to Gills Station Coso Road are designated as Motorized travel routes by the West Mojave Route Network Plan (routes SE-435 and 431). Southwest Pumice has submitted a pending road right-of-way application for access from the Makayla site(s) to the Gills Station-Coso Junction Inyo County Road. Issues regarding right-of-way usage, sharing and maintenance will be addressed in Section 3.0, *Affected Environment and Environmental Consequences*.
Livestock Grazing	**No**	Cattle Grazing occurs in the area, but no range facilities would be affected. No change in AUMs would be necessary due to small size of the proposal. No further analysis is warranted in this EA.
Noise	**No**	BMPs and the temporary nature of the project does not affect noise to the degree that it needs to be analyzed in depth. The site is some miles from the nearest habitation with the view and sound blocked by surrounding hills.
Paleontological Resources	**No**	Project Area is entirely a volcanic rock formation with no potential for occurrence of vertebrate fossils.
Wastes (Hazardous or Solid)	**No**	No potentially harmful materials would be left on, or in the vicinity of the project area. No further analysis is warranted in this EA.
Recreation	**No**	Recreation use occurs in the general area, but recreational use such as hiking and horseback riding could travel around the site as needed. No further analysis is warranted in this EA.
Socioeconomics	**No**	There are no identified minority or low-income populations in the study area for the project. No further analysis is warranted in this EA.
Soils	**Yes**	The project may result in soil erosion. This resource is further analyzed in Section 3.0, *Affected Environment and Environmental Consequences.*
Special Designations	**Yes**	Both an Area of Critical Environmental Concern (ACEC) and National Conservation Lands (NCL) occur on the site:

Resource/ Environmental Factor	Further EA Analysis Warranted?	Issues
		• Basin and Range CDNCL • Mohave Ground Squirrel ACEC This resource is further analyzed in Section 3.0, *Affected Environment and Environmental Consequences.*
Unallocated Lands	**No**	Unallocated lands are not present at or near the project site. No further analysis is warranted in this EA.
Variance Lands	**No**	Variance lands are not present at or near the project site. No further analysis is warranted in this EA.
Visual Resources	**No**	VRM Class III. The existing pit and its proposed expansion area are located in a small canyon. They are not visible from Gill Station Road. Intervening ridgelines block the views, therefor no further analysis of visual resources is warranted.
Wetlands / Riparian Zones	**No**	No wetlands or riparian zones are at or near the project site. No further analysis is warranted in this EA.
Wild and Scenic Rivers	**No**	No wild and scenic rivers are identified in or adjacent to the project area. No further analysis is warranted in this EA.
Water Resources	**No**	BMPs and CMAs will be implemented therefor the project will not affect water resources to the degree that it needs to be analyzed in depth.
Wild Horses and Burros	**No**	The project area would be within the Centennial Herd Area, however wild horses and burros very rarely are seen in this area. No additional analysis is needed for this resource.

~~See Appendix B for the Interdisciplinary Team Checklist.~~

2.0 Alternatives

2.1 Alternative 1- Proposed Action

The Proposed Action is to issue a sales contract from BLM to Southwest Pumice for 100,000 tons of pumice, along with a road right-of-way providing terms of access from the mine site(s) to the Gills Station Coso Road, both with stipulations as dictated by the applicable CMAs from the DRECP.

A substantial part of the area for this proposed action was previously studied by environmental assessment CA065-NEPA-2005-101 (see Appendix D, Map 4). The purpose of CA650-NEPA-2005-101 concerned assessing the effects of a pumice exploration program by California Lightweight Pumice, LLC, including several bulk sampling localities. Former bulk sampling locations BS-1, BS-2 and BS-4 were/are located within the area of this proposed action (see Figure 4, below). All the described Bulk Sampling Site areas have been mined previously. Based on preliminary field visits and aerial photographs, it is estimated that there is roughly 12.2 ± acres of existing disturbance from past mining and prospecting activities in the general project area, not including the access roads (see Appendix D, Map 6). Numerous test pits occur throughout the area. The existing disturbance is from mining activities conducted from 1945 to 1947, the 1980s, and most recently 2006-2007.

Southwest Pumice (SWP) submitted a Plan of Operation July 30, 2019 to the BLM, Ridgecrest Field Office to commence mining activities on public lands located on a portion of Township 21 South, Range 38 East, Section 22, Mount Diablo Meridian. The proposed operation involves the disturbance of 25 acres, with the initial focus on the reclamation of the 50-75 foot-high walls left by California Lightweight Pumice (CLP) in 2007.

The Plan has several components including excavation, removal of overburden and stock piling of both overburden topsoil and saleable pumice materials.

The overburden will be removed with a D-9 Dozer and stockpiled as topsoil and reapplied during future reclamation. The pumice material will be loaded onto trucks and hauled to the Makayla 1 site (located within 1 /2 mile) for crushing and processing. SWP will transition and move the crushing plant over to the Makayla 2 mine site within 12-18 months following commencement of mining at Makayla 2. The routes involved are shown at Appendix D, Map 7.

Reclamation will be accomplished by using the stockpiled overburden to backfill any open pits created by mining activities. Steep pit walls created by excavation will be graded to 2:1 slopes. Topsoil will be reapplied to the slopes, pit bottom and test pits. The slopes will be furrowed and re-vegetated with a native seed mix approved by BLM.

The specific proposed area of use will be approximately 25 acres and access routes, which includes: 2.4 acres of the Main Access Road. Within the specific area of use, approximately 12.2± acres are already disturbed including the following: Five (5) of the nineteen (19) Test Pits are existing resulting in 0.11 acres of existing disturbance; 2.9 acres of the 4 acres of Bulk

Sampling Sites are already disturbed: approximately 650 feet of Access Road No. 1 is part of an existing 4WD path resulting in 0.18 acres of existing disturbance; and the entire Main Access Road is existing (2.4 acres). The project will result in 12.8 acres of new disturbance. Grading of access routes will be kept to a bare minimum as needed for safety.

Design Features/Environmental Protection Measures

- A biologist would be on-site during excavations and equipment movement as needed to ensure avoidance and minimization measures are appropriately implemented;
- Resources setbacks would be identified to avoid and minimize adverse effects to specific biological resources such as suitable habitat for Focus and BLM special status species, if present;
- Seasonal restrictions would be implemented or visual barriers installed for activities which may impact BLM special status species, if present;
- Worker education would be implemented to cover topics including, but not limited to, biological resource identification and protections, avoidance, reporting, and protection measures; the described predator subsidy management standards would be implemented as part of the Project design including, but not limited to, controlling food subsidies, water subsidies, and breeding site
- Subsidized predator standards will be implemented-All trash and food items shall be promptly contained within closed, raven-proof containers or placed out of site in vehicles with closed windows.
- Check under vehicles and equipment for tortoises before moving. If a tortoise is found underneath one, operator must wait until it leaves on its own accord.
- Vehicular traffic will not exceed 15 miles per hour on BLM access roads.
- All native breeding birds, (except game birds) regardless of their listing status, are protected under the Migratory Bird Treaty Act (MBTA). Potential impacts to nesting birds are significant. When mining occurs between April 15th and July 15th, a survey (within three days prior to work in those areas) is required and must be conducted by a qualified biologist to determine presence/absence of active nests within or adjacent to the area to be mined. This stipulation prevents killing the young of federally and state protected migratory birds. If no nesting activities are detected within 200 feet of the proposed work area, mining activities may proceed. If nesting activity is confirmed, work activities within 200 feet of the active nest shall be delayed until the young birds have fledged and left the nest. Work shall proceed in another location that is at least 200 feet from the nest. A pre-mining survey will not be required if mining activities take place between July 16th and April 14th.
- Pre-construction surveys for special status wildlife species will be conducted prior to activities to establish resource avoidance areas such as.

- Weed management practices would be implemented as part of the Proposed Action operations including but not limited to vehicle cleaning, use of weed-free materials, and monitoring for weeds;
- The presence of a biological monitor would be used to establish sensitive resource avoidance areas as needed.
- Proposed Action activities would be confined to the designated routes and mine site.
- CDFW shall be contacted and any regulations or mitigations proposed by this agency shall be completed, including an incidental-take permit authorizing the take of the Mohave ground squirrels. Further mitigation to reduce the impacts to less than significant levels would be specified in the 2081 Incidental Take Permit issued by CDFW.
- The described closure and decommissioning measures would be covered by the site reclamation activities which will be approved by BLM
- The operator would obtain and adhere to the required permits or authorizations from the Great Basin Unified Air Pollution Control District (GBUAPCD). The operator would also adhere to the required GBUAPCD prohibitions including fugitive dust precautions such as road watering or chemical applications for dust control, particulate matter standards, and nitrous oxide emission standards. A fugitive dust control plan would be prepared. Measures include covering loads and removing spilled materials from the loading area to maintain a lower-dust driving surface.
- Up-to-date industry practices would be used to prevent toxic substances from leaching into the soils;
- An emergency response plan would be prepared for the control of spills prior to Project initiation;
- The proponent will be required to follow all federal and state laws and regulations, including the Clean Air Act and the California Surface Mining and Reclamation Act, with site reclamation to be guaranteed by a reclamation bond mutually acceptable to the Bureau of Land Management, the County of Inyo and the State of California.
- No surface disturbance is authorized outside of the proposed operational areas.
- Rerouting of a small portion of BLM Route SE-431 will be done to mitigate conflict between heavy equipment usage within the Makayla 2 pit and recreational traffic on SE-431.

2.2 Alternative 1 - No Action Alternative

In the No-Action Alternative, no sales contract or ROW would be issued. Southwest Pumice would be required to complete reclamation at the Makayla II site as required by CACA-47476 (the 2006 exploration project).

2.3 *Alternatives Considered but not Analyzed in Detail*

The National Environmental Policy Act requires environmental assessments to analyze reasonably foreseeable actions and/or impact of a proposal to the extent, but only to the extent for the purpose and need of the action. This document does not analyze the impact of disposing 100,000 tons of pumice from a smaller acreage (smaller than 25 acres) because this could only be achieved by deepening the pit and changing the highwall angle to a steepness greater than 2:1. This would increase the difficulty of reclaiming the site at the end of operations.

3.0 Affected Environment and Environmental Consequences

Introduction to Affected Environment

This section presents an assessment of changes to the human environment that are reasonably foreseeable and have a close causal relationship to the proposed action and alternatives and may include effects that are later in time or farther removed in distance from the proposed action and alternatives. Reasonably foreseeable future actions are those for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends. This section also presents the environmental consequences relative to the issues warranting further analysis identified in Sec. 1.5. The following information regarding past, present, and future relevant actions for effects applies to all alternatives, and for all resource impacts discussed below:

Past and Present Relevant Actions

Background:
Prior to 1955 the General Mining Laws allowed mineral location of common pumice deposits. Crownite Corporation located several pumice claims in this area in the 1940s. At some point in the early 1980s Crownite Corporation leased these claims to an operator, California Lightweight Pumice, Inc (see underlined locations in Figure 1, below). Crownite failed to file the required affidavit of assessment work December 30, 1982, and BLM issued a decision June 14, 1983 finding these claims null & void. The Surface Resources Act of 1955 removed common pumice from further location under the General Mining Laws, removing the possibility of locating new placer claims for pumice. The Crownite/California Lighweight Pumice Corporation(s) were held in trespass for operating a mineral material site without a sale contract (case CACA-19767 & CACA-24090). BLM decided to hold a public sale auction to determine a resolution to this trespass (environmental assessment CA-065-89-24, available on request). A sale public auction was held January 16, 1990 to determine fair market value for the pumice materials involved. No bids were received. As a resolution, California Lightweight Pumice paid monthly installments toward the necessary trespass amount and BLM issued sale contract(s) to California Lightweight Pumice. The present Makayla 2 location is near,but was not included by environmental assessment CA-065-89-24.

Area of Proposed Action:
The Haiwee Reservoir 15-minute Quadrangle (published 1951) indicates a pumice mine of unknown size was present at this location in 1951 (See Appendix D, Map 5). In 2005 California Lightweight Pumice (CLP) applied for a permit to sample certain locations in the NW¼ of Sec. 22, T.21S., R.38E., MDM. The purpose of the permit was to explore for new pumice deposits as the existing pumice becomes uneconomic. The exploration proposal was analyzed as environmental assessment CA065-2005-101, available on request. Exploration permit CACA-47476 was issued 6/16/2006 and expired 3/28/2007. See Appendix D-Figure 6 for amount of disturbance and appearance of the site after the above two operations.

Reasonably Foreseeable Relevant Actions Not Part of the Proposed Action •
Haiwee Geothermal Leasing Area projects- 3 authorized, non-competitive geothermal lease applications on 4,460 acres of public land within the HGLA.

General Environment

The proposed project is within the Coso Range, a north-south trending mountain range composed largely of igneous rock formations near the southwestern edge of the Great Basin. The general region is in the rain shadow of the Sierra Nevada Mountains. The climate is generally characterized by mild winters and long, hot summers, with roughly 3-7 inches of annual precipitation. The site is located approximately 5.5 miles NE of intersection of US 395 and Gill Station/Coso Road, on the south-facing slope of a hilly area within the Coso Range. Elevation ranges from approximately 4,400 to 4,900 feet above mean sea level. The general location lies approximately 2 miles west of the China Lake Naval Weapons Center, 10 miles east of the Sequoia National Forest, 35 miles north of Ridgecrest and 20 miles southwest of Death Valley National Park. (see Figures 1 and 2). The Project site is situated on the northwestern side of BLM access route SE-435. The landscape around the site bears extensive evidence of past mining activities, but large areas of undisturbed native landscape remain.

3.1 Air Quality and Green House Gas Emissions

3.1.1 Affected Environment

The project area is under the jurisdiction of the Great Basin Unified Air Quality Control District and lies within the Coso Junction PM10 Planning Area (CJPA). [1]

Air pollution in the Coso Junction planning Area (CJPA) is dominated by wind-blown dust transported from Owens Lake, located north of this Planning Area and within the Owens Valley PM10 Planning Area. Sources include the Coso geothermal power operations, military operations at the China Lake Naval Air Weapons Station, volcanic cinder mining at Red Hill and pumice mining operations.

The Coso Junction Planning Area (CJPA) was designated a PM10 nonattainment area in 1987. The CJPA was redesignated as attainment for PM10 National Ambient Air Quality Standards (NAAQS) by the U.S. Environmental Protection Agency July 29, 2010[2]. The area is currently under review for continuation of its PM10 attainment status for another 10-year period.

[1] Reference "2010 Maintenance Plan and Redesignation Request for the Coso Junction Planning Area", at https://www.gbuapcd.org/Docs/District/AirQualityPlans/Coso/2010CosoPM10MaintenancePlan.pdf (a revision to the State Implementation Plan for Coso Junction Planning Area).

[2] May 2021 Draft Coso Junction PM10 Planning Area Second 10-Year Maintenance Plan, at https://www.gbuapcd.org/Docs/District/AirQualityPlans/Coso/2021DRAFTCosoPM10SecondMaintenancePlan.pdf.

Attachment 3

The reported emission sources for the Coso Junction Planning Area include:

Annual PM10 emission inventory for the Coso Junction Planning Area

STATIONARY SOURCES	Estimated Amount PM10 emissions
COSO ENERGY DEVELOPERS	262#day (47.8 ton/yr)
TWIN MOUNTAIN ROCK VENTURES	235 #/day (42.9 ton/yr)
CHINA LAKE NAVAL AIR WEAPON STATION	191 #/day (34.9 ton/yr)
SOUTHWEST PUMICE LLC	185 #/day (33.8 ton/yr)
BOWMAN ASPHALT, INC.	86 #/day (15.7 ton/yr)
All other Stationary Sources	1 #/day (<0.2 ton/yr)
AREA SOURCES	
Entrained Dust – Vehicle Travel	120 #/day (21.9 ton/yr)
Windblown Dust – Unpaved Roads	216 #/day (38.4 ton/yr)
Windblown Dust – Open Areas	72,682 #/day (13,273 ton/yr)
Mobile Sources	14.09 #/day (2.5 ton/yr)

Source:
https://www.gbuapcd.org/Docs/District/AirQualityPlans/Coso/2021DRAFTCosoPM10SecondMaintenancePlan.pdf

Southwest Pumice LLC employs, or will be required to employ reasonably available measures to control PM10 emissions including:

Disturbed Surface Area:	Apply water and/or dust suppressants as required. Re-vegetate finished areas using native seeds and/or stockpiles topsoil.
Open storage piles:	Continuously apply water and/or dust suppressants to produce a surface crust.
Loading/Hauling:	Apply water to all stockpiles before loading. Cover loads prior to transport. Remove spilled materials from the loading area to maintain a lower-dust driving surface.

Mobile Equipment:	Operate equipment when wind speed is low (25mph or less), at a speed of 15mph or that which produces a maximum of 20% opacity.
Unpaved road(s):	Improve road surface. Control vehicular traffic speed. Continuously apply water and/or dust suppressants. Track out onto paved road Sweep the paved road to reduce entrainment dust.

Green House Gas Emissions

Greenhouse gases (GHGs) are those that allow short-wave solar radiation to enter the earth's atmosphere but absorb long-wave infrared radiation reemitted from the earth's surface. Greenhouse gases can affect climate patterns, which in turn can affect resources and management.

Climate represents the long-term statistical characterization of daily, seasonal, and annual weather conditions such as temperature, relative humidity, precipitation, cloud cover, solar radiation, wind speed, and direction. Climate is the composite of generally prevailing weather conditions of a particular region throughout the year, averaged over a series of years. A region's climate is affected by latitude, terrain, and altitude, as well as nearby water bodies and their currents. As GHG levels in the atmosphere change, so may a region's climate.

Gases exhibiting greenhouse properties come from both natural and human sources. Water vapor, carbon dioxide (CO_2), methane, and nitrous oxides (NO_x) are examples of greenhouse gases that have both natural and man-made sources, while other greenhouse gases, such as chlorofluorocarbons, are exclusively man-made. Although GHG levels have varied for millennia, recent industrialization and burning of fossil carbon sources have caused carbon dioxide equivalent concentrations to increase and have the potential to contribute to overall global climatic changes. The Intergovernmental Panel on Climate Change recently concluded that "human influence has been detected in warming of the atmosphere and the ocean, in changes in the global water cycle, in reductions in snow and ice, in global mean sea level rise, and in changes in some climate extremes it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century" (IPCC, 2013).

California is a substantial contributor to global GHG emissions as it is the second largest contributor in the U.S. and the 16th largest in the world. (California Energy Commission (CEC). 2006. Inventory Greenhouse Gas Emissions and Sinks: 1990 to 2004. Staff Final Report (CEC-600-2006-013-SF). GHGs include:

1. Carbon dioxide (CO_2)
2. Methane (CH4)
3. Mono-nitrogen oxides (NOx)
4. Hydrofluorocarbons (HFCs)
5. Perfluorocarbons (PFCs)
6. Sulfur hexafluoride (SF6)

According to the Intergovernmental Panel on Climate Change (IPCC) Third Assessment Report,

increased atmospheric levels of CO_2 correlate with rising temperatures; concentrations of CO_2 have increased by 31 percent above pre-industrial levels since 1750. Climate models show that temperatures will probably increase by 1.4 degrees Celsius (°C) to 5.8 °C between 1990 and 2100. Much uncertainty in this increase results from not knowing future CO_2 emissions and inherent uncertainty in the assumptions that frame climate models.

Different GHGs can have different effects on the earth's warming. Two key-ways in which these gases differ from each other are their ability to absorb energy (their radiative efficiency), and how long they stay in the atmosphere (also known as their lifetime). The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of one ton of a gas will absorb over a given period of time, relative to the emissions of one ton of CO_2. The larger the GWP, the more that a given gas warms the earth compared to CO_2 over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure of how much a given mass of GHG is estimated to contribute to global warming and is devised to enable comparison of the warming effects of different gases. It is a relative scale that compares the gas in question to that of the same mass of CO_2. CO_2 equivalence (CO_2e) is a measure used to compare the emissions from various GHGs based on their GWP, when measured over a specified time scale (generally 100 years). The CO_2e for a gas is obtained by multiplying the mass (in tons) by the GWP of the gas.

California is a substantial contributor to global GHG emissions as it is the second largest contributor in the United States and the 16th largest in the world. Sources of greenhouse gas emissions in the vicinity of the Project area are primarily vehicles and mobile equipment, construction and operation for mineral and energy development, and livestock grazing. Urban areas to the west of the Project area contain larger industrial sources. To the extent that these activities increase, GHG emissions are also likely to increase.

The Final Mandatory Reporting of Greenhouse Gases Rule issued by the Environmental Protection Agency (EPA), as signed on September 22, 2009, requires suppliers of fossil fuels or industrial GHG, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports to the EPA (40 CFR 98).

The existing Makayla 1 quarry currently uses mobile equipment which emit GHGs for which emission quantity totals have never been calculated. This equipment would be moved to the quarry in the proposed action and would be expected to be the same as the current emissions.

3.1.2 Environmental Impacts—No Action Alternative

Under the No Action Alternative, the project site would remain undeveloped and there would be no ground disturbance and operation activities that would generate air or greenhouse gas emissions. Therefore, there would be no impacts to air resources.

3.1.3 Environmental Impacts—Proposed Action

PM-10 Emissions from the proposed action would have both direct and indirect effects. Direct

emissions would come from vehicle use on the access roads, heavy equipment operation and material handling in the form of $PM_{2.5}$ dust emissions. Indirect emissions will occur in the form of increased fugitive dust during windstorms due to soil disturbance related to the proposed action. Impacts to air quality as a result of the proposed project will consist of mobile and stationary pumice dust emissions, dust emissions from maintenance of dirt access roads, and dust emissions from vehicle traffic on dirt access roads. The proposed expansion will likely result in continued dust emissions in the same manner and kind as the present quarry. ~~California Lightweight Pumice~~ Southwest Pumice, LLC, is in compliance with existing federal requirements and has the required permits from the Great Basin Air Quality Control District. The continued application of these measures should result in dust emissions little or no different from those of the No Action Alternative. One should note that the existing quarry and sale contract is already subject to mitigation for air and climate resources (see appendix), and the proposed action includes extending these same measures to any expansion area. Past environmental assessments have already deemed these measures sufficient for avoiding significant impact to air and climate resources. Any expansion will likewise not reach the level of significant impact on the human environment, so long as these measures continue to be required and enforced.

- The permittee shall have and implement the correct state Air Pollution Control District (APCD) permits before excavating any material. The permittee is required to comply with Rules 400 and 401 of the Great Basin Unified Air Pollution Control District.

- Operations that generate fugitive dust emissions shall be curtailed when wind velocities exceed 25 MPH. Dust-suppressing procedures shall be used on unpaved roads (that is, improving the road surface, applying dust suppressants or water, and/or limiting vehicle speeds to ~~20~~15 MPH).

    - Similar dust suppression measures will be used on open storage piles as needed; particularly if the silt content of such piles exceed 5%. The operation will be modified or additional mitigation applied if fugitive dust emissions exceed APCD standards.

Green House Gas Emissions would have the effect of adding to the existing atmospheric conditions within California. EPA requires reporting when a threshold of 25,000 metric tons of CO2/year for reporting is met. This proposed action is estimated to produce 500 metric tons of CO_2/year, 2% percent of the threshold required for reporting to the Environmental Protection Agency.

The following information was used to calculate the estimated CO_2 produced from this project and is taken from the list of the mobile equipment proposed for use under the proposed action is found on page 16 of the EA. The GHG emissions for each alternative have been calculated using published GHG emissions per hour data for various types of equipment. Where the data for the exact equipment type was not available, the closest equivalent type was used. Operational hours for the Project were estimated based on the size of the Project.

The Makayla 2 Proposed Action Alternative would not meet the requirements for greenhouse gas reporting (https://www.epa.gov/ghgreporting), with the highest amount of CO_2e emissions estimated to be approximately 500 tons and the reporting threshold being 25,000 metric tons (40 CFR 98). Emissions related to carbon sequestration losses (soil disturbance and vegetation loss)

have not been calculated for this project. Such contributions would be minimal given the small area, the sparse desert vegetation, and reclamation.

Calculations for CO2 are as follows:

Equipment type	CO2 lbs/hr	Operating hrs/year	CO2 lbs/year	CO2 tons/year
Bulldozer D-6	243.4	1500	365100	182.55
Grader (est)	200	400	80000	40
Excavator/backhoe	67.2	1000	67200	33.6
Service/Fuel truck (est)	100	200	20000	10
Water truck 2000gal	135	1000	135000	67.5
Light truck	1.1	500	550	0.275
			Sum	333.925
			Safety factor considering larger equipment	1.5
				500.8875

Note - CO2 lbs/hr figures for bulldozer, backhoe, water truck and light truck were derived from a previous analysis, which referenced a BLM Medford, Oregon Office GHG Calculator.

The Medford GHG calculator is password protected and could not be directly used for this calculation so some CO2 lbs/hr values are estimated. A safety factor was added to address the use of larger equipment.

3.1.5 Mitigation

The Design Features and Environmental Protection Measures in Section 2.1 will minimize impacts to Air Quality and GHG Emissions. Some important measures include Vehicular traffic not exceeding 15 miles per hour on BLM access roads, watering the roads, covering the loads, and not digging/hauling when wind is 25 mph or greater.

3.2 Cultural Resources

3.2.1 Affected Environment

Archaeological investigations in the Owens Valley, Rose Valley, and Coso Mountains indicate that the area was occupied by at least the Middle Archaic, or Pinto Period, which began approximately 7000 years ago. By the Late Archaic, or Gypsum Period, the number of habitation locations in the Coso Mountains and Owens Valley seems to have risen dramatically with evidences of occupation moving into previously unexploited or under-exploited areas. This change seems to have coincided with climatic changes that resulted in cooler and moister conditions.

Around 800 years ago the expansion of Numic-speaking peoples within the region brought Shoshone people into the area. During the ethno- historic period, the area of the proposed project area was occupied by Koso Shoshone peoples. Various Tribal communities from the region around the Coso Mountains visited the Coso Hot Springs routinely for their healing properties. The Coso Mountains were central to a large community inhabited by the Koso Shoshone. Their winter villages were located in the Coso Mountains, and during the rest of the year they moved out in family groups into the surrounding areas to exploit seasonally available resources.

Silver and gold were both reported in the Coso Range in the 1860s and a short-lived mining boom occurred. Chesterman though, states (1956: 62-67) that most of the mines in the Coso Range region began serious commercial operations after the war. The Makayla (Ray-Gill #7) Mine was operated in the late 1940s by the Crownite Corporation for the purposes of making lightweight building blocks. Previous to this, the Desert Materials Corporation owned and operated the mine. Beginning in 1946-47, the Crownite operation consisted of an open pit where the overburden was scraped off with a bulldozer and the pumice mined with a dragline, and the pumice was then loaded onto trucks. The ore was sent to a processing plant along the Southern Pacific Railroad siding at Sykes, some eight miles distant, where it was sorted and loaded onto railcars (Dice, 2001).

An archaeological field inventory (pedestrian surface inspection) for this project was conducted by Duke Cultural Resource Management during the summer 2019. They relocated and monitored the current surface conditions of four prehistoric archaeological sites that occur within the boundary of the 25 acre Area of Potential Effects (APE) proposed to be mined. All of these four sites consist of surface obsidian debitage from the manufacture of stone tools by the prehistoric inhabitants. Subsequently, Duke conducted sub-surface archaeological test excavations at three of these sites and established that all are surface manifestations only, and do not contain enough substantiative data potential that would allow them to be determined as eligible for National Register status. The fourth site previously identified by Duke within the APE was recently inadvertently removed by required mining reclamation.

3.2.2 Environmental Impacts—No Action Alternative

Under the No Action Alternative, the project site would remain undeveloped and there would be no additional ground disturbance or mining activities that would potentially cause adverse effects to National Register Historic Properties. Therefore, there would be no impacts to cultural resources.

3.2.3 Environmental Impacts—Proposed Action

Four prehistoric archeological sites occur within the APE, and archaeological test excavations to determine if these sites, either individually or as a group, contain any substantiative data or evidences that could contribute new or additional information to the interpretation of important archaeological research questions pertaining to the prehistoric use of the Coso Range was

conducted by Duke Cultural Resources Management during April 2021. This evaluation determined that all sites are just surface lithic debitage manifestations only, and do not have any depth to their deposits. Duke recommends that all four sites be found as ineligible for the National Register of Historic Places and the BLM concurs with this recommendation. Thus, the approval of the proposed mining Plan of Operation by the BLM will not cause any adverse effects to any National Register eligible Historic Properties.

3.2.4 Mitigation

No additional mitigation measure are needed.

3.3 Biological Resources

3.3.1 Affected Environment

The following paragraphs summarize pertinent data concerning this project area and environmental assessment CA650-NEPA-2001-94 for the existing pit.

Vegetation

The vegetation of the general area is comprised of desert scrub, dominated by creosote bush (*Larrea tridentata*), and Joshua tree woodland. Other vegetation that occurs in the area is burro-brush (*Ambrosia dumosa*), winter fat (*Krascheninnikovia lanata*), Mormon tea (*Ephedra nevadensis*), indigo bush (*Psorothamnus arborescens*), cacti and perennial grasses. Additionally, annual grasses (including non-native *Bromus spp.*) and forbs are present but sparce.

Sensitive and special status species exist within the project area. In 2005, the vegetation of the Makayla exploration project area was surveyed and three individual plants of Booth's evening-primrose *(Camissonia boothii ssp. boothii)*, a California rare plant and BLM Sensitive Species, were observed. Furthermore, the 2019 vegetation survey of the Makayla 2 expansion area revealed three Booth's evening-primrose plants within the project site. In addition, Joshua trees (*Yucca brevifolia*) are present throughout the area of the proposed action. Joshua trees provide a unique habitat providing shelter and protection to numerous desert species and increases the structural diversity of the vegetation community. For these reasons and the fact that they are slow growing and long lived, Joshua trees are a CDFW candidate species and protected by the State of California.

Desert Tortoise

The desert tortoise (*Gopherus agassizii*) is a federally and state-listed threatened species that occurs to the west and south of the project area. Desert tortoise have been observed on the floor of Rose Valley to the west (~5-6-miles), which has a typical elevation around 3300 – 3600 feet above mean sea level. The project area has an elevation around 4600-5000 feet above sea level. The project area is situated at a relatively high elevation compared to the main portion of tortoise habitat. Due to this elevation, the mean winter temperature can be colder than preferred tortoise habitat.

No tortoises were observed during the May 2019 survey, nor were any active tortoise burrows, scat, or other signs observed.

Mohave Ground Squirrel

The Mohave ground squirrel is a California Threatened Species (CDFW). It is not listed as a Threatened or Endangered Species under federal law (USFWS), and no protocol-level (CDFW) surveys for Mohave ground squirrel were conducted for this environmental assessment. However, the project area is entirely within the Mohave Ground Squirrel (MGS) Area of Critical Environmental Concern, outlined within the DRECP.

Mohave ground squirrel populations have been documented in the region and this species is dependent upon desert scrubs and based on its behavior, the species is

infrequently observed above ground except during a favorable weather, typically in early February to March, when breeding season typically occurs. According to California Natural Diversity Database (CNDDB), Mohave ground squirrels have been documented within the Coso Mountains approximately 1.5-to-2 miles east of the proposed project site near the BLM and Naval Air Weapons Station-China Lake property boundary. Numerous ground squirrel-sized burrows were observed during the most recent inspection and survey of the area.

The DRECP establishes one-percent threshold for Allowable Ground Disturbance within the Mohave Ground Squirrel ACEC which equates up to 38.4 acres (3 x 12.8).
The proposed new expansion is in the region marked as a 3:1 compensation area for new disturbance.

An operator is also allowed to receive Habitat Rehabilitation Credits for successful rehabilitation of previously degraded habitat. (see Section 3.6 for DRECP disturbance cap and compensation information.)

Other Wildlife
Desert adapted birds, such as sage sparrow, Le Conte's thrasher, black-throated sparrow, and cactus wren use this area for a variety of habitat needs, including nesting. Raptors have been observed soaring over the area, probably searching for prey. A variety of lizards and snakes also inhabit the area. Small mammal, such as various rodents and lagomorphs utilize habitats in the project area.

3.3.2 Environmental Impacts—No Action Alternative

Under the No Action Alternative, the project site would remain undeveloped and there would not be operation activities that would disturb more ground. Therefore, there would be no impact to biological resources from new disturbance, additional vehicles, etc.

3.3.3 Environmental Impacts—Proposed Action

The proposed action would result in the elimination of up to 25 acres of vegetation and wildlife habitat. This habitat would be converted into a mining pit surrounded by high walls.

The project would adversely affect individuals of wildlife species and habitats by removing vegetation, eliminating existing habitats, and causing injury or direct mortality from mining operations. Individuals of various species that would be eliminated from the project site include the following:

Nesting Birds:

A variety of birds nest and forage in the Mojave Desert scrub habitat.

Joshua trees provide song perches, lookout posts, and nest sites for birds such as the ladder-backed woodpecker *(Picoides scalarus)*, cactus wren *(Campylorhynchus brunneicapillus)*, Scott's oriole (*Icterus parisorum*), and black-throated sparrow *(Amphispeza bilineata)*.

Mohave Ground Squirrel:

There is a high potential for occurrence of the Mohave ground squirrel, which is currently listed as Threatened by the California Department of Fish and Wildlife. The presence of this species is assumed. Implementing project activities would result in disturbance factors (e.g., vegetation and soil removal, project-related noise, habitat fragmentation) that would lead to mortality of Mohave ground squirrels.

Desert Tortoise:

There is a low probability of desert tortoises occurring at the project site. Based on focused desert tortoise surveys and project site scoping efforts, desert tortoises do not currently occupy the project site. Therefore, no effect to individual tortoises should occur. However, the removal of vegetation and soil as a result of implementing the proposed project could eliminate future habitat occupancy opportunities for desert tortoises, especially in the midst of shifting climatic factors within the Mojave Desert.

Sensitive Plant Species:

Known individuals of Booth's evening-primrose and Joshua trees will be affected by the proposed project. Multiple Joshua trees will be removed from the site as a result of project activities (i.e., removal or compaction of vegetation and soil). Furthermore, three known individuals of Booth's evening-primrose will be removed from the site as a result of project activities (*see* Mitigation).

3.3.4 Mitigation

1. CDFW shall be contacted and any regulations or mitigations proposed by this agency shall be completed, including an incidental-take permit authorizing the take of the Mohave ground squirrels. Further mitigation to reduce the impacts to less than significant levels would be specified in the 2081 Incidental Take Permit issued by CDFW.

2. The applicant must rehab at a ratio of - 3:1 per DRECP

3. All native breeding birds, (except game birds) regardless of their listing status, are protected under the Migratory Bird Treaty Act (MBTA). Potential impacts to

nesting birds are significant. When mining occurs between April 15th and July 15th, a survey (within three days prior to work in those areas) is required and must be conducted by a qualified biologist to determine presence/absence of active nests within or adjacent to the area to be mined. This stipulation prevents killing the young of federally and state protected migratory birds. If no nesting activities are detected within 200 feet of the proposed work area, mining activities may proceed. If nesting activity is confirmed, work activities within 200 feet of the active nest shall be delayed until the young birds have fledged and left the nest. Work shall proceed in another location that is at least 200 feet from the nest. A pre-mining survey will not be required if mining activities take place between July 16th and April 14th.

4. All applicable DRECP Conservation Management Actions related to minimizing impacts to sensitive plant species, features, communities, or alliances will be implemented, including but not limited to the following: LUPA-BIO-7 Salvage and relocate cactus, nolina, and yucca (e.g., Joshua tree) from the site prior to disturbance using BLM protocols. To the maximum extent practicable for short-term disturbed areas (see Glossary of Terms), the cactus and yucca will be re-planted back to the original site. LUPA-BIO-VEG-5 All activities will follow applicable BLM state and national regulations and policies for salvage and transplant of cactus, yucca, other succulents, and BLM Sensitive plants (e.g., Booth's evening-primrose).

5. No surface disturbance is authorized outside of the proposed operational areas.

6. Following reclamation, the abundance and diversity of plants would be lower than prior to the operation. Pioneer species would colonize the sites. These plants, in turn, would be followed by short-lived shrubs and eventually long-lived shrubs. The site would not return to its pre- disturbance species mix and biomass for at least 50 years.

3.4 Land and Access

3.4.1 Affected Environment

The project area contains existing roads. The proposed quarry site is served by an Inyo County road called the Gill Station / Coso Junction Road and by BLM-designated routes SE431 and SE435, shown in Appendix D, Map 7.[3] These two roads are used by the public and other authorized users currently to access the Makayla 1 quarry primarily and the proposed pit, secondarily. The roads have been regularly maintained and are of sufficient width to serve the current and proposed mining operation. The proposed action is use and maintenance of these BLM public access routes, not expansion of these routes. Traffic to Makayla 1 quarry averages 1-2 trucks per hour at the busiest times, ranging to zero trucks during idle times. In the past, haul trucks have lost material from their trailers, which has accumulated on SE435, making travel by passenger car/truck and off-highway vehicle difficult due to deep, soft soil and dust. Public drivers occasionally interact with haul trucks on weekdays with no reported accidents. Recreational traffic uses SE435 for access to the Coso Range Wilderness and other non-wilderness areas. There is no BLM right-of-way for Makayla 1 pit over SE435 such that maintenance on BLM SE435 cannot be performed by the applicant.

3.4.1 Environmental Impacts—No Action Alternative

In the No Action alternative, the quarry would not be authorized and there would be no change to the volume of traffic on Gill Station / Coso Junction Rd or BLM SE435. No Right-of-Way would be authorized and no BLM route would be rerouted.

3.4.2 Environmental Impacts—Proposed Action

In the Proposed Action, BLM routes SE431 and SE435 would be the access for haul trucks and other mining equipment between the Makayla minesite(s) to the Gill Station-Coso Junction Road (an Inyo County public road). Traffic is not expected to increase, however, due to Makayla 1 closing and operations and equipment transferring to the new quarry. A Right-of-Way would be issued from Gill Station /Coso Junction Rd to Makayla 2 quarry, which would allow for performing maintenance and rerouting of a portion of SE-431 in order to better separate public vehicles and haul trucks, leading to increased safety, visitor enjoyment and access. The designated route network would be modified slightly by the reroute, but access still retained. Recreational visitors could still access to the same places they currently go.

3.4.3 Mitigation

Since rerouting of BLM SE431 is part of the proposed action, no mitigation for public travel would be required. Issuance of a road right-of-way to applicant would allow for maintenance on the road and not require any mitigation to ensure public travel and continued access.

[3] Shown as 'Ground Transportation Linear Features' online at https://www.blm.gov/services/geospatial

3.5 Soils

3.4.1 Affected Environment

The project area contains sedimentary type alluvium and volcanic tuff soils typical of the Coso Formation within the Coso Mountain range at approximately 4.600ft elevation. The surface soil type at the proposed quarry site is a gravelly loam - coarse sand but has pumice below and also at the surface. This sandy soil type supports plant species which are dependent upon scarce nutrients found in the thin topsoil layer. Soil types found within the project site include pumice tuffs (Qti), flows of Ondesite and Tuffoceous (Qtc) sedimentary rock and granitic basement rock (gr). The coarse topsoil layer required for growing can be one to six inches in depth. Due to its coarseness, it tends to be less susceptible to erosion by wind and water on low to moderate slopes. The quarry area has been previously disturbed on approximately 10 acres or 40% of the site. No topsoil was stockpiled at the time of previous disturbance.

3.5.1 Environmental Impacts—No Action Alternative

Under the No Action, the quarry would not be approved and the current condition would remain, which includes 10 acres of previously disturbed soil. The previously disturbed soils would remain unchanged and no restoration would occur on the site.

3.5.2 Environmental Impacts—Proposed Action

Up to 25 acres of land may be disturbed by the expansion of the existing quarry and may not recover unless or until those lands are adequately reclaimed. Approximately 10 acres of that is already disturbed. Development of the quarry would cause disturbance to the entire 25 acre area over the life of the mine. Reclamation would occur at the end of mining using stockpiled soil and possibly augmented with native seed according to the restoration reclamation plan. Drainage patterns will be altered through the removal of pumice. Implementation of the reclamation plan would be sufficient to prevent long-term impacts from any erosion that might occur and the layback of high walls would assist in the regrowth by creating stable, moderate slopes.

3.5.3 Mitigation

Ensure that compliance with the existing reclamation plan and California Surface Mining and Reclamation Act includes: scraping topsoil from the top 6 inches of the area to be mined prior to mining operations; stockpiling, labeling, and protecting removed soil during the operation; spreading that soil over the re-contoured areas when reclaiming the site to a uniform depth of not less than 6 inches and then stabilized in a manner that retains the material in place and will insure maximum seed-bed preparation. Ensure that topsoil is not be compacted or

stabilized to the degree that the topsoil is not a viable growing medium. Upon completion of operations, reclaim the area to simulate natural contours and native vegetative cover.

3.6 Special Areas- ACEC and CDNCL

3.6.1 Affected Environment

The proposed project falls within a until of the Mohave Ground Squirrel Area of Critical Environmental Concern (MGS-ACEC) and a Sub-Unit of the Basin and Range California Desert National Conservation Lands (CDNCL).

The Mohave Ground Squirrel ACEC is a large area comprised of separate units, approximately 198,499 acres in total, containing the habitat for the state threatened and BLM Sensitive Mohave ground squirrel. It was established to protect the long-term survival of this species. The overarching goals of this ACEC are to protect Mohave ground squirrel habitat; maintain wildlife habitat connectivity and characteristics of climate refugia and prevent fragmentation; and retain healthy desert habitat for this and other sensitive species (DRECP, 2016).

The particular ACEC unit this project falls within is approximately 48,345 acres. It has a 1 % disturbance cap limit and is currently over the cap at 2.55% total disturbance (USGS ScienceBase calculation)-, which triggers the need for ground disturbance mitigation if additional disturbance areas are to be created. Mineral exploration and development is allocated as restrictive with the ACEC. Existing mining proposal and future proposals are to be analyzed on a case-by-case basis, and assessed as to whether they can be accommodated within the ACEC and its management goals.

The National Conservation Lands (NCL) are made up of National Monuments, National Conservation Areas, Wilderness Areas, Wilderness Study Areas (WSA), Wild and Scenic Rivers, National Scenic and Historic Trails, and Conservation Lands of the California Desert (California Desert National Conservation Lands (CDNCL)).CDNCL are made up of BLM-administered lands with nationally significant ecological, cultural, and scientific values. These lands are managed to conserve, protect, and restore these values. The proposed project area includes a unit of CDNCL called the Basin and Range Ecoregion.

The Basin and Range CDNCL lands within this subarea include many cultural and ecological values such as vegetation alliances and intact habitat linkages amongst a number of designated BLM wilderness areas, undeveloped military lands, and Death Valley National Park. Linkages for wildlife migration are critical to the conservation of certain species, especially with respect to climate change. The CDNCL subunit this proposed project falls within is approximately 150,719 acres total and it is over its 1% cap at 1.11 % total disturbance which like the ACEC, triggers ground disturbance mitigation. Ground disturbance caps are set for each ACEC and CDNCL unit as stipulated in the Conservation Management Actions

3.6.2 Environmental Impacts—No Action Alternative

Under the No Action Alternative, the project site would remain undeveloped and there would not be any operation activities that would disturb more ground. Therefore, there would be no additional impact to this ACEC, NCL unit, or their respective disturbance caps.

3.6.3 Environmental Impacts—Proposed Action

The proposed project would create 12.8 acres of new ground disturbance (12.2 acres of disturbance already due to - exploration project CACA-47476). The proponent will restore all of the disturbance by the end of the mine's life.

MGS ACEC

The proposed action could impact the ACEC by removing vegetation, eliminating existing habitat for Mohave ground squirrel and other sensitive species. It would fragment the habitat which could impact wildlife connectivity. The ACEC unit is approximately 48,345 acres and is currently over its ground disturbance cap at 2.55% total disturbance. The addition of 12.8 acres of new disturbance would equate to a small increase in the total disturbance.

Basin and Range CDNCL

The proposed action could impact the CDNCL subunit by impacting landscape intactness and habitat linkages. Removing 12.8 acres of habitat could negatively impact vegetation alliances. The sub-unit is approximately 150,719 acres and is currently over its ground at 1.11% total disturbance. The addition of 12.8 acres of new disturbance would equate to a negligible increase in the disturbance.

3.6.4 Mitigation

For the portion of the proposed activity that is located on undisturbed land (12.8 acres), the required disturbance mitigation ratio is 3:1, therefore 38.4 acres will need to be mitigated. It takes decades for arid environments such as this area to fully restored, but active rehab will assist with this process.

Since multiple CMAs with compensation requirements apply to this particular activity, these compensation requirements may be "nested", that is, the most conservative mitigation action may satisfy multiple mitigation requirements. In this case, it will be 3:1 for all ground disturbance. Ground disturbance mitigation must occur within the management unit within which the project occurs. Mitigation opportunities would be investigated and decided on in consultation with the BLM and other agencies or parties as required. Ground disturbance mitigation is required to be completed within 12 months of disturbance. Southwest Pumice would remain in communication with the BLM regarding project progress and actual disturbance of the chosen alternative to ensure the correct acreage of ground disturbance mitigation is completed within the required time frame. The BLM must approve any restoration and revegetation techniques.

In addition, the Design Features and Environmental Protection Measures in Section 2.1 will minimize impacts to both the CDNCL and ACEC units. Some important measures include resource setbacks to avoid Focus and BLM special status species, no surface disturbance is authorized outside of the proposed operational areas, and weed management including but not limited to monitoring of non-native invasives and cleaning vehicles, which would assist with re-vegetation of natives in the future.

4.0 Consultation and Coordination

4.1 Summary of Consultation and Coordination

This EA will be published on the BLM Environmental Documents and Land Use Plans website located at: https://eplanning.blm.gov.

BLM made a No Affect call for the desert tortoise, therefore no consultation occurred with U.S. Fish and Wildlife Service, and coordination is ongoing with CA Dept. of Fish and Wildlife for a 2081 Incidental Take Permit for Mohave ground squirrel.

5.0 List of Appendices

Appendix A—List of Preparers

Appendix B—Table of Issues Considered

Appendix C— References

Appendix D—Maps

Appendix E—DRECP CMA Spreadsheet

Attachment 3

Appendix A: List of Preparers

Name	Title	Resource Area
Adena Fansler	Contractor	Planning
Brian Ferwerda	Former Ridgecrest BLM Geologist	Geology, Hazardous Waste,
Randy Porter	BLM Geologist	Project Lead, Geology
Caroline Woods	Planning & Environmental Coordinator	NEPA, ACEC, NCL
Clinton Helms	Wildlife Biologist	Special status species, Wildlife
Donald J Storm	Archaeologist	Cultural Resources, Tribal Concerns
Martha Dickes	Wilderness ORP	VRM, LWC, and Recreation
Paul Rodriquez	Realty Specialist	Lands, Access and Road ROWs
Priscilla Watson-Wynn	Field Biologist	Vegetation, Wildlife
Thomas Bickauskas	Associate Field Manager	Air Quality, Soils, Land and Access

Appendix B: Table of Issues Considered

Table B-1: List of Issues Considered

This table provides an exhaustive list of issues, resources and uses for which issues may arise.

Determination*	Issues	Rationale for Determination	Responsible Reviewer
PI	Air Quality	The proposed project will consist of mobile and stationary mine-related dust emissions, dust emissions from maintenance of dirt access roads, and dust emissions from vehicle traffic on dirt access roads.	Bickauskas
PI	Areas of Critical Environmental Concern	The project is within the Mohave Ground Squirrel ACEC and needs to be analyzed in detail.	Woods
PI	Cultural Resources	Cultural study by Duke CRM identified 4 lithic scatter sites that need formal National Register eligibility determination before permit approval. DJ Storm, Archeologist, 21Nov2019	Storm
NI	Environmental Justice	This resource is not affected to the degree that it needs to be analyzed in depth.	Woods
NP	Farmlands (Prime or Unique)	Not present	Woods
NI	Fire Management	No blasting or use of explosives involved. Surrounding area is considered to have a low risk for wildfire potential.	Porter
NP	Fish Habitat	Not present	Helms
NP	Floodplains	Not present	Helms
NP	Forestry Resources and Woodland Products	Not present	Woods
NI	Human health and safety concerns	Health and Safety concerns will be mitigated in the design features and therefor this resource will not be affected to the degree it needs further analysis.	Woods
NI	Invasive, Non-native Species	Reclamation measures will be formulated to minimize risk for introduction of non-native species.	Dickes
PI	Lands and Access	The proposed action includes consideration of a road right-of-way, and mitigation measures incident to sharing this route with public and private users.	Rodriquez and Bickauskas

NI	Lands with Wilderness Characteristics	WIU 131-1. The inventory unit is so large that it will be unaffected by the proposed action, and any associated activities (such as continued use of the existing access road), both of which have already been excluded.	Dickes
NI	Livestock Grazing Management	Cattle Grazing occurs in the area, but no range facilities would be affected. No change in AUMs would be necessary due to small size of the proposal.	Bickauskas
NI	Migratory birds and wildlife	The operator is/will be required to follow pertinent Conservation Management Actions required by DRECP. Refer to DRECP for detailed analysis for the efficacy of those measures. .	Helms
PI	National Land Conservation System (NLCS)	The project is within NLCS Basin and Range subunit and needs to be analyzed for this site-specific action.	Woods
NI	Native American Religious Concerns	Tribes do consider the broader Rose Valley-Coso Volcanic Range as having a very high cultural importance and sensitivity. However, there are no known resources within the proposed project area. Therefore, this resource is not analyzed in depth in the EA. DJ Storm, archeologist, 21 Nov 2019	Storm
NI	Noise Resources	BMPs and the temporary nature of the project does not affect noise to the degree that it needs to be analyzed in depth. The mine site is surrounded by hills and is several miles from the nearest human habitation.	Porter
NP	Paleontological Resources	Project Area is entirely a volcanic rock formation that did not allow the formation of vertebrate fossils.	Storm
NI	Recreation Resources	Recreation use occurs in the general area but recreational use such as hiking and horseback riding could travel around the site as needed. Therefore, this resource does not need further analysis.	Dickes
NP	Sage Grouse Habitat	Not present	Helms
NI	Socioeconomics	This project does not affect socioeconomics to the degree that it needs to be analyzed in depth	Woods
PI	Soils	Soils will be heavily disturbed in the area of proposed action, removed, stored and re-applied for reclamation of the site. Reclamation of the site will be needed to restore the post-operation productivity of the	Bickauskas

		area.	
PI	Threatened, Endangered or Candidate Plant or Animal Species	Mojave ground squirrels are a listed as a BLM-Special Status species, known to occur in that general area. The operator will need to follow Conservation Management Actions required by DRECP. Desert tortoise are unlikely to be in conflict due to the high elevation of this area.	Helms
PI	Vegetation	Special Vegetation Features present, including Joshua trees, cacti and Booth's evening primrose	Watson-Wynn
NI	Visual Resources,	VRM Class III. The existing pit and its proposed expansion area are located in a small canyon. They are not visible from Gill Station Road. Intervening ridgelines block the views.	Dickes
NI	Wastes, Hazardous or Solid	Design features and measures will be adhered to and therefor this resource does not need to be analyzed in depth.	Ferwerda
NI	Water (including groundwater)	Water is used for dust control, but is imported from outside the area. BMPs and CMAs will be implemented. The project will not affect water resources to the degree that it needs to be analyzed in depth.	Bickauskas
NP	Wetlands/Riparian Zones	Not present.	Helms
NI	Wild Horses and Burros	The project area would be within the Centennial Herd Area, however wild horses and burros very rarely are seen in this area. Therefor, this resource is not analyzed further.	Bickausas
NP	Wild and Scenic Rivers	Not present.	Woods
NP	Wilderness and Wilderness Study Areas	Not present.	Dickes

*Possible determinations:

NP = not present in the area impacted by the proposed or alternative

actions NI = present, but not affected to a degree that detailed

analysis is required

PI = present and may be impacted to some degree. Will be analyzed in affected environment and environmental impacts. (NOTE: PI does not necessarily mean impacts are likely to be significant, only that there are impacts to this issue, resource or use. Significance will be determined through analysis and documented in a Finding of No Significant Impact or Environmental Impact Statement.).

Appendix C: References

Dice, Michael and LeAnne Hattig; 2001; California Lightweight Pumice Makayla Mine Expansion: A Class III Intensive Field Survey of Properties located within Section 21 and 28, T21S-R38W, Coso Junction Area, County of Inyo, California.

"2010 Maintenance Plan and Redesignation Request for the Coso Junction Planning Area", at https://www.gbuapcd.org/Docs/District/AirQualityPlans/Coso/2010CosoPM10MaintenancePlan.pdf (a revision to the State Implementation Plan for Coso Junction Planning Area).

May 2021 Draft Coso Junction PM10 Planning Area Second 10-Year Maintenance Plan, at https://www.gbuapcd.org/Docs/District/AirQualityPlans/Coso/2021DRAFTCosoPM10SecondMaintenancePlan.pdf.

The Desert Renewable Energy Conservation Plan Amendment online at https://eplanning.blm.gov/eplanning-ui/project/66459/510

DOI-BLM-CA-D050-2017-0002-EIS, Record of Decision April 24, 2020.

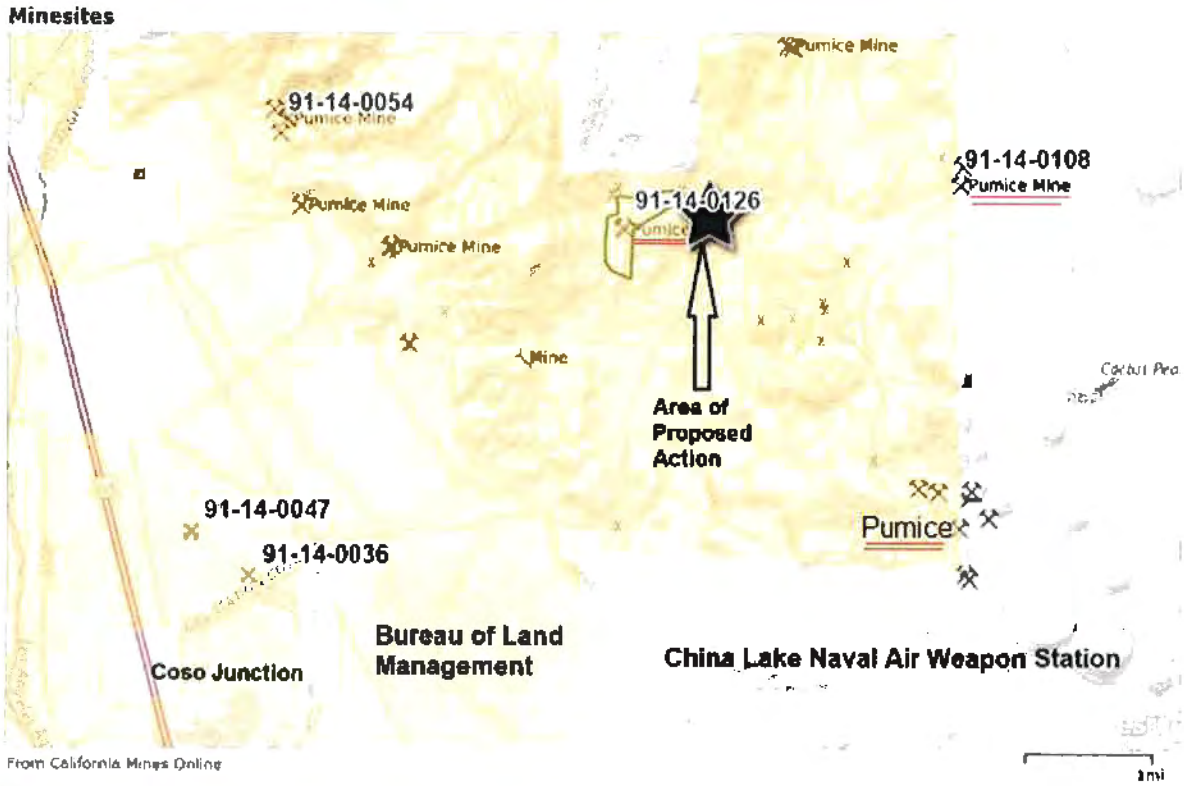
CA650-NEPA-2001-94- Tiered Environmental Assessment for the Makayla Pumice Quarry

CA650 -NEPA- 2005-101- Environmental Assessment for The Makayla 2 Exploration Plan of Operations

USGS ScienceBase- Surface Disturbance Analysis (previously called Sdartt). www.sciencebase.gov

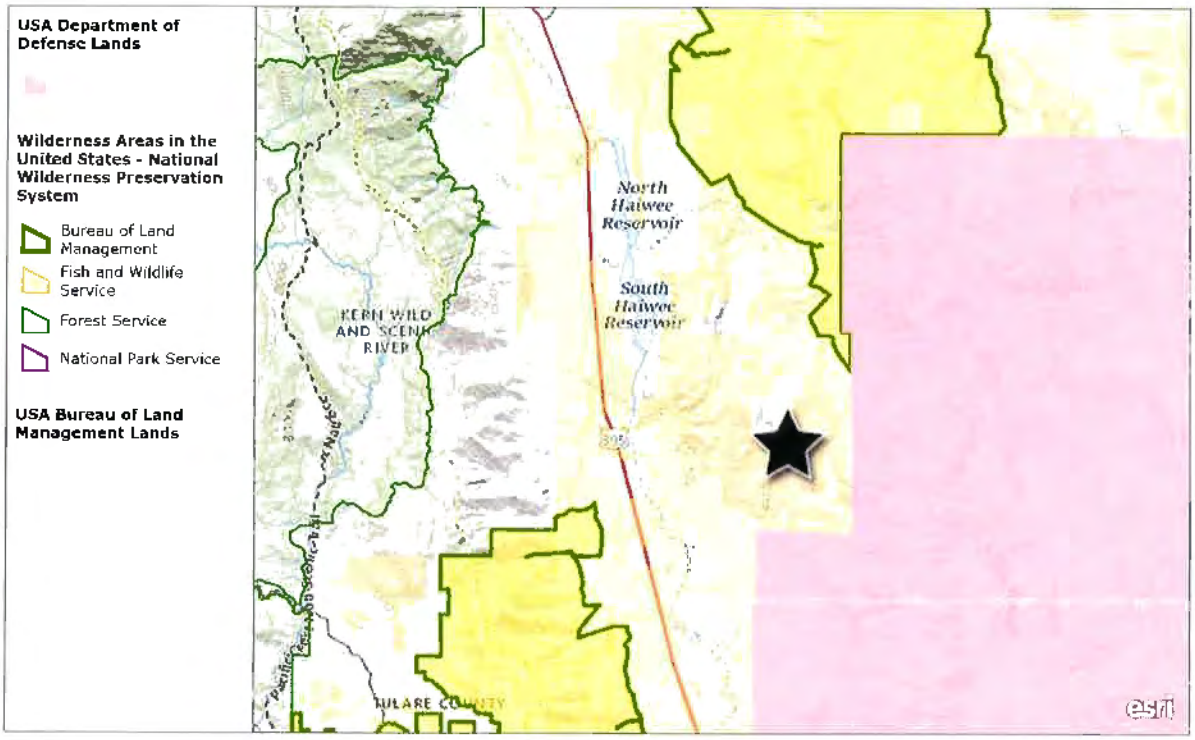
Attachment 3

Appendix D: Maps and Figures



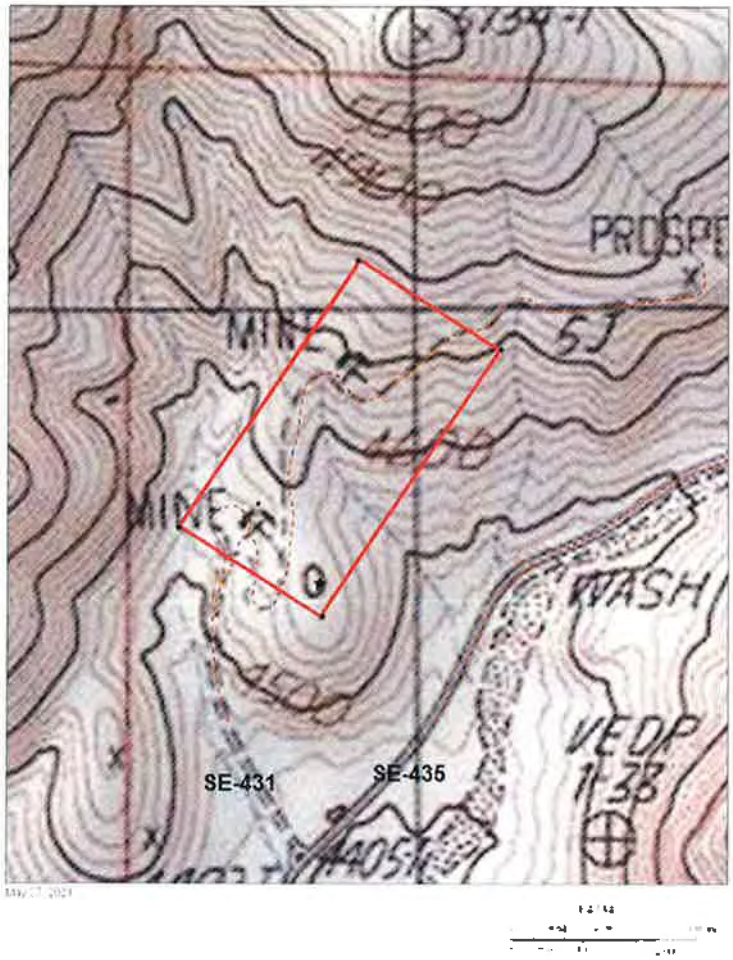
Map 1. Area of proposed action with proximity to past and present mine sites. The proposed Makayla 2 site is shown as a black star located due east of California Mine I.D. 91-14-0126, the 'Makayla 1' pumice mine. Several former, now inactive pumice mine sites are shown. Mine identification numbers are taken from 'Mines Online-California' at https://maps.conservation.ca.gov/mol/index.html.

Attachment 3



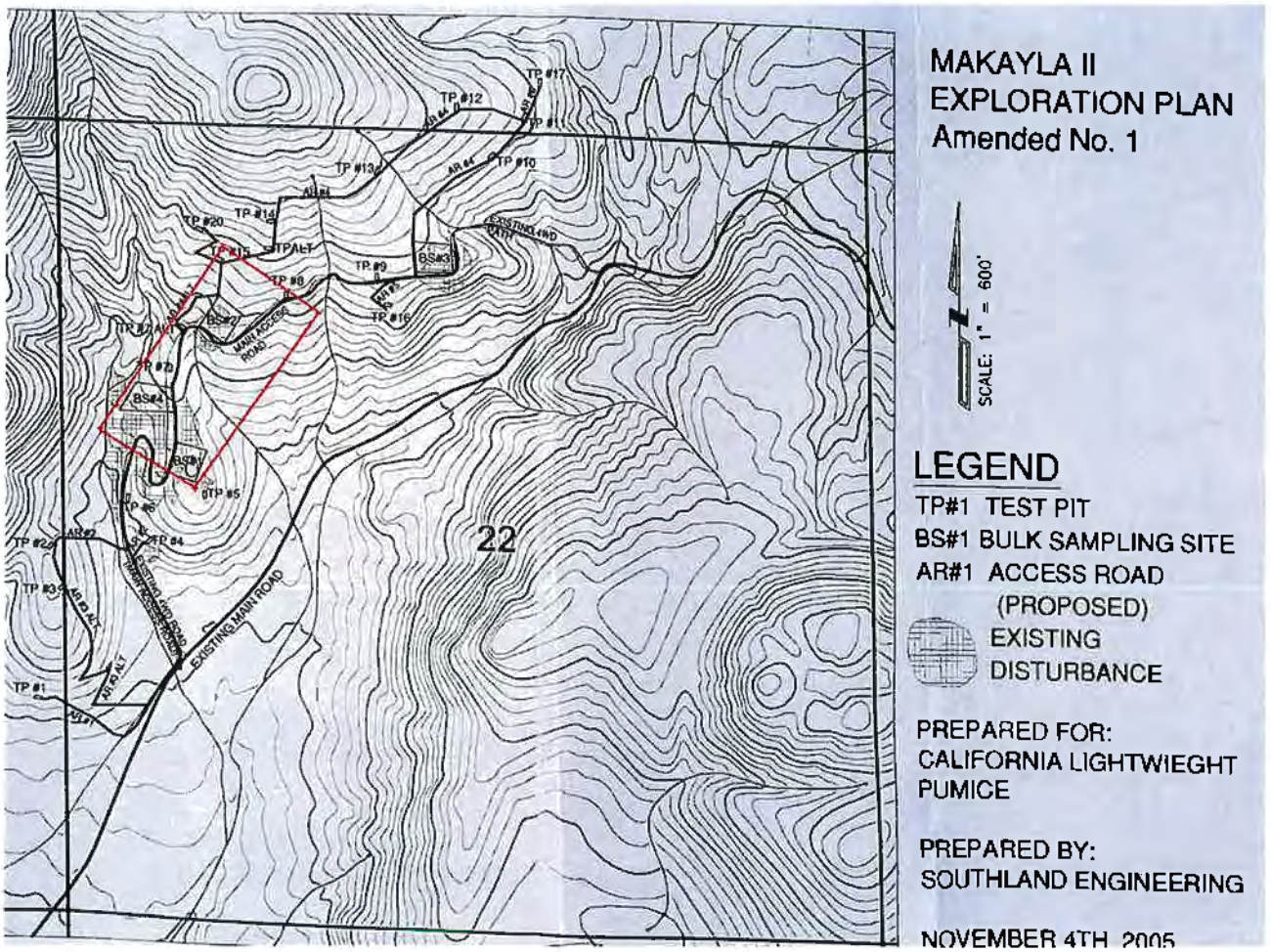
Map 2. Relationship of the proposed action area (shown as a black star) to nearby wilderness areas (outlined in green) and China Lake Naval Air Weapon Station (military reservation in pink).

Attachment 3



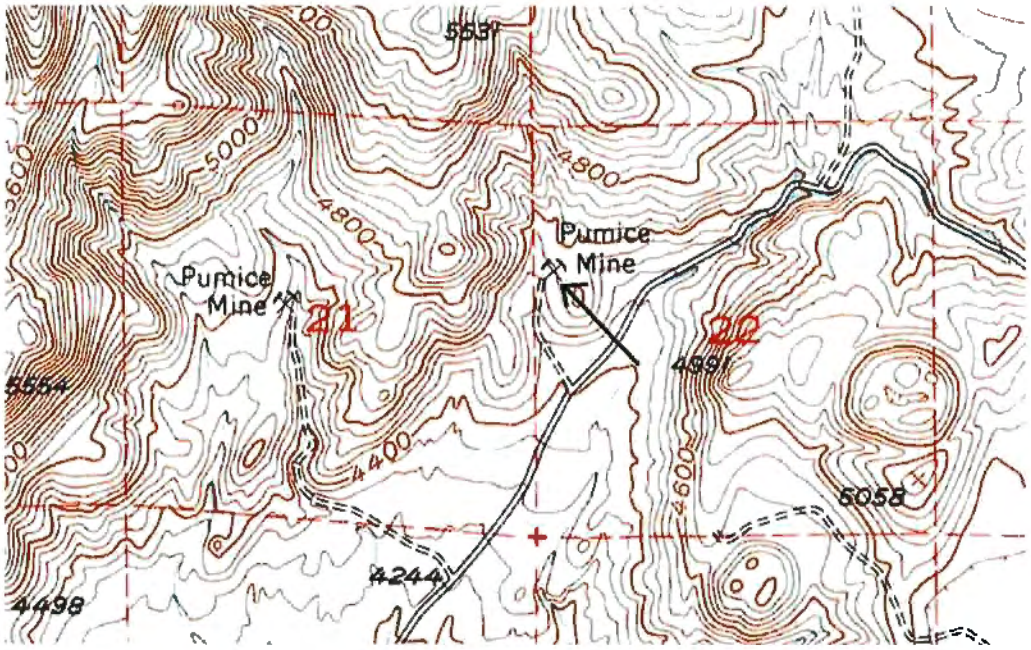
Map 3. Area and boundaries of the proposed excavation, mining and operating. Coordinates supplied by the operator.

Attachment 3

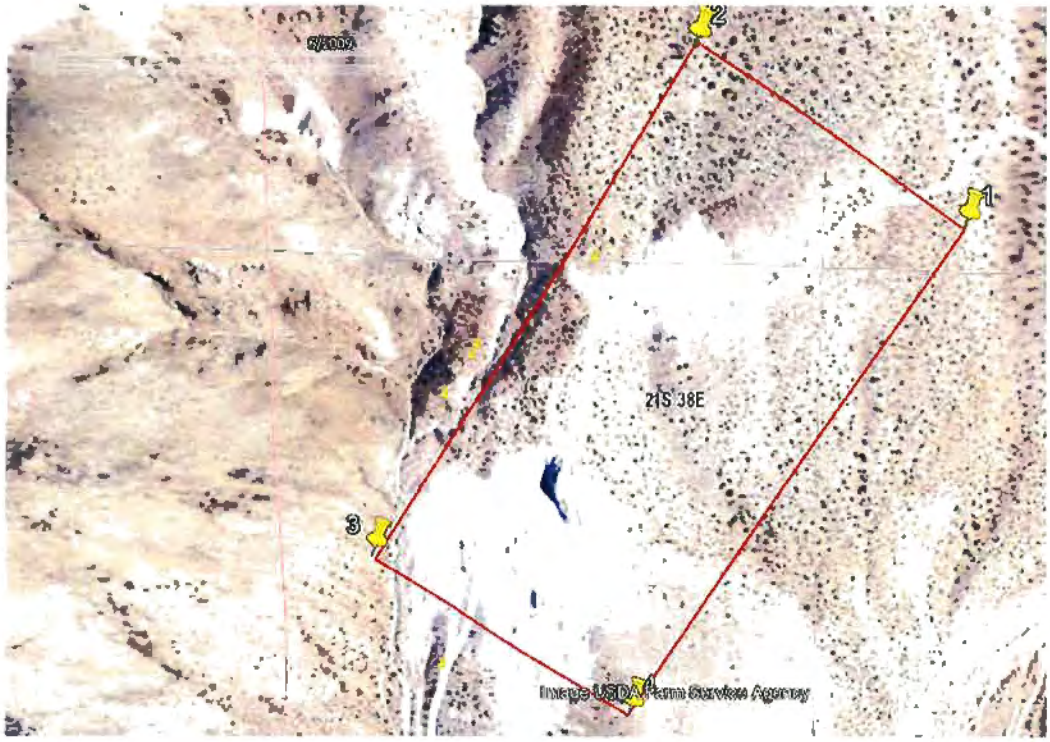


Map 4. Map of the exploration project analyzed by environmental assessment CA650-NEPA-2005-101. Boundaries of the current Proposed Action are superimposed for purpose of comparison (red rectangle). The Proposed Action includes former Bulk Sample Areas BS-1, BS-2 and BS4.

Attachment 3

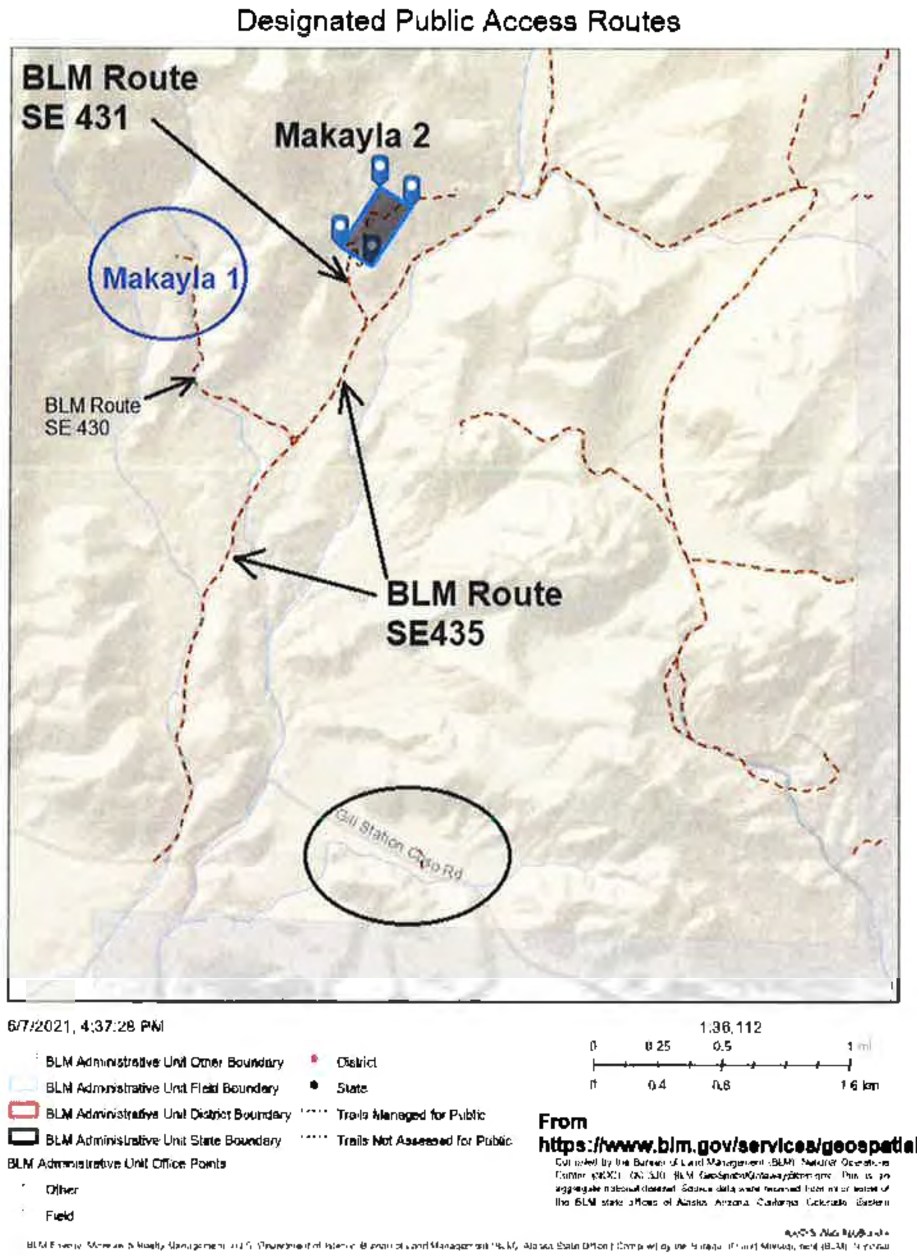


Map 5. Portion of the Haiwee Reservoir 15" Quadrangle published 1951. A pumice mine is shown at the location of the present proposed action.



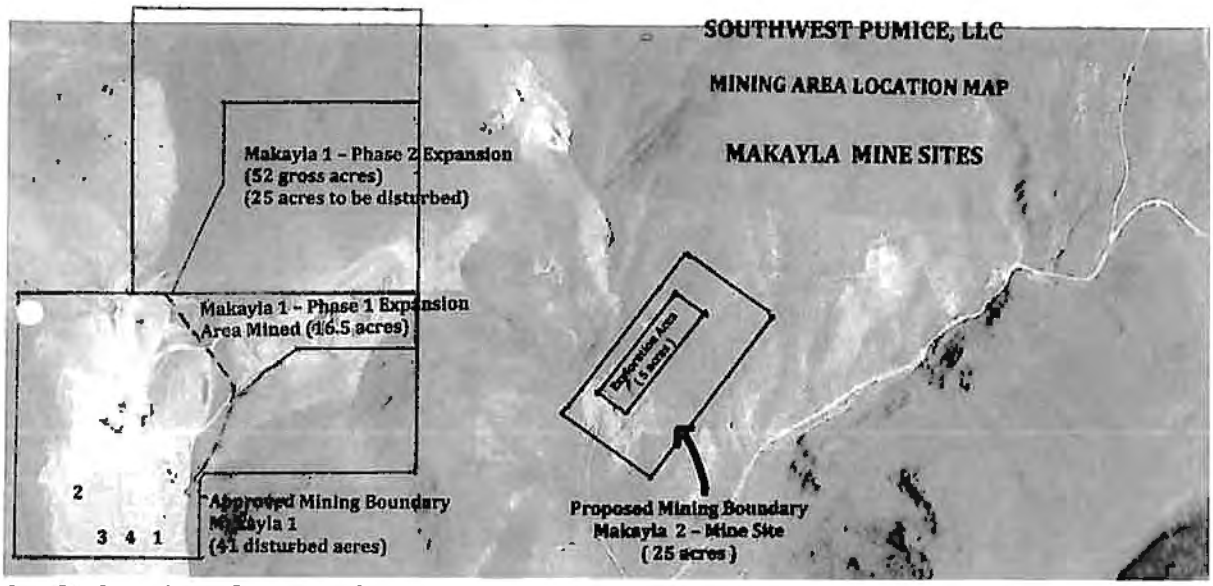
Map 6. Google Earth image of the proposed action area dated June 2009, showing area(s) previously disturbed.

Attachment 3



Map 7. Relationship of proposed action with BLM routes SE-430, S-431, SE-435 and the Gill Station-Coso Junction county road.

Attachment 3



Map 8: Overview of Proposed Mine

Attachment 3

Appendix E: CMA Table
Attached Separately

Attachment 3

Attachment 3

within 5-7 years. However, Map 2 Makayla Mine, Mine Plan & Map 3 Makayla II Mine, Reclamation Plan state the estimated operation life will be in 30 years.

Requirement: The RP should be revised to include a proposed initiation date and should clarify the proposed termination date.

Hydrology and Water Quality

(Refer to PRC Sections 2770, 2772, and 2773 and CCR Sections 3502, 3503, 3706, 3710, and 3712)

Comment #3

Issue: CCR Section 3706(e) requires that where natural drainages are covered, restricted, rerouted, or otherwise impacted by surface mining activities, mitigating alternatives shall be proposed and specifically approved in the reclamation plan to assure that runoff shall not cause increased erosion or sedimentation. Review of 2017 GE imagery and 2020 NAIP aerial imagery, appears to depict recent disturbance outside of northwest reclamation plan boundary. Disturbance depicted appears to be overburden placed as fill in two natural drainage systems. The reclamation plan does not address reclamation of this disturbance.

Requirement: The reclamation plan should be revised to incorporate all existing disturbance and propose mitigation alternatives for the drainage systems impacted by surface mining. The County should consider any local ordinances and other state and federal regulatory agencies for requirements on drainage issues

Revegetation Considerations

(Refer to PRC Section 2773 and CCR Sections 3503 and 3705)

Comment #4

Issue: CCR Section 3705(g) states "Native plant species shall be used for revegetation, except when introduced species are necessary to meet the end uses specified in the approved reclamation plan." The RP (pg. 16) mentions a "suggested seed mix"; however, a specific seed mix was not included in the RP.

Recommendation: The RP should be revised to include a seed palette appropriate for the site.

Sensitive Species and Habitat Considerations

(Refer to CCR Sections 3502, 3503, 3703, 3704, and 3710)

Comment #5

Issue: CCR Section 3703 requires that species of special concern shall be preserved or mitigated for, particularly if the end use is wildlife habitat. The 2019 Rare Plant and Wildlife Survey Report (Survey Report) included with the RP (Appendix B, pg. 20) states that Booth's Evening Primrose (*Eremothera boothii ssp. boothii*) was found on site. Mitigation measures to protect this rare, threatened, or endangered species (California Rare Plant Rank 2.B.3) include avoidance and salvage prior to ground disturbance, as well as relocation (pg. 20). While the RP includes mitigation measures for other species of special concern, it lacks any mitigation measures for Booth's Evening Primrose.

Requirement: The RP should be revised to include mitigation measures recommended in the Survey Report to protect or conserve Booth's Evening Primrose.

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Ryan Smith-Standridge
Proposed Makayla II Mine (CA Mine ID #91-14-XXXX)
June 7, 2022

The Division looks forward to receiving a response to comments, and a 30-day notice that the County intends to approve the RP, and finally, a submission of the approved RP. If you have any questions, please contact Claire Meehan at Claire.meehan@conservation.ca.gov or 916-639-5238.

Sincerely,

DocuSigned by:
Ian MacLeod
BD0B83B2077B44D
Ian MacLeod
Manager
Environmental Services Unit

DocuSigned by:
Ian MacLeod signing for:
BD0B83B2077B44D
David H. Rader, P.G.
Manager
Engineering and Geology Unit

DocuSigned by:
Claire Meehan
7C67E0775504421
Claire Meehan
Restoration Ecologist
Environmental Services Unit

DocuSigned by:
Jacquelynn Moore
10B2FB1E4F934E0
Jacquelynn Moore, G.I.T.
Engineering Geologist
Engineering and Geology Unit

ec: Thomas Hrubik, Operator, thrubik@globlapumice.com

Attachment 4

Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526

Phone: (760) 878-0263
FAX: (760) 872-2712
E-Mail: inyoplanning@inyocounty.us

Claire Meehan
Department of Conservation
Division of Mine Reclamation
715 P. Street MS 1905
Sacramento, Ca 95814

Dear Claire Meehan:

Southwest Pumice, LLC (SWP) has updated the reclamation plan in response to comments provided by DMR staff. Inyo County will address some considerations by adding conditions to their permit. Responses to the letter are as follow:

Comment #1
SWP corrections are in Figures 2 and 3 Section 1.3, page 6 and also Section 2.1, page 12. The reclamation boundaries have been addressed in Figures 2 and 3 and noted in Paragraph 3.1, page 16. The geologic descriptions have been added in Paragraphs 1.2 and 3.7.

Comment #2
SWP has updated the mining start dates and termination dates. The Mine has 30 years of material available. However, since this is BLM land, they must get a plan of operation or a sales contract. BLM requires a sales contract renewal every 5 to 7 years. Additionally, Inyo County will be conditioning the reclamation plan with a requirement to provide the county with the current sales contract within 30 days of obtaining the agreement with BLM. If SWP can't get a sales contract agreement before the contract's expiration date, reclamation must start within one year.

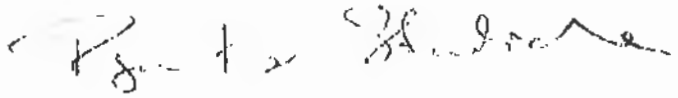
Comment #3
SWP will install berms and retention basins during mining activities to disallow any materials to flow offsite. SWP will contour the prior disturbed desert washes during final reclamation. Inyo County will condition SWP to get the appropriate permits through California Department of Fish and Wildlife (CDFW) to restore the desert washes.

Comment #4
SWP has amended the reclamation plan text in Paragraph 3.2; page 17, to specify the seed mix per pound.

Comment #5
SWP has updated the Reclamation Plan text to include the BLM requirement to have a biologist present during the relocation. Inyo County will be conditioning SWP with getting the appropriate permit through CDFW to relocate the Booth's Evening Primrose.

If you have any questions, please call 760-878-0405 or email me at rstandridge@inyocounty.us.

Thank you,



Ryan Smith-Standridge

Attachment 5

Planning Department
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FAX: (760) 872-2712
E-Mail: inyoplanning@inyocounty.us

DRAFT NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACT AND INITIAL STUDY

PROJECT TITLE: Reclamation Plan 2020-01/SouthwestPumice LLC.

PROJECT LOCATION: Pumice Mine Road is located on BLM land approximately 6 miles NorthEast of Coso Junction, California. The proposed mine reclamation located in section 22, Township 21S North, Range 38E, Mount Diablo Meridian with Tax Assessor Parcel Number (APN) 037-270-02.

PROJECT DESCRIPTION: The Bureau of Land Management has awarded Southwest Global Pumice a Pumice Materials-Sale Contract. Southwest Global Pumice has applied for a reclamation plan near Coso Junction as required hy Surface Mining And Reclamation Act. The proposal consists of a previously approved 12.23 exploratory drilling project that transitions into an active open-pit pumice mine. The applicant also proposes expanding an additional 11.98 acres for a total disturbance of 25 Acres.

FINDINGS:

A. The proposed project is consistent with the goals and objectives of the Inyo County General Plan.
B. The proposed project is consistent with the provisions of the Inyo County Zoning Ordinance.
C. Potential adverse environmental impacts will not exceed thresholds of significance, either individually or cumulatively.
D. Based upon the environmental evaluation of the proposed project, the Planning Department finds that the project does not have the potential to create a significant adverse impact on flora or fauna; natural, scenic and historic resources; the local economy; public health, safety, and welfare. This constitutes a Negative Finding for the Mandatory Findings required by Section 15065 of the CEQA Guidelines.

The 21-day public & State agency review period for this Draft Negative Declaration will expire on January 11,2022. Inyo County is not required to respond to any comments received after this date.

Additional information is available from the Inyo County Planning Department. Please contact Project Planner if you have any questions regarding this project.

Ryan Kay Standridge

Name

1/19/22

Date

Attachment 5

INYO COUNTY PLANNING DEPARTMENT

CEQA APPENDIX G: INITIAL STUDY & ENVIRONMENTAL CHECKLIST FORM

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

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

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

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

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

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance issues.

Planning Department
168 North Edwards Street
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Independence, California 93526

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E-Mail: inyoplanning@inyocounty.us

INYO COUNTY PLANNING DEPARTMENT

APPENDIX G: CEQA INITIAL STUDY & ENVIRONMENTAL CHECKLIST FORM

1. Project title: Reclamation Plan 2020-01/SouthwestPumice LLC.

2. Lead agency name and address: Inyo County Planning Department, PO Drawer L, Independence, CA 93526

3. Contact person and phone number: Ryan Standridge: (760) 878-0405

4. Project location: Pumice Mine Road is located on BLM land approximately 6 miles NorthEast of Coso Junction, California. The proposed mine reclamation located in section 22, Township 21S North, Range 38E, Mount Diablo Meridian with Tax Assessor Parcel Number (APN) 037-270-02.

5. Project sponsor's name and address: Thomas Hrubik, Southwest Global Pumice LLC, P.O. Box 174 Apple Valley, CA 92307.

6. General Plan designation: State and Federal Land (SFL)

7. Zoning: Open Space, 40-acre minimum (OS-40)

8. Description of project: The applicant has applied for a reclamation plan near Coso Junction. The proposal consists of a previously approved 12.23 exploratory drilling project and transitioning into an active open-pit pumice mine. The applicant also proposes expanding an additional 11.98 acres for a total disturbance of 25 Acres.

9. Surrounding land uses and setting: The Property is surrounded by Vacant Public lands.

Location:	Use:	Gen. Plan Designation	Zoning
Site	Mine	State and Federal Lands (SFL)	Open Space, 40-acre minimum (OS-40)
North	Vacant Public Land	State and Federal Lands (SFL)	Open Space, 40-acre minimum (OS-40)
East	Naval Weapons Center Vacant Land	State and Federal Lands (SFL)	Open Space, 40-acre minimum (OS-40)
South	Naval Weapons Center Vacant Land	State and Federal Lands (SFL)	Open Space, 40-acre minimum (OS-40)
West	Vacant Land	State and Federal Lands (SFL)	Open Space, 40-acre minimum (OS-40)

10. Other public agencies whose approval is required: Inyo County Environmental Health, Department of Conservation, Bureau of Land Management.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? Inyo County started the 30-day Tribal Consultation opportunity period, according to Public Resource code section 21080.31, by sending out certified written notices on May 13, 2021, inviting the Tribes to consult on the project. It described the project and location. The tribes that were notified are: Big Pine Tribe of Owens Valley, Bishop Paiute Tribe, Fort Independence Indian Community of Paiutes, Lone Pine Paiute-Shoshone Tribe, Timbisha Shoshone tribe, Twenty-Nine Palms Band of Mission Indians, Cabazon Band of Mission Indians, and the Torrez Martinez Desert Cahuilla Indians. Since no comments have been provided and no formal consultation meeting date requested, staff is submitting this Negative Declaration for a 30-day review and comment period. The County will continue to be open to consultation with the Tribe during this period. If the Tribe does not provide comments or schedule a formal consultation meeting within this 30-day period, the County, per Public Resources Code 21082.3 (d)(2) will consider the consultation process complete and certify the Negative Declaration of Environmental Impact.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

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

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

DETERMINATION

On the basis of this initial evaluation:

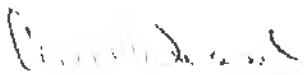
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

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

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

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



Name

1/19/22
Date

Attachment 5

INYO COUNTY PLANNING DEPARTMENT
ENVIRONMENTAL CHECKLIST FORM

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
No, the project's mining reclamation areas location is isolated near Cactus peak and not visible from Highway 395.				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
No, the proposed expansion will not damage scenic resources; there are no nearby trees rock outcroppings or historic buildings in the generol area.				
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
No, the mining reclamation area is in an isolated area near Cactus peak that is not visible from Highway 395. Although views of the mining reclamation might be visible from the relocation of a small portion of the SE-431 route or high points on surrounding public lands, it will not affect the overall scenic integrity of the area as the views would be from a considerable distance.				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
No, the proposed mining reclamation will not create a new source of substantial light or glare as site operations are conducted during daylight. The applicant has not submitted any security lighting at this time, but the reclamation plan will be conditioned that all outdoor light fixtures use low-energy, shielded light fixtures which direct light downward and fully shielded.				
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including The Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology Provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
No, the project is not located on farmland.				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
No, the proposed mining reclamation will not be located on land zoned for agriculture. There are no Williamson Act contracts in Inyo County.				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
No, the project is not located on timberland.				
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
No, the project is not located on forestland.				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒
No, the project is not located on farmland.				

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

a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
No, although there are portions of Inyo County within non-attainment areas for Federal and State PM10 (particulate matter 10 microns or less in diameter) ambient air quality standards, the primary source for this pollution is the Owens dry lake, located approximately 25-miles from the project site. The applicant will also be subject to Great Basin Unified Air Pollution Control District regulations regarding dust mitigation during operation and all processing equipment is permitted with the Great Basin Unified Air Pollution Control District.				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
No, although there are portions of Inyo County within non-attainment areas for Federal and State PM10 (particulate matter 10 microns or less in diameter) ambient air quality standards, the primary source for this pollution is the Owens dry lake, located approximately 25-miles from the project site. The applicant will also be subject to Great Basin Unified Air Pollution Control District regulations regarding dust mitigation during operation and all processing equipment is permitted with the Great Basin Unified Air Pollution Control District.				
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
No, although there are portions of Inyo County within non-attainment areas for Federal and State PM10 (particulate matter 10 microns or less in diameter) ambient air quality standards, the primary source for this pollution is the Owens dry lake, located approximately 25-miles from the project site. The applicant will also be subject to Great Basin Unified Air Pollution Control District regulations regarding dust mitigation during operation and all processing equipment is permitted with the Great Basin Unified Air Pollution Control District.				
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
No, there are no sensitive receptors near the project location. The nearest community is Olancha 20 miles away.				
e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact

No, the pumice mine does not create odor affecting a substantial number of people. Also, there are no sensitive receptors near the project location. The nearest community is Olancha 20 miles away.

IV. BIOLOGICAL RESOURCES:

Would the project:

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

Applicant-supplied biologists conducted the biological analysis with RCA Associates, Inc. (RCA). RCA performed CNNDB and California Native Plant Society (CNPS) database queries to identify special-status plant and wildlife species that could potentially be found in the project impact area. RCA conducted field surveys for special status species between the 23rd and 29th of May 2019. This query found potential habitat for the following species: Boothe's Primrose, Pinyon Rock Cress, Death Valley beardtongue, Charlette's phacelia, Joshua tree, Desert tortoise, LeConte's Thrasher, Burrowing owl, Mojave ground squirrel. The Ridgecrest BLM reviewed this project under NEPA for the mining of pumice and granted Southwest Globol Pumice a sales contract. The applicant will apply for a 2081 Incidental Take Permit to mitigate the impacts to less than significant as a condition of approval for issuing their permit. The applicant proposed a silt fence or a 3-foot berm around the mining area (1) and the production plant to reduce the risk of the Mojave Ground Squirrel or Dessert Tortoise coming onto the site. See the attached site plan. Under a qualified biologist's supervision, Southwest Global Pumice will relocate 8 Joshua trees on the proposed site plan and relocate 2 Boothe's Primrose plants with BLM approval. Inyo County will condition the reclamation plan with the same conditions.

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

No, the project site has no identified riparian habitat based on the USFWS National Wetlands Inventory Mapping Tool or any nearby riparian habitat affected by the project.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

No, the project site has no identified riparian habitat based on the USFWS National Wetlands Inventory Mapping Taol or federally protected wetland habitats affected by the project.

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

Although the project site could potentially have wildlife species, the project will not interfere with migratory fish or wildlife species under the Migratory Bird Treaty Act (MBTA). The BLM's pumice sales contract requires a survey when mining occurs between April 15th and July 15th. A qualified biologist must conduct a pre-mining study and determine the presence/absence of active nests within or adjacent to the area to be mined. A pre-mining survey will not be required if mining activities occur between July 16th and April 14th. Inyo County will condition the reclamation plan with the same condition.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
No, there are no local policies or ordinances protecting biological resources that pertain to the project site.				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
No, there are no adopted habitat or conservation plans that affect the project site.				
V. CULTURAL RESOURCES: Would the project: a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
No, the county approved the original exploratory drilling in August 1997 with disturbance restricted to 12.23 acres. Also, this project has already been reviewed under NEPA by the BLM. An archaeological investigation was conducted in 2019 for approximately 25 acres of land, including and surrounding the proposed mining reclamation area, and determined that there are no resources that would be defined per 15064.5. In the unlikely event an archaeological or cultural resource is discovered on the site during any future development, work shall immediately stop and Inyo County staff shall be notified per Inyo County Code (ICC) Chapter 9.52, Disturbance of Archaeological, Paleontological and Historical Features of the Inyo County Code.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
No, the county approved the original exploratory drilling in August 1997 with disturbance restricted to 12.23 acres. Also, this project has already been reviewed under NEPA by the BLM. An archaeological investigation was conducted in 2019 for approximately 25 acres of land, including and surrounding the proposed mining reclamation area, and determined that there are no resources that would be defined per 15064.5. In the unlikely event an archaeological or cultural resource is discovered on the site during any future development, work shall immediately stop and Inyo County staff shall be notified per Inyo County Code (ICC) Chapter 9.52, Disturbance of Archaeological, Paleontological and Historical Features of the Inyo County Code..				
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐
No, the county approved the original exploratory drilling in August 1997 with disturbance restricted to 12.23 acres. Also, this project has already been reviewed under NEPA by the BLM. An archaeological investigation was conducted in 2019 for approximately 25 acres of land, including and surrounding the proposed mining reclamation area, and determined that there are no resources that would be defined per 15064.5. In the unlikely event an archaeological or cultural resource is discovered on the site during any future development, work shall immediately stop and Inyo County staff shall be notified per Inyo County Code (ICC) Chapter 9.52, Disturbance of Archaeological, Paleontological and Historical Features of the Inyo County Code..				
VI. ENERGY: Would the project: a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
No, the project is mining reclamation; the site does not have buildings or power poles that require electricity; therefore, the proposed reclamation area does not impact the consumption of energy resources during operations.				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	☐	☐	☐	☒
No, the project is not located in one of the County's Solar Energy Development Areas (SEDA).				
VII. GEOLOGY AND SOILS: Would the project: a) Directly or indirectly cause substantial adverse effects, including the risk of loss injury, or death involving: i) Rupture of a known earthquake fault, as delineated on	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				

No, the project is not in an Alquist-Priolo zone.

ii) Strong seismic ground shaking?	☐	☐	☒	☐

Ground shaking may occur anywhere in the region, due to numerous earthquake faults, regardless of whether the project site is within an identified Alquist-Priolo zone or not. However, the Uniform Building Code ensures that future structures shall constructed to required seismic standards (Level IV) in order to withstand such shaking, so this potential impact is considered less than significant.

iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒

No the project area is not within an area of soils know to be subject to liquefaction.

iv) Landslides?	☐	☐	☐	☒

No, the project area is not subject to landslides.

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

No, the proposed mining reclamation shall conform to all drainage, grading, and "Best Management Practice (BMP)" requirements as set forth by BLM and all other associated regulatory agencies, will be written into the Conditions of Approval for the permit. As a result of these regulations, potential impacts are considered less than significant. .

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

No, the project is not located on a geologic unit or soil that is considered unstable.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒

No, the project is not located on a geologic unit or soil that is considered expansive.

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

No, the site has portable toilets on-site and is serviced by a commercial vendor; therefore, the project will not create a need for upgrades to the existing waste disposal systems as it will not create additional waste.

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

No, the project site does not include a unique paleontological or geologic feature.

VIII. GREENHOUSE GAS EMISSIONS:

Would the project: a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact

impact on the environment?

No, all equipment used at the mining site meet California's CO2 emission requirements, follow best management practices, and shall be subject to Great Basin Unified Air Pollution Control District regulations regarding dust mitigation during operations and shall be required to obtain all necessary permits from Great Basin Unified Air Pollution Control District.

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

No, all equipment used at the mining site meet California's CO2 emission requirements, follow best management practices, and shall be subject to Great Basin Unified Air Pollution Control District regulations regarding dust mitigation during operations and shall be required to obtain all necessary permits from Great Basin Unified Air Pollution Control District.

IX. HAZARDS AND HAZARDOUS MATERIALS:

Would the project:

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

No, Chemicals are not used on-site; no chemical processing occurs on-site only crushing and screening. There will be no chemical waste or pollution from the mining operation.

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

No, equipment and vehicles get transported to the Apple Valley shop for standard maintenance. Emergency maintenance and refueling comply with all rules and regulations regarding implementing proper fueling procedures, fuel, waste oil storage, spill control measures, and employee training per their Emergency Response Plans and Procedures on file with the Inyo County Environmental Health Services (EHS). EHS is the Certified Unified Program Agency (CUPA) that oversees hazardous materials storage, use, generation, and disposal. EHS will continue to permit.

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

No, the proposed project is not within one-quarter mile of an existing or proposed school.

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

No, the proposed project is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. There are no DTSC sites mapped within or adjacent to the project area and no additional sites are identified in the site vicinity on Geotracker and EnviroStor databases.

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

No, the mining reclamation is not included in an airport land use plan or within two miles of a public or public use airport.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact

residing or working in the project area?

No, the mining reclamation is not located in the vicinity of a private airstrip.

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

No, the mining reclamation will not physically interfere with an adopted emergency plan or emergency evacuation plan.

h) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

No, the mining reclamation location is not adjacent to any urbanized area and the surrounding area is BLM vacant land.

X. HYDROLOGY AND WATER QUALITY:

Would the project:

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

No, the currently approved Makayla I mine site will be in reclamation, and the existing water policy will remain in place with the relocation to the Makayla II site. Water supply is from an existing off-site well located across highway 395. A water truck (currently a 4,000-gallon truck) wets down material and roads during mining activities. Southwest Global Pumice may use approximately 28,000 gallons of water for dust suppression activities around 200 days per year, which amounts to approximately 17.2 acre-feet annually. Southwest Global Pumice will continue to provide employees with bottled water.

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

No, the currently approved Makayla I site will be in reclamation, and the existing water policy will remain in place with the mining operation relocating to the Makayla II site. Water supply is from an existing off-site well located across highway 395. A water truck (currently a 4,000-gallon truck)wets down material and roads during mining activities. Southwest Global Pumice may use approximately 28,000 gallons of water for dust suppression activities around 200 days per year, which amounts to approximately 17.2 acre-feet annually. Southwest Global Pumice will continue to provide employees with bottled water.

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

i) result in a substantial erosion or siltation on- or off-site;	☐	☐	☐	☒

No, the project site is composed of volcanic cinder gravels and sands. This material is very porous and there are no drainages or impervious surfaces on-site. Erosion is not an issue of concern on-site.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐

No, the project site is composed of volcanic cinder gravels and sands. This material is very porous, and there are no drainages or impervious surfaces on-site. Erosion is not a concern on-site. The mining reclamation is required to conform to all drainage, grading, and "Best Management Practice" (BMP) requirements set forth by the Inyo County Public Works Department, Inyo County of Inyo Environmental Health Services Department, and other associated regulatory agencies. As a result of this regulation, potential impacts are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐

No, the project site is composed of volcanic cinder gravels and sands. This material is very porous, and there are no drainages or impervious surfaces on-site. Erosion is not an issue on-site.

iv) impede or redirect flood flows?	☐	☐	☐	☒

The project area is not located in any flood hazard areas and will not potentially redirect flood flows.

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

No, the project is not proposed in an area that is included in a water quality control or sustainable ground water management plan.

c) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

No, the proposed mining reclamation is not in a 100-year flood hazard area.

f) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

No, the project is not in a 100-year flood hazard area.

g) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒

No, the proposed mining reclamation is not in an area subject to flooding due to the failure of a levee or dam. Average annual rainfall in this area is 7-inches to 10-inches.

h) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

No, the proposed mining reclamation is not in an area subject to seiches, tsunamis, or mudflows.

XI. LAND USE AND PLANNING:
Would the project:

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

No, the proposed reclamation plan does not physically divide an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

The proposed project is consistent with the County Zoning Ordinance designation of 'Open Space (OS). The OS designation conditionally allows mining uses (Inyo County Code, Title 18, Section18.12.040 I. Mining uses are also allowed if approved by the Bureau of Land Management accompanied by a reclamation plan approved by Inyo County under a Memorandum of Understanding between the County and the BLM). These include the mining and processing of natural resources, including open pits. The proposed mining reclamation plan is a continued mining use. The General Plan consists of a policy that protects the current and future extraction of mineral resources essential to the County's economy while minimizing impacts of this use on the public and the environment.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

No, the proposed project will not conflict with any habitat conservation plan or natural community conservation plan—the project site is located in a previous exploratory mining area that has been disturbed.

XII. MINERAL RESOURCES:

Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

No, this project is the mining of a mineral; however, this minerol is in abundance in the area and mining this small deposit will not deplete the mineral resource. The Inyo County General Plan encourages such mining. The impact to this resource is very small considering the great quantities of it that are avoilable within Inyo County.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

No, the project will have no impact on the resource.

XIII. NOISE: Would the project result in the:

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

No, the proposed reclamation plan can increase the ambient noise level in the project's vicinity; however, the proposed site is secluded in the Coso Mountains range near cactus peak, and the nearest community is Olancha, approximately 20 miles away.

b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

No, although the mining operation requires the use of heavy construction equipment the nearest comunity is approximately 20 miles away.

c) For a project located within the vicinity of a private airstrip or, an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

No, the proposed project is not located within an airport land use plan, or within 2-miles of a public airport.

XIV. POPULATION AND HOUSING:

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

No, the proposed project transitions from exploratory to active mining with an expansion. It does not include housing and is not an infrastructure improvement that would cause a population increase.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No, the proposed project transitions from exploratory to active mining with an expansion will not result in a loss of housing units or the displacement of people.

XV. PUBLIC SERVICES: Would the project:

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

No, the proposed project transitions from exploratory drilling to active mining with an expansion. It will not cause high demand for additional services, resulting in an overall loss in service provision.

Police protection?	☐	☐	☐	☒

No, the proposed project transitions from exploratory drilling to active mining with an expansion. It will not cause high demand for additional services, resulting in an overall loss in service provision.

Schools?	☐	☐	☐	☒

No new school service will be required because of this project.

Parks?	☐	☐	☐	☒

No new parks will be required because of this project.

Other public facilities?	☐	☐	☐	☒

No, the proposed project will not create a need for additional public services.

XVI. RECREATION: Would the project:

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

No, the proposed project will not increase the use of existing recreational facilities. No portion of this project anticipates any change in the level of service required.

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

No, the proposed project does not include, nor will it cause, a need for an increase in parks or other recreational facilities that might have an adverse physical effect on the environment.

XVII. TRANSPORTATION:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit,	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact

roadway, bicycle and pedestrian facilities?

No, the proposed project transitions from exploratory drilling to active mining with an expansion. It will have no impact on adopted transportation plans, policies, or programs.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? ☐ ☐ ☐ ☒

No, The project is consistent with CEQA Guidelines § 15064.3, subdivision (b). the applicant has stopped production of pumice and is currently reclaiming the Makayla I site. Production will resume after the approval of Makayla II expansion reclamation plan , and vehicle miles traveled will remain the same.

c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ☐ ☐ ☐ ☒

No, the proposed project transitions from exploratory drilling to active mining with an expansion. It will not cause a need for changes to the roads in the area.

d) Result in inadequate emergency access? ☐ ☐ ☒ ☐

No, the proposed project transitions from exploratory drilling to active mining with an expansion. It will not create losses of emergency access.

XVIII. TRIBAL CULTURAL RESOURCES:

Would the project:

a) cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or ☐ ☐ ☐ ☒

No, this project has already been reviewed under NEPA by the BLM. The proposed project does not encompass a resource eligible for listing in the California Register of Historical Resources or a local register or historical resources as defined in Public Resource Code section 5020.1(k). If any archaeological or cultural resources are discovered on the site, work shall stop and Inyo County staff shall be immediately notified per Chapter 9.52, Disturbance of Archaeological, Paleontological and Historical Features of the Inyo County Code.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. ☐ ☐ ☐ ☒

No, the proposed project transitions from exploratory drilling to active mining with an expansion does not encompass a resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of the Public Resource Code section 5024.1. The project description was also sent to Tribes requesting AB52 notification. No requests for additional information have been received from the Tribes. If cultural resources are discovered in the project area, work will be stopped and a local Tribal representative will be consulted with to determine the significance of the finding and the proper handling of the resource will be required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIX UTILITIES AND SERVICE SYSTEMS: Would the project: a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒

No, the proposed project will not result in the construction of new or expanded utility or service systems. The proposed project does not require electricity or waste facilities. All stormwater received at this site will be contained on-site or diverted into existing drainage channels and will not require new or an expansion of existing stormwater drainage facilities.

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

Yes, the proposed project transitions from exploratory drilling to active mining with an expansion. The mining operations will move to the new Makayla II site upon approval and closure of the Makayla I site. The water use on-site minimizes dust generation and will remain the same. The water supply is from an existing off-site well.

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

No, the proposed project will not be serviced by a wastewater treatment facility.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒

No, the project is served by a county landfill that has the capacity to accommodate the project's solid waste disposal needs. All refuse is disposed into approved trash bins and removed by a commercial garbage hauler.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Yes, the applicant will be required to comply with federal, state and local statues and regulations related to solid waste.

XX. WILDFIRE: Would the project: a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

No, the project will not interfere with the implementation of an adopted emergency plan.

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

No, the project site is comprised of pumice, gravel, and sand. The site's vegetation will remain sparse until the completion of mining occurs, and final slope, seed distribution has been accomplished to reduce the risk of wildfire.

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

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact

temporary or ongoing impacts to the environment?

No, the project will not cause the need for additional wildfire-associated infrastructure. The project site is also located within a Federal Responsibility Area.

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

No, the nearest community is Olancha 20 miles away.The site consists of highly permeable soils and will not create downslope or downstream flooding or landslides.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE:

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

No, the project will not impact or degrade the quality of the environment. Southwest Global Pumice can mitigate the project area's resource impacts to less than significant. Inyo County will write mitigation measures into the Conditions of Approval for the permit. The applicant shall work with the Great Basin Air Pollution Control District (GBAPCD) to operate in such a way as to minimize potential air quality effects from the mining operation and reclamation plan. The applicant shall work with CDFW to mitigate the special status species' impacts and obtain a 2081 Incidental Take permit. If any vegetation removal activities occur between March 15 – September 15. A pre-construction survey shall be conducted for nesting birds, no more than 3-days before construction, and submitted to the Planning Department and the BLM. A qualified avian biologist shall prepare and implement a Nesting Bird Plan if active nests are found, per CDFW requirements. Any grubbing or vegetation removal shall occur outside peak breeding season. Southwest Global Pumice will be required to follow all State and local regulations regarding hazardous materials. The proposed project does not encompass a resource eligible for listing in the California Register of Historical Resources or a local register or historical resources defined in Public Resource Code section 5020.1(k). Work shall stop if any archaeological or cultural resources are discovered on the site. Inyo County staff shall be immediately notified per Chapter 9.52, Disturbance of Archaeological, Paleontological, and Historical Features of the Inyo County Code.

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

The proposed mining reclamation is located in a remote location and none of the impacts of this project will be cumulatively considerable.

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

No, Southwest Global Pumice will remove all equipment and debris from the site upon completion of mining. The site perimeter berm will restrict public access to the site for the life of the mine operation. Warning signs with contrasting background lettering shall install at access points into the quarries stating "No Trespassing - Keep Out; Surface Mining Operation" or similar. Also, the reclaimed 2H:1V slopes will be of sufficient low gradient to not cause a hazard to public safety.

Attachment 6

RARE PLANT AND WILDLIFE SURVEY REPORT

MAKAYLA 2 MINE EXPANSION PROJECT
INYO COUNTY, CALIFORNIA

Prepared for:

Global Pumice, LLC

Prepared by:

RCA Associates, Inc.
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Principal Investigator: Randall C. Arnold, Jr.

Report prepared by: R. Arnold
Project: #2019-37

June 18, 2019

TITLE PAGE

Date Report Written: June 18, 2019

Date Field Work Completed: May 23 and 28, 2019

Report Title: Rare Plant Survey Report

Prepared for: Global Pumice, LLC

Principal Investigators: Randall C. Arnold, Jr., Principal Biologist

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Attachment 6

Table of Contents

1.0 INTRODUCTION AND PROJECT DESCRIPTION

Biological surveys were conducted on May 23 and 28, 2019 within the project area which is located approximately 4-miles east of Oso Junction, California and Highway 395 and 2.5-miles north of Gill Station Coso Road (Township 21 South, Range 38 East, Section 22) (Figures 1 and 2). The primary emphasis was to survey the site for the presence of any special status plant and/or wildlife species which have a moderate potential for occurring on the site. The proposed expansion area is approximately 25-acres in size and encompasses an existing mine area along with additional acreage that may be mined for pumice following completion of exploratory investigations and upon project approval (Figure 3). The project site is located within "Areas of Critical Environmental Concern" (ACEC) and "National Conservation Lands" (NCL). As part of the environmental assessment process, data sources were reviewed prior to the start of field investigations including the California Natural Diversity Data Base (CNDDB), CALFORA, and the Biogeographic Information & Observation Systems (BIOS). In addition, other technical reports previously prepared for the existing Makayla Mine 1 were also reviewed.

This report includes a discussion of the existing conditions within the boundaries of the proposed expansion area; as well as a discussion of federal, State, and county guidelines and policies which may affect project implementation. Mitigation measures which may be required are also discusses.

Following completion of the comprehensive data review, surveys were performed on the site during which the biological resources on the property and in the surrounding areas were documented by biologists from RCA Associates, Inc. As part of the surveys, the property site and the adjoining lands were evaluated for the presence of native habitats which could potentially support populations of special status species which have been documented in the region based on the background data review. A focused survey was also conducted for the desert tortoise and burrowing owl, and a habitat assessment was also performed for the Mohave ground squirrel.

Attachment 6

The property was also evaluated for the presence of sensitive habitats including stream channels, wetlands, vernal pools, riparian habitats, and potential jurisdictional areas.

Based on data from CNDDB, CALFLORA, and BIOS for the region, there are fourteen special status plants and thirteen special status wildlife species in the region. Of these species only one special status plant (i.e., *Camassonia boothii ssp. Boothii*) was observed within the boundaries of the proposed expansion area and three other plants could potentially occur on the site (Pinyon rock cress [*Arabis dispar*], Death Valley beardtongue [*Penstemon fruticiformis var. amargosae*], and Charlotte's phacelia [*Phacelia nashiana*]). Only four special status wildlife species (i.e., desert tortoise [*Gopherus agassizii*], LeConte's thrasher [*Toxostoma lecontei*], burrowing owl [*Athene cunicularia*], and Mohave ground squirrel [*Spermophilus mohavensis*]) have a moderate potential for occurring on the site or in the immediate area. However, none of these wildlife species were observed during the May 2019 field investigations. The special status plant and wildlife species which have been documented in the region are presented in Table 5-1 and a discussion is provided in Sections 4.2 and 4.3 for those species observed on the site, and those which could potentially occur on the site. Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980).

The Project Proponent is proposing to abandon the existing mine (Makayla 1) and expand the mining operation into an area immediately east of the existing mine. The necessity for the change in the mining position is due to extreme overburden in the Makayla 1 mine area. The proposed new mine area will be designated as Makayla 2 where exploratory work will be conducted to assess the economic viability of the area. The project area which will encompass Makayla 2 will be approximately 25-acres; however, the initial exploratory work will be confined to a 5-acre portion as depicted in Figure 3.

2.0 ENVIRONMENTAL SETTING

The mine area is approximately 25-acres in size and consists of steep sloping hills covered in sand and pumice. The area in question encompasses the existing Makayla I Mine and additional areas which will be mined upon approval of the proposed expansion area. The proposed expansion is depicted in Figure 3 and as shown includes an existing mine area (Makayla Mine 1) in the southern portion of the site, as well as a smaller mine area in the northern part. The mine site is located about four miles east of Coso Junction, California and State Highway 395 and about 2.5 miles north of Gill Station Coso Road (Township 21 South, Range 38 East, Section 22, USGS Cactus Peak, CA Quadrangle) (Figures 1 and 2).

The undisturbed areas of the 25-acre parcel supports a low to moderately Alkali Desert Scrub and Joshua tree plant community (CDFG, 2005). A total of 45 plants were identified during the field investigations with creosote bush (*Larrea tridentata*), saltbush (*Atriplex* sp.), ephedra (*Ephedra nevadensis*) and Fremont's indigo bush (*Psorothamnus fremontii*) the dominant plant species. The site supports a variety of wildlife species; however, only six species were observed including antelope ground squirrel (*Ammospermophilus leucurus*), jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), kit fox tracks (*Vulpes macrotis*), side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), and raven (*Corvus corax*).

Tables 1 and 2 (Appendix A) provide a list of the plants and wildlife observed. No sensitive habitats such as blueline channels, wetlands, or critical habitats for sensitive species were present on the property.

3.0 REGULATORY SETTING

West Mojave Plan (WMP): The West Mojave Plan (WMP) is an environmental planning document designed to streamline the permitting process and compliance with the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) for projects. The WPA includes the West Mojave Desert area encompassing 9.3 million acres in Inyo, Kern, Los Angeles, and San Bernardino counties, as wells as 3.3 million acres of public lands administered by BLM, 3.0 million acres of private lands, 102,000 acres administered by the State of California, and military lands administered by the Department of Defense. Compliance with the WPA covers all permitting requirements normally covered under FESA and CESA.

Federal Endangered Species Act (ESA): The USFWS administers the federal endangered species act which was passed in 1973, and has since been amended and re-authorized. The ESA provides a process for listing species as either threatened or endangered as well as a process for protecting listed species and to prevent the "take" of a listed species, unless authorized through Section 10 or Section 7 consultations with the federal agencies.

Migratory Bird Treaty Act (MBT): Native Migratory Birds are protected by international treaty under the Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10. Any disturbances that may cause abandonment of nests and/or loss of reproductive effort maybe be considered "take" and potentially punishable by fines or imprisonment. Project related disturbance at active nesting territories must be reduced or eliminated during the nesting cycle (February 1 to August 31) to avoid violation of the MBTA.

California Endangered Species Act (CESA): The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act. This Act prohibits the "take" of any plant or animal species which has been designated by the Fish and

Wildlife Commission as either threatened or endangered in the state of California. Section 2080 of the Fish and Wildlife code prohibits "take" of any species that the commission determines to be an endangered or threatened species, and early consultation with the CDFW is required to avoid potential impacts to endangered or threatened species, as well as to develop an appropriate mitigation plan to avoid or minimize impacts to listed species.

California Fish and Game Code: All birds (especially raptors) and their nests are protected under Section 3503 of the California Fish and Game Code. Under the code, the take, possession, or destruction of birds, their nests or eggs is prohibited. To avoid violation of the "take" provisions of the code, project impacts at active nesting territories must be reduced or eliminated during the nesting period.

California Environmental Quality Act (CEQA)

Whenever a California public agency determines that a project may have significant environmental consequences, a formal evaluation is required under CEQA to evaluate the potential environmental impacts of a project. Under CEQA guidelines, a proposed project would result in a potentially significant impact if it were to have any of the following impacts:

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

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or FWS.

3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal. Filling, hydrological interruption, or other means;

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites;

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.0 METHODOLOGIES

Biological surveys were conducted on May 23 and 28, 2019 during which biologists from RCA Associates, Inc. initially walked meandering transects throughout the site to collect data on the plant and wildlife communities. Following completion of the initial reconnaissance surveys, comprehensive (i.e., 100 percent coverage) pedestrian surveys were performed throughout the site to document the vegetation present on the property and the wildlife species which inhabit the area. The surveys were conducted as per the survey protocol requirements for NEPA/ESA compliance for BLM special status plant species, and as required by CDFW for special status plant n animal species.

In addition to the general biological investigations, focused/protocol surveys were also conducted to determine if desert tortoises or burrowing owls were present on the site. Although burrowing owls have not been documented in the region, given the mobility of the species and distribution of the species throughout California, focused surveys were conducted in conjunction with the other surveys performed. In addition, a habitat assessment was also performed for the Mohave ground squirrel. The applicable methodologies for the various field investigations performed are summarized below.

Pedestrian surveys were performed on the site and in the surrounding area from approximately 0700 to about 1350 hours on each survey day (May 23, and 28, 2019). During the field investigations, focused surveys were performed for the desert tortoise and burrowing owl and the habitat present on the site was evaluated for the presence of Mohave ground squirrel and desert tortoise. Weather conditions during the surveys consisted of winds ranging from 5 to 15 mph, temperatures from the low 70's (F) to low-80's (AM) (°F) with cloud cover ranging from 5 to 10 percent. All plants and wildlife detected during the field investigations were recorded and are provided in Tables 1 & 2 along with other species that have been documented in the area (Appendix A).

4.1 General Plant and Animal Surveys

Meandering pedestrian transects were walked throughout the site at a pace that allowed for careful documentation of the plant and animal present on the site. All plants observed were identified in the field and wildlife were identified through visual observations and/or by vocalizations. Tables 1 and 2 (Appendix A) provide a comprehensive compendium of the species observed and those expected to occur in the region. As part of the general plant surveys, the entire 25-acres was also surveyed for the presence of any sensitive plan species that have been documented in the region. The sensitive plants which have been documented in the region are discussed in Sections 4.0 and 5.0.

4.2 Special Status Wildlife Species

Based on the literature review there are fourteen special status plants and nine special status wildlife species which have been documented in the region. However, only five of these species either occur on the site or have a moderate likelihood of occurring on the property. These species include desert tortoise, Mohave ground squirrel, burrowing owl, LeConte's thrasher, and Booth's evening primrose. These species are discussed below in more detailed.

Desert Tortoise (*Gopherus agassizii*): A protocol survey was conducted for the desert tortoise in conjunction with the general biological surveys and the focused owl survey. The purpose of the protocol survey was to evaluate the site for the presence of tortoises, as well as the presence of any tortoise sign such as burrows, scats, carcasses, etc. USFWS and CDFW specify when protocol surveys for protocol surveys for tortoises should be conducted (i.e., April through May and September through October), therefore; the surveys were conducted on May 28, 2019.

As part of the surveys, 10-meter belt transects were walked throughout the site during which the entire 25-acre area was evaluated for the presence of any undisturbed areas

which might support vegetation typically associated with the desert tortoise, as well as the presence of tortoises and/or tortoise sign. Zone of influence surveys were also performed in the surrounding area.

Mohave Ground Squirrel (*Xerospermophilus mohavensis*): A habitat assessment was performed for the Mohave ground squirrel as per CDFW protocol including an analysis of the on-site habitat, evaluation of local populations, and assessment of connectivity with habitats in the surrounding area which might support populations of the Mohave ground squirrel. If a site supports suitable habitat for the Mohave ground squirrel, CDFW may require payment of a mitigation fee for acquisition of mitigation lands to compensate for impacts to the species. In lieu of payment of mitigation fees, the proponent may conduct a live trapping survey to definitively determine the presence/absence following consultations with CDFW.

Burrowing Owl (*Athene cunicularia*): The site was evaluated for owls and/or owl sign given the mobility and wide spread distribution of the species throughout California. The site was evaluated on May 23, 2019 for the presence of suitable habitat for the species. Owls utilize a variety of natural and modified habitats for nesting and foraging where the vegetation is low-growing. Typical habitats for the species include native and non-native grasslands, interstitial grassland within shrub lands, shrubs lands with low density cover, drainage ditches, earthern berms, pasture lands, and fallow fields (CDFW, 1992). Burrowing owls typically utilize abandoned fossorial burrows which have been excavated by various mammals such as coyotes, foxes, ground squirrels, badgers, and dogs since they are no capable of excavating their own burrows. Owls may also use man-made structures such as electrical vaults, cement culverts, man-made structures, and large debris piles.

As part of the field investigations, the site was surveyed for the presence of owls and potential (i.e., occupiable) owl burrows. As required by survey protocol, belt transects

were walked in a north-south direction until the entire property had been checked for owls, potential burrows, as well as owl sign (burrows, tracks, whitewash, etc.). All transects were walked at a pace that allowed careful observations along the transect routes and in the immediate vicinity. Field notes were recorded regarding native plant assemblages, wildlife sign, and human affects in order to determine the presence or absence of suitable burrowing owl habitat.

LeConte's Thrasher (*Toxostoma lecontei*): The site was surveyed for LeConte's thrashers in conjunctions with the tortoise protocol surveys. The species is typically associated with desert scrub communities and is uncommon throughout the Mojave Desert.

4.3 Special Status Plant Species

As noted above, the site was evaluated for the presence of special status plant species which have been documented in the region according to CNDDB, CALFLORA, and BIOS. Special status species in the region are threatened by road construction, mining, urbanization, and grazing with some of the species listed as endangered by the State of California. As noted above, comprehensive surveys (100 percent coverage) were conducted throughout the entire 25-acres to determine if any specials status plants were present with emphasis placed on evaluating the site for the presence of sensitive plants which were previously observed on the site (i.e., Booth's Evening Primrose).

The rare plant survey performed included 10-meter pedestrian surveys throughout 100 percent of the 25-acre site in order to document the presence/absence of any special status plant species. Annual rainfall in 2019 for California was above average; therefore, surveys were conducted at a time (May) when most plants, including special status plants, were expected to be flowering or at least identifiable. Fourteen special status plant species have been observed in the general region and of these four have the potential to occur on the site. These are discussed below.

Booth's Evening Primrose (*Camissonia boothii spp. Boothii*): This primrose species is an annual herb and is native to California, Nevada, and Arizona. It is found primarily in desert washes and desert scrub plant communities. It is a CNPS List 2.3 species and a BLM sensitive species. List 2 species are defined as "rare, threatened, or endangered in California. This species has been documented east of the Sierra Nevda in Inyo, Mono, and San Bernardino Counties and was observed on the project site in 2006 (UltraSystems, June 21, 2006).

Pinyon rock cress (*Arabis dispar*): This species is a perennial herb typically occurring in Joshua tree woodland, juniper woodland communities, and Mojavean desert scrub communities. The elevational range of the plant is about 3,900 to 7,800 feet. It is a CNPS List 2 species, as well as, a BLM sensitive species.

Death Valley Beardtongue (*Penstemon fracticiformis var. amargosae*): This perennial herb is a CNPS List 1B.3 and a BLM sensitive species. It is normally found in Mojavean desert scrub communities in sandy and gravely washes at an elevational range of 3,200 to 3,900 feet.

Charlotte's Phacelia (*Phacelia nashiana*): This Phacelia is an annual herb found in Mojavean desert scrub, Joshua tree woodlands, and pinyon-juniper woodlands on granitic and sandy soils. The plant normally occurs at an elevation of 1,900 to 7,200 feet.

5.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDB, 2019), CALFLORA, and BIOS was performed. The data base search included the USGS Cactus Peak, California quadrangle and the eight surrounding quadrangles in order to fully evaluate the existing conditions in the region in regards to special status species. Based on this review, it was determined that twelve special status plant species and nine special status wildlife species have been documented within the Region. The following tables provide data on each special status species.

Table 5-1: Special Status Plant and Wildlife Species in the Region.

NAME	STATUS	HABITAT REQUIREMENT	OCCURRENCE PROBABILITY
PLANTS			
Booth's evening primrose (*Camissonia boothii ssp. Bothii*)	Fed: None State: None CNPS: List 2.3 BLM: S	Mojavean desert scrub communities and Joshua tree woodlands from 2,900 to 7,800 feet elevation	Observed on site in 2006 and 2019.
Death Valley beardtongue (*Penstemon fructiciformis var. amargosae*)	Fed: None State: None CNPS: List 1B.3 BLM: S	Mojavean desert scrub communities from 3,200 to 4,000 feet elevation	Moderate probability of occur on site.
Pinyon rock cress (*Arabis dispar*)	Fed: None State: None CNPS: List 2 BLM: S	Mojavean desert scrub	Moderate probability of occurring on site.
Charlotte's phacelia (*Phacelia nashiana*)	Fed: None State: None CNPS: List 1B.2 BLM: S	Mojavean desert scrub	Moderate probability of occurring on the site.
Darwin Mesa milk-vetch (*Astragalus atratus var. mensanus*)	Fed: None State: None CNPS: List 1B.1 BLM: S	Mojavean desert scrub 3900 to 7800 feet elevation	Not expected to occur on site.
Big Bear Valley woollypod (*Astragalus leucolobus*)	Fed: None State: None CNPS: 1B.2	Pinyon and juniper woodlands from 5400 to 8,200 feet elevation	Not expected to occur on site.

NAME	STATUS	HABITAT REQUIREMENTS	OCCURRENCE PROBABILITY
Kern County clarkia (*Clarkia xantiana ssp. parviflora*)	Fed: None State: None CNPS: List 4,2	Mojavean desert scrub from 2,700 to 3,800 feet elevation.	Not expected to occur on site.
Sanicle cymopterus (*Cymopterus ripleyi var. saniculoides*)	Fed: None State: None CNPS: List 1B.2 BLM: S	Mojavean desert scrub 3200 to 5400 feet elevation	Not expected to occur on site.
Inyo hulsea (*Hulsea vestita var. inyoensis*)	Fed: None State: None CNPS: List 1B.3	Great basin scrub 5,400 to 9,800 feet elevation	Not to expected to occur on site.
Creamy blazing star (*Mentzelia tridentata*)	Fed: None State: None CNPS: List 1B.3 BLM: S	Mojavean desert scrub 2,200 to 3,800 feet elevation	Low probability of occurrence on site.
Mono County phacelia (*Phacelia monoensis*)	Fed: None State: None CNPS: List 1B.1 BLM: S	Great basin scrub 6,200 to 9,500 feet elevation	Not expected to occur on site.
Charlotte's phacelia (*Phacelia nashiana*)	Fed: None State: None CNPS: List 1B.2 BLM: S	Mojavean desert scrub 1,900 to 7,200 feet elevation	Moderate probability of occurrence on site.
DeDecker's clover (*Trifolium dedeckerae*)	Fed: None State: None CNPS: List 1B.3 BLM: S	Pinyon-juniper woodland 6,800 to 11,500 feet elevation	Not expected to occur on site.
Owens Valley checkerbloom (*Sidalcea covillei*)	Fed: None State: Endangered CNPS: List 1b.1 BLM: S	Occurs in Owens Valley in alkali meadows	Not expected to occur on site.
WILDLIFE			
San Emigdio blue butterfly (*Plubulina emigdionis*)	Fed: None State: None	Desert canyons	Low probability of occurrence on site.
Wong's springsnail (*Pyrgulopsis wongi*)	Fed: None State: None Other: FSS	Freshwater habitats	Not expected to occur on site.
Owens speckled dace (*Rhinichthyes osculus*)	Fed: None State: None CDFW: SSC	Amargosa River	Not expected to occur on site.

Attachment 6

NAME	STATUS	HABITAT REQUIREMENTS	OCCURRENCE PROBABILITY
Desert tortoise (*Gopherus agassizii*)	Fed: T State: T	Mojavean desert scrub and Joshua tree woodlands	Moderate probability of occurrence on site.
Swainson's hawk (*Buteo swainsoni*)	Fed: None State: T	Varity of habitats throughout California	Low probability of occurrence on site.
Le Conte's thrasher (*Toxostoma lecontei*)	Federal: None State: None CDFW: SSC	Mojavean desert scrub	Moderate probability of occurrence on site.
Pallid bat (*Antrozous pallidus*)	Federal: None State: None CDFW: SSC BLM: S	Chaparral, scrub, grassland, riparian woodland	Low probability of occurrence on site.
Townsend's big-eared bat (*Corynorhinus townsendii*)	Federal: None State: None CDFW: SSC BLM: S	Broadleaved upland forests, chaparral, chenopod scrub, and grasslands.	Not expected to occur on site.
Panamint kangaroo rat (*Dipodomys panamintinus panamintinus*)	Fed: None State: None CDFW: SSC	Sagebrush and pinyon pine	Low probability of occurrence on site.
Silver-haired bat (*Lasionycteris noctivagans*)	Fed: None State: None CDFW: SSC	Sierra Nevada and Great Basin areas	Not expected to occur on site.
Owens Valley vole (*Microtus californicus vallicola*)	Fed: None State: None CDFW: SSC	Variety of habitats in Owens Valley	Not expected to occur on site
Mojave Ground Squirrel (*Spermophilus mohavensis*)	Federal: None State: T CDFW: SSC BLM: S	Mojave desert scrub, Joshua tree woodland, chenopod scrub	Moderate probability of occurrence on site.
Golden eagle (*Aquila chrysaetos*)	Fed: None State: None CDFW: FP BLM: S	Open habitats	Low probability of occurrence on site.

Legend: T = Threatened
E = Endangered
SSC = CDFW Species of Special Concern
S = BLM Sensitive Species
FSS = Forest Service Sensitive Species
FP = California Fully Protected

6.0 RESULTS

6.1 General Biological Resources

The property supports a desert scrub plant community typical of the region with creosote bush (*Larrea tridentata*) and various saltbush (*Atriplex sp.*) the dominant species (Figures 3 and 4). A total of 50 plant species were identified during the field investigations. Other species common throughout the site included Indigo bush (*Psorothamnus fremontii*), ephedra (*Ephedra nevadensis*), cheesebush (*Hymenoclea salsola*), Cooper's goldenbush (*Ericameria cooperi*), fiddleneck (*Amsinckia tessellata*), silver cholla (*Opuntia echinocarpa*), beavertail cactus (*O. basilaris*), and cottontop cactus (*Echinocarpa polycephalus*). Other plant species noted included several brome grasses (*Bromus* sp.), Joshua tree (*Yucca brevifolia*), California buckwheat (*Eriogonum fasciculatum*), white bursage (*Ambrosia dumosa*), and needlegrass (*Stipa speciosa*). Table 1 (Appendix A) provides a compendium of all of the plants observed on the site.

The site supports a variety of wildlife species with jackrabbits (*Lepus californicus*), antelope ground squirrels (*Ammospermophilus leucurus*), and kangaroo rats (*Dipodomys sp.*) observed during the surveys. Tracks and scats of kit fox (*Vulpes macrotis*) and coyote (*Canis latrans*) were also identified. Reptile observations were limited to a few western whiptails (*Cnemidophorus tigris*) and side-blotched lizards (*Uta stansburiana*); although, other reptiles which have been observed in the area include desert spiny lizard (*Sceloporus magister*) and desert horned lizard (*Phrynosoma platyrhinos*). The only birds species observed included mourning dove (*Zenaida macroura*) and common raven (*Corvus corax*). Table 2 provides a compendium of wildlife which has been observed on the site and those known to occur in the region. No sensitive habitats such as blueline channels, vernal pools, or critical habitats for sensitive species were noted during the field investigations.

6.2 Federal and State Listed Species

There are two Federal and/or State listed species which have been documented in the surrounding region within the surrounding region which have a moderate potential for occurring on the site in the future; although, neither species was observed during the May 2019 investigations. These two species include the desert tortoise (*Gopherus agassizii*) and Mohave ground squirrel (*Xerospermilus mohavensis*). These two species are discussed below:

Desert Tortoise: Desert tortoises, which are listed as threatened by USFWS and CDFW, have been documented in the region; although, no tortoises have been recently documented in the immediate area. A protocol survey was conducted on May 28, 2019 to determine if the site supports the species. No tortoises were observed during the May 2019 surveys nor were any active tortoise burrows, scats or other sign (e.g., carcasses, etc.) observed.

Mohave Ground Squirrel: Mohave ground squirrel (California threatened species) populations have been documented in the region and this species is dependent upon undisturbed desert scrub, Joshua tree woodlands, and chenopod scrub communities. Based on its behavior, the species is infrequently observed above ground except during a small window from about early February to March which is when the breeding season typically occurs.

6.3 Wildlife Species of Special Concern and Special Status Plants

There is one special status wildlife species and four special status plants species which have been documented within the region and which do occur or have a moderate potential for occurring on the site. These species include LeConte's thrasher, Booth's evening primrose, Pinyon rock cress, Death Valley Beardtongue, and Charlotte's phacelia.

Burrowing Owl: The burrowing owl has a wide spread distribution throughout California; although, populations levels have been declining over the last several decades throughout the state. No owls were observed during the field investigations nor were any owl sign (e.g., whitewash, castings, etc.) identified. Given the results of the surveys, the site does not currently support any owls and there is a low to moderate probability of the species occurring on the site in the near future.

LeConte's Thrasher: LeConte's thrasher's have been designated as a Species of Special Concern by CDFW, and this species use to have a relatively widespread distribution throughout the Owens Valley, Mojave Desert, Colorado Desert, the Kern River Basin, and the San Joaquin Valley. However, populations of the species have declined significantly over the last few decades with the species infrequently observed. The species has been documented in the region and has a moderate potential for occurring on the site.

Booth's Evening Primrose: This primrose species is a CNPS List 2 species and BLM sensitive species. It is an annual herb found in Inyo, Mono and San Bernardino Counties. This species was previously observed in 2006 on the site and was also identified during the 2019 field investigations. Although rainfall has been above average in California, only three locations of the species were identified, which may be an indication of lower rainfall in the area where mine site is located. The locations of the 2019 observations are shown on Figure 3, and the GPS locations are: 36.098396 117.868392; 36.098221 117.867968; and 36.097458 117.867316.

Pinyon Rock Cress: Pinyon rock cress is a CNPS List 2 plant and BLM sensitive species that is found in Inyo, Mono, San Bernardino, and Tulare Counties, and is also found in Nevada. It is found in Mojavean desert scrub, Pinyon/Juniper woodlands, and Joshua tree woodlands and has a moderate potential for occurring on the site. However, no Pinyon rock cress plants were identified during the May 2019 field investigations, nor

was the species observed during previous surveys conducted in 2006. The species does have a moderate potential for occurring on the site.

Death Valley Beardtongue: This plant is listed as a CNPS List 1B.3 plant, as well as a BLM sensitive species. It occurs in Inyo and San Bernardino counties and in Nevada where it occurs primarily in Mojavean desert scrub communities. The species was not observed in May 2019, nor was it previously observed in 2006; although, there is a moderate potential for the species occurring on the site.

Charlotte's Phacelia: Charlotte's phacelia is a CNPS List 1B.2 species, as well as a BLM sensitive species. It is typically found in Mojavean desert scrub, Pinyon/Juniper woodland, and Joshua tree woodland communities throughout Inyo, Kern, and Tulare Counties. Although the species was not observed during 2019 or in previous surveys, there a moderate potential for the plant to occur on the site

6.4 Other Sensitive Plants

Joshua trees occur throughout the mine site with the highest density in the northern portion of the site. Joshua trees are considered an important component in desert habitats and provide a valuable resource or a variety of wildlife species for nesting, perching, and protection for smaller species such as lizards and rodents. Therefore, impacts to Joshua trees during exploratory activities, as well as any future mining will need to be evaluated and measures implemented to minimize impact to the species.

7.0 IMPACTS AND RECOMMENDATIONS

7.1 Potential Impacts

Special Status Wildlife: As noted above, no desert tortoises were observed during the field investigations nor were any tortoise sign (e.g., scats, active/inactive burrows, etc.) noted. In addition, no Mohave ground squirrels were observed, although the above ground activities of the species are limited to a very narrow window. Based on the focused surveys conducted for the desert tortoises it is the opinion of RCA Associates, Inc. that the site does not support tortoises at the present time; furthermore, the likelihood of the site supporting Mohave ground squirrels is limited.

In addition, no burrowing owls or LeConte's thrashers were seen on the site; although, these species could potentially inhabit the site in the future given the mobility of these two bird species. The proposed exploratory excavations and future mining activities are not expected to impact the desert tortoise, burrowing owl, or LeConte's thrasher given their absence from the site.

Special Status Plants: As noted above, Booth's evening primrose plants (CNPS List 2 and BLM sensitive species) were observed on the site in 2006 and were also identified during the most recent rare plant survey conducted in May 2019. The three documented locations of the species were outside of the proposed 5-acre exploratory area as shown on Figure 3; therefore, the exploratory activities are not expected to impact the species. It's CNPS status (List 2 species) does not provide any legal status for the species; however, any future impacts to a CNPS plant during future mining activities may be considered significant under CEQA. Therefore, implementation of various measures to minimize impacts may be required prior to the start of any mining activities outside of the exploration area. Section 7.0 provides a list of recommendations for the species.

Three other special status plants have a moderate potential for occurring on the site including pinyon rock cress, Death Valley beardtongue, and Charlotte's phacelia.

However, none of these plants have been identified on the site either during previous surveys or during the May 2019 field investigations. Therefore, proposed exploratory activities, as well as future mining, are not expected to have any impacts on any of these species.

Joshua trees occur throughout the site and would likely be impacted by proposed exploratory activities and potential future mining activities. Section 7.0 provides a list of potential measures which may need to be implemented to minimize impacts to Joshua trees.

7.2 Recommendations

Outline below are specific measures which may be required to minimize impacts to sensitive plant species.

Special Status Plants: As discussed above, Booth's evening primrose plants (CNPS List 2.3 and BLM sensitive species) and Joshua trees were observed on the site; therefore, the following measures may need to be implemented to minimize impacts.

1. Booth's evening primrose, and any other special status plants occur in the area where ground disturbance activities will occur, should be avoided. Where avoidance is not possible, the plants should be salvaged prior to ground disturbance activities and relocated to an area approved by BLM.

2. Discussions with BLM should be conducted to determine measures which may need to be implemented to avoid and/or relocate any Joshua trees which may be located in the areas where ground disturbance will occur.

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Attachment 6

Appendix A

Tables and Figures

Table 1: Plants observed on the site during May 2019 field investigations.

SCIENTIFIC NAME	COMMON NAME
Ambrosia acanthicarpa	Bursage
Ambrosia dumosa	White bursage
Amsinckia tessellata	Fiddleneck
Astragalus cimea	Cima astragalus
Astragalus nutans	Providence Mountain milkvetch
Astragalus calycosus	Torry's milkvtech
Atriplex canescens	Fourwing saltbush
Atriplex confertifolia	Shadscale
Atriplex polycarpa	Saltbush
Bromus madritensis	Red brome
Bromus tectorum	Cheatgrass
Bromus sp.	Unknown
Camissonia boothii ssp. boothii	Booth's evening primrose
Chorizanthe rigida	Spineflower
Coreopsis calliopsidea	Coreopsis
Echinocactus polycephalus	Cottontop cactus
Ephedra nevadensis	Ephedra
Eriastrum diffusum	Woollystar
Ericameria cooperi	Cooper's goldenbush
Eriogonum deflexum	Flat topped buckwheat
Eriogonum fasiculatum	California buckwheat
Eriogonum inflatum	Desert trumpet
Eriogonum sp.	Unknown
Eriogonum nidularium	Bird nest buckwheat
Eriogonum pusillum	Yellow turbon
Erodium circutarium	Heron's bill
Escholtzia glyptosperma	Desert poppy
Gilia densifolia var. Mohavensis	Mojave gilia
Gilia scopularium	Rock gilia
Hymenoclea salsola	Cheesebush
Larrea tridentata	Creosote bush
Lycium andersonii	Anderson's desert thorn
Cordylanthuys eremicus	Purple bird's beak
Xylorhiza tortifolia	Mojave aster
Malacothrix sonchoides	Desert dandelion
Oenothera deltoides	Birdcage evening primrose
Opuntia basilaris	Beavertail cactus
Opuntia echinocarpa	Silver cholla
Oryzopsis hymenoides	Indian ricegrass

Table 1, continued

Phacelia distans	Heliotrope
Poa secunda	Bluegrass
Psorothamnus arborescens	Indigo bush
Psorothamnus fremontii	Fremont indigo bush
Salazaria mexicana	Paperbag plant
Salsola tragus	Russian thistle
Salvia columbariae	Sage
Schismus barbatus	Schismus
Sphaeralcea ambigua	Globemallow
Stipa speciosus	Needlegrass
Yucca brevifolia	Joshua tree

NOTE: The above table is not a comprehensive list of every plant species which may occur on the site but a list of those species which were observed during the May 2019 field investigations

Table 2 - Wildlife observed on the site and/or in the surrounding region during the field investigations.

Common Name	Scientific Name	Location
Jackrabbit	*Lepus californicus*	On site and surrounding area
Antelope ground squirrel	*Ammospermophilus leucurus*	"
Coyotes	*Canis latrans*	"
Kit fox	*Vulpes macrotis*	"
Kangaroo rat	*Dipodomys sp*	"
Common raven	*Corvus corax*	"
Mourning dove	*Zenaida macroura*	"
Pigeon	*Columbulivia domestica*	"
Northern mockingbird	*Mimus polyglottus*	"
Desert spiny lizard	*Sceloporus magister*	"
Western whiptail lizard	*Cnemidophorus tigris*	"
Side-blotched lizard	*Uta stansburiana*	"
Desert woodrat	*Neotoma lepida*	Known to occur in the area.

Note: The above Table is not a comprehensive list of every animal species which may occur in the general area, but is a list of those common species which were identified on the site or in the region, or those that have been previously identified in the area.

Attachment 6

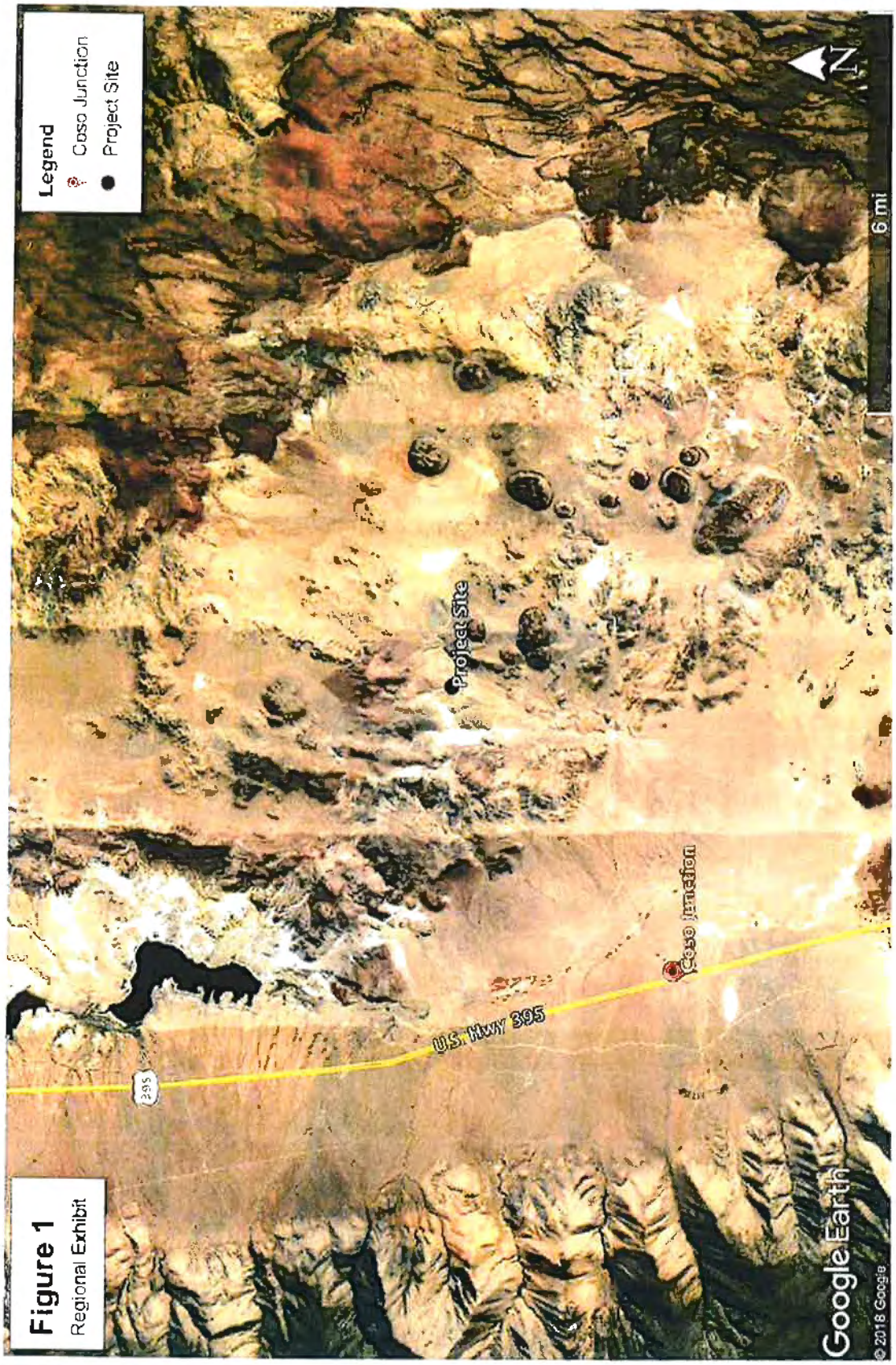
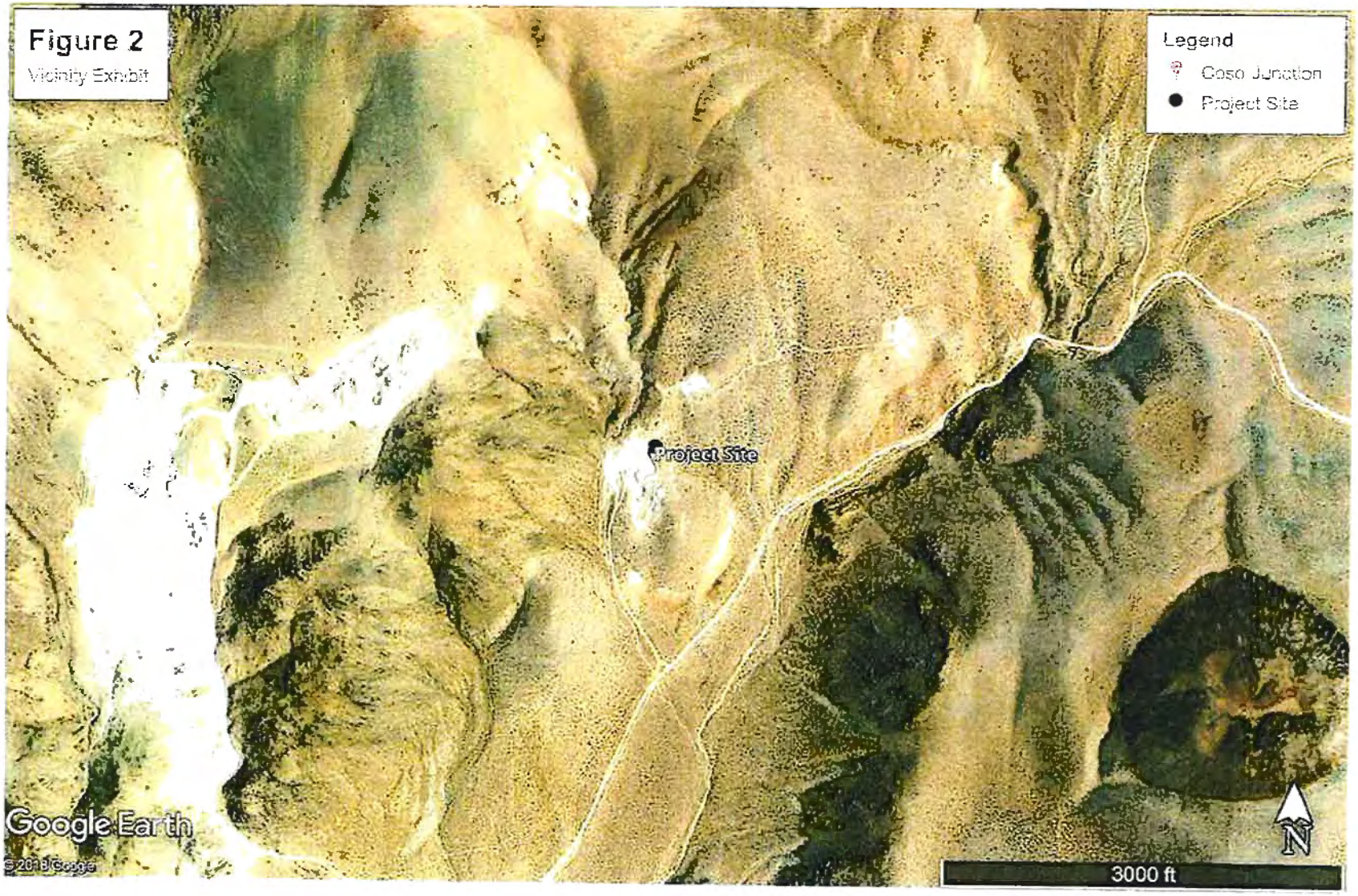


Figure 1
Regional Exhibit

Attachment 6



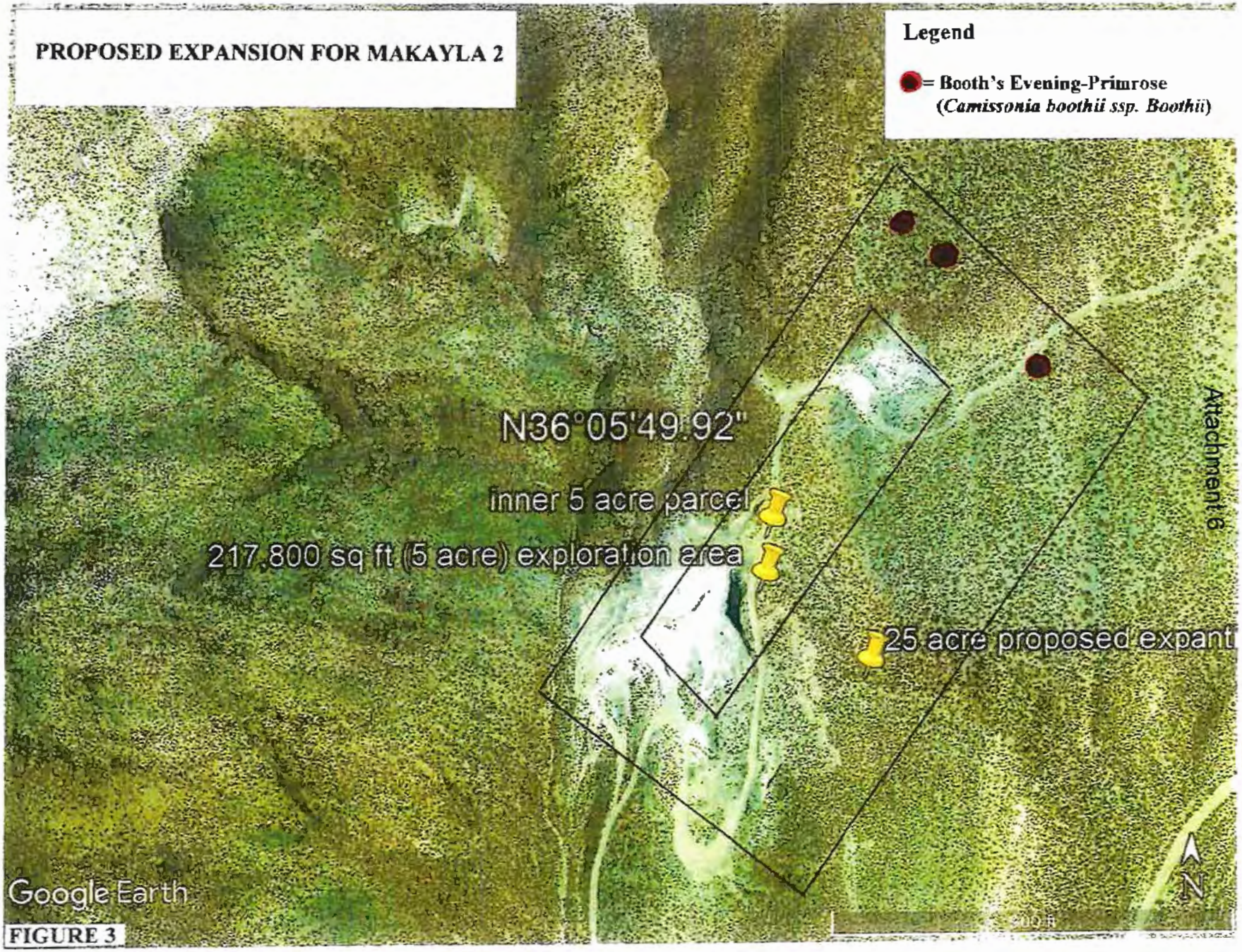

PROPOSED EXPANSION FOR MAKAYLA 2
Legend
= Booth's Evening-Primrose
(Camissonia boothii ssp. Boothii)
N36°05'49.92"
inner 5 acre parcel
217,800 sq ft (5 acre) exploration area
25 acre proposed expant
Attachment 6
Google Earth
N

FIGURE 3

Attachment 6

CENTER OF SITE LOOKING NORTH

CENTER OF SITE LOOKING EAST

FIGURE 4
PHOTOGRAPHS OF SITE

Attachment 6

CENTER OF SITE LOOKING SOUTH

CENTER OF SITE LOOKING WEST

FIGURE 4, cont.
PHOTOGRAPHS OF SITE

Attachment 7

PLAN OF OPERATION AND MINE RECLAMATION PLAN FOR THE MAKAYLA 2 MINE EXPANSION SITE

Prepared For:
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P. O. Box174
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Submitted To:
County of Inyo
Planning Department
168 North Edwards Street
Independence, California 93526

Prepared By:
Southwest Pumice, LLC
P.O. Box 174
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DATE:
November 15, 2021

TABLE OF CONTENTS

APPENDICES

A. Environmental Assessment - Bureau of Land Management
B. Rare Plant and Wildlife Survey Report - RCA Associates
C. California Endangered Species Act Incidental Take Permit Application – RCA Associates
D. Cultural Resources Inventory - Far Western Anthropological Research Group
E. Identification & Evaluation of Historical Properties - DUKE CRM
F. Research Design for the Evaluation of Four Cultural Resource Sites - DUKE CRM
G. Reclamation Plan Content - Checklist

REFERENCES

GENERAL INFORMATION

Application/Operator:	SOUTHWEST PUMICE, LLC P.O. BOX 174 Apple Valley, CA 92307 (760) 240-3544 – Office (760) 240-9555 – Fax thrubik@globalpumice.com Attn: Thomas A. Hrubik, President
Land Owner:	Bureau of Land Management Ridgecrest Field Office 300 S. Richmond Road Ridgecrest, CA 93555
Representative:	Thomas A. Hrubik, President Southwest Pumice, LLC P.O. Box 174 Apple Valley, CA 92307 (760) 240-3544 – Office (760) 559-3280 - Mobile (760) 240-9555 – Fax thrubik@globalpumice.com
General Plan Designation:	Open Space and Recreation (OSR)
Zoning:	OS-40
APN:	037-270-02
Mine Name:	Makayla 2
Legal Description:	Sections 22, Township 21S, Range 38E, M. D. B. & M.
Existing Disturbed (2006):	12.2 acres
Proposed Total Mine Area:	25 acres
Estimated Operating Life:	Proposed Start Date of 10/1/2022 and ending 9/30/2027
Reclamation Plan No:	RP-2021-01
Reclamation End Use:	Open Space with reclaimed landforms

INTRODUCTION AND BACKGROUND

Southwest Pumice LLC proposes to mine approximately 25 acres and remove 100,000 tons of Pumice from BLM-managed public lands located in the Coso Mountains north and east of Coso Junction, Inyo County, California (see Project Vicinity Map) The proposed mining project is approximately 5.4 miles northeast of the intersection of U.S. 395 and Gill Station Coso Road, approximately 2.5 miles north of Gill Station Coso Road, located within the NW1/4 of Sec. 22, T21S, R38E, M.D.B.&M. The site is also approximately 2 miles west of the China Lake Naval Weapons Center, 10 miles east of the Sequoia Forest, 35 miles north of the City of Ridgecrest, and 20 miles southwest of Death Valley National Park.

Prior to 1955 the General Mining Laws allowed mineral location of common pumice deposits. Crownite Corporation located several pumice claims in this area in the 1940s. At some point in the early 1980s Crownite Corporation leased these claims to an operator, California Lightweight Pumice, Inc (see underlined locations in Figure 1, below). Crownite failed to file the required affidavit of assessment work December 30, 1982, and BLM issued a decision June 14, 1983 finding these claims null & void. The Surface Resources Act of 1955 removed common pumice from further location under the General Mining Laws, removing the possibility of locating new placer claims for pumice. The Crownite/California Lightweight Pumice Corporation(s) were held in trespass for operating a mineral material site without a sale contract (case CACA-19767 & CACA-24090). BLM decided to hold a public sale auction to determine a resolution to this trespass (environmental assessment CA-065-89-24, available on request). A public sale auction was held January 16, 1990 to determine fair market value for the pumice materials involved. No bids were received. As a resolution, California Lightweight Pumice paid monthly installments toward the necessary trespass amount and BLM issued sale contract(s) to California Lightweight Pumice. The present Makayla 2 location is near, but was not included by environmental assessment CA-065-89-24.

Southwest Pumice, LLC ("SWP") is a successor in interest to California Lightweight Pumice, Inc. ("CLP"). SWP acquired all the assets and liabilities of CLP in 2014 and has continued pumice mining CLP's previously approved Makayla 1 mine site, as shown on attached map. Upon acquisition of CLP, SWP employed Global Pumice, LLC ("GP") to be the exclusive operator for SWP. SWP has contemplated the expansion of Makayla 1 mine site, but is now willing to abandon such expansion plan and move over to the adjacent Makayla 2 mine site. The Makayla 2 mine site had been previously explored by CLP and others. This change by SWP is due to the extreme overburden in the Makayla 1 expansion area, which may render it too costly to proceed. SWP has made the determination that the Makayla 2 mine site area will be an economically feasible mining site thus necessitating its need to apply for a mineral materials sales contract with BLM.

SWP is fully aware of the original application BLM had approved for CLP back in 2006 called the Makayla 2 Project. CLP and previous exploration on this very site has disturbed approximately 12.2 acres. It has also been determined that CLP failed to complete the required reclamation from their exploration activities leaving a massive personal injury liability potential

to BLM. SWP has reviewed the 2 primary bulk sampling test sites that CLP explored and found CLP leaving 50-75-foot high walls adjacent to accessible roads that are traversed by the public leaving this liability hazard. These high walls need to be cut to a 3:1 slope to minimize personal injury liability and mitigate prior reclamation requirements. As a requisite to performing its mining activity, SWP believes it is in the best interest of both BLM and SWP that SWP eliminate the personal injury liability and reclamation debacle left by CLP.

1.0 ENVIRONMENTAL

1.1 GENERAL ENVIRONMENT

The proposed project is within the Coso Range, a north-south trending mountain range composed largely of igneous rock formations near the southwestern edge of the Great Basin. The general region is in the rain shadow of the Sierra Nevada Mountains. The climate is generally characterized by mild winters and long, hot summers, with roughly 3-7 inches of annual precipitation. The site is located approximately 5.5 miles NE of intersection of US 395 and Gill Station/Coso Road, on the south-facing slope of a hilly area within the Coso Range. Elevation ranges from approximately 4,400 to 4,900 feet above mean sea level. The general location lies approximately 2 miles west of the China Lake Naval Weapons Center, 10 miles east of the Sequoia National Forest, 35 miles north of Ridgecrest and 20 miles southwest of Death Valley National Park. The Project site is situated on the northwestern side of BLM access route SE-435. The landscape around the site bears extensive evidence of past mining activities, but large areas of undisturbed native landscape remain.

1.2 GEOLOGIC DESCRIPTION

The proposed 25 acre project area is located in the Coso volcanic field east of the Sierra Nevada between Owens Valley and the Garlock fault in southern California within the present-day Basin and Range province. Volcanism began in the Coso Range approximately 6 million years ago, and the earliest basaltic lava flows are tilted, indicating that the start of volcanism in the area preceded the onset of faulting associated with Basin and Range extension. Three periods of volcanic activity have occurred with the Coso Range. Basalt was the primary magma type erupted during the oldest episode, which started 6 million years ago. The most volcanically active period occurred during the Pliocene between about 4 and 2.4 million years ago producing 7.2 mi of the total 8.4 mi erupted material found in the Coso Range. Volcanic rocks age dated to this time period include basalt, andesite, dacite, rhyodacite and silica rhyolite (pumice). The third period of activity occurred during the Pleistocene between about 1.1 and .04 million years ago. The region is most well-known for the 38-high silica rhyolite domes and lava flows that erupted during this time period. These well-known domes were accompanied by the eruption of 14 basaltic centers.

1.3 LAND USE

The Makayla 2 mine site is located approximately 5.4 miles northeast of the intersection of U.S. 395 and Gill Station Coso Road, approximately 2.5 north of Gill Station Coso Road. The legal land description is within the NW1/4 of Sec. 22, T21S, R38E of the Mount Diablo Meridian.

The road(s) connecting the Makayla 2 site to Gills Station Coso Road are designated as motorized travel routes by the West Mojave Route Network Plan (routes SE-435 and 431). Southwest Pumice has submitted a pending road right-of-way application for access from the Makayla site(s) to the Gills Station-Coso Junction Inyo County Road.

Since rerouting a portion of BLM SE431 within the Makayla 2 mine site area is part of the proposed action, no mitigation for public travel would be required. Issuance of a road right-of-way to applicant would allow for maintenance on the road and not require any mitigation to ensure public travel and continued access. (See Figure 2 - Mine Plan)

The proposed project is within the Coso Range, a north-south trending mountain range composed largely of igneous rock formations near the southwestern edge of the Great Basin. The general region is in the rain shadow of the Sierra Nevada Mountains. The climate is generally characterized by mild winters and long, hot summers, with roughly 3-7 inches of annual precipitation. The Project site is situated on the northwestern side of BLM access route SE-435. The landscape around the site bears extensive evidence of past mining activities, but large areas of undisturbed native landscape remain.

The surrounding land uses are as follows:

North	Public lands managed by the BLM and consist of vacant high desert open space. Directly northwest is Makayla 1 mine site.
South	Public lands consisting of vacant high desert land managed by the BLM.
East	Public lands managed by the BLM and consist of vacant high desert open space lands.
West	Public lands managed by the BLM and consist of vacant high desert open space. Directly east is Makayla 1 mine site.

1.4 VISIBILITY

Some areas of the mine site may be visible from public roads with binocular aid. The majority of activities will be hidden from the view of the roads.

The landscape around the site bears extensive evidence of past mining activities, but large areas of undisturbed native landscape still remain. The vegetation includes primary creosote bushes, brittle brush, and other small desert grasses and shrubs, while scattered Joshua trees are also present.

1.5 AIR QUALITY AND GREENHOUSE GAS EMISSION

The project area is under the jurisdiction of the Great Basin Unified Air Quality Control District

and lies within the Coso Junction PM10 Planning Area (CJPA). [1]

Air pollution in the Coso Junction Planning Area (CJPA) is dominated by wind-blown dust transported from Owens Lake, located north of this Planning Area and within the Owens Valley PM10 Planning Area. Sources include the Coso geothermal power operations, military operations at the China Lake Naval Air Weapons Station, volcanic cinder mining at Red Hill and pumice mining operations.

The Coso Junction Planning Area (CJPA) was designated a PM10 nonattainment area in 1987. The CJPA was re-designated as attainment for PM10 National Ambient Air Quality Standards (NAAQS) by the U.S. Environmental Protection Agency July 29, 2010[2]. The area is currently under review for continuation of its PM10 attainment status for another 10-year period.

SWP employs, or will be required to employ reasonably available measures to control PM 10 emissions including:

Disturbed Surface Area:	Apply water and /or dust suppressants as required. Re-vegetate finished areas using native seed and/ stockpiled topsoil.
Open storage piles:	Continuously apply water and/or dust suppressants to produce a surface crust.
Loading/Hauling:	Apply water to all stockpiles before loading. Cover loads prior to transport. Remove spilled material from the loading area to maintain a lower-dust driving surface.
Mobile Equipment:	Operate equipment when wind speed is low (25mph or less), at a speed of 15mph or that which produces a maximum of 20% opacity.
Unpaved road(s):	Improve road surface. Control vehicular traffic speed. Continuously apply water and/or dust suppressants. Track out on paved road. Sweep the paved road to reduce entrainment dust.

The Makayla 2 Proposed Action Alternative would not meet the requirements for greenhouse gas reporting (https://www.epa.gov/ghgreporting), with the highest amount of CO2e emissions estimated to be approximately 500 tons and the reporting threshold being 25,000 metric tons (40 CFR 98). Emissions related to carbon sequestration losses (soil disturbance and vegetation loss) have not been calculated for this project. Such contributions would be minimal given the small area, the sparse desert vegetation, and reclamation.

Calculations for CO2 are as follows:

Equipment type	CO2 lbs/hr	Operating hrs/yr	CO2 lbs/yr	CO2 tons/yr
Bulldozer D-6	243.4	1500	365100	18.55
Grader (est)	200	400	80000	40
Excavat/backhoe	67.2	1000	67200	33.6
Service/fuel truck	100	200	20000	10
Water truck	13.5	1000	135000	67.5
Light truck	1.1	500	550	0.275

The CO2 lbs/hr figures for bulldozer, backhoe, water truck, and light truck were derived from a previous analysis, which referred a BLM Medford, Oregon Office GHG Calculator.

1.6 VEGETATION

The project sites vegetation consists of desert scrub, alkali scrub dominated by creosote bush (Larrea tridentata), and Joshua tree woodland. Other vegetation that occurs in the area is burro-brush (Ambrosia dumosa), winter fat (Krascheninnikovia lanata), Mormon tea (Ephedra nevadensis), indigo bush (Psorothamnus arborescens), cacti and perennial grasses. Additionally, annual grasses (including non-native Bromus spp.) and forbs are present but sparse.

Sensitive and special status species exist within the project area. RCA Associates ("RCA") conducted a Rare Plant and Wildlife Survey during May 2019, with a completed report as of June 18, 2019 (" Survey"). RCA conducted a subsequent more specific biological analysis during December, 2020, which included a Joshua tree survey, in preparation of the required California Endangered Species Act Incidental Take Permit Application ("ITP"). With respect to the Survey to determine the existence of any rare and endangered plant species, RCA observed three individual plants of Booth's evening- primrose (Camissonia boothii ssp. boothii), a California rare plant and BLM Sensitive Species, within the project site. (See Appendices B and C).

As discussed above, Booth's evening-primrose plants were observed on the site and noted on Mine Plan Map – Figure 2. The following measures will be implemented to minimize impacts. Booths' evening-primrose in the area where ground disturbance activities will occur will be avoided, if possible. Where avoidance is not possible, the plant areas as shown on Mine Plan Map – Figure 2, will be salvaged prior to ground disturbance activities and relocated to the relocation area as depicted on Mine Plan Map – Figure 2, and approved by BLM, under the direction of a licensed biologist.

In addition, RCA observed 12 western Joshua trees (Yucca brevifolia) present throughout the area of the proposed Makayla 2 mine site during its December 2020 expanded survey analysis. . Joshua trees are very long-lived and provide a unique habitat providing shelter and protection to

numerous desert species and increases the structural diversity of the vegetation community. For these reasons and the fact that they are slow growing and long lived, Joshua trees are a CDFW candidate species and protected by the State of California. Specific details of the focused Joshua tree survey and proposed mitigation measures can be found in Appendix C. The 8 western Joshua trees that occur within the Makayla 2 mine area which have been determined by RCA to be transplantable will be relocated to an area along the southern and easterly boundaries of the Makayla 2 mine site as shown on attached Figure 5. The applicant is seeking authorization under Section 2081 (b) of the CESA for incidental take of the Joshua trees. The ITP was filed earlier in 2021 with all application fees being paid.

The remaining 4 trees are not suitable for transplanting and will be discarded as directed by the County and CDFW.

SWP will begin by removing and transplanting 8 Joshua trees which are suitable for transplanting under the direction of a licensed biologist based on the following criteria:

Trees from 2 feet in height up to approximately 12 feet;

No visible signs of damage to the tree such as absence of bark due to rodent or other animals;

Minimal number of branches with panicles (no more than 3 branches);

No excessive leaning of the tree;

No yellow or brown fronds;

Proximity to other Joshua trees (i.e. clonal); and

No exposed roots at the base of the tree.

SWP applicant will implement protection measures to address invasive species, fugitive dust, and erosion that may affect western Joshua trees as outlined in Appendix C.

1.7 WILDLIFE

The site supports a variety of wildlife species: however, only six wildlife species or the sign were observed including antelope ground squirrel, jackrabbit, coyote, kit fox tracks, side-blotched lizard, western whiptail.

The applicant is seeking authorization under Section 2081 (b) of the CESA for incidental take of the any desert tortoise, Mohave ground squirrel, and Joshua tree. The ITP was filed earlier this year 2021 with all application fees being paid.

The primary emphasis is the presence of the desert tortoises and the Mohave ground squirrel.

Desert Tortoise: The desert tortoise (Gopherus agassizii) is a federally and state-listed threatened species that occurs to the west and south of the project area. Desert tortoises have been observed on the floor of Rose Valley to the west (5-6-miles), which has a typical elevation

around 3300 – 3600 feet above mean sea level. The project area has an elevation around 4600-5000 feet above sea level. The project area is situated at a relatively high elevation compared to the main portion of tortoise habitat. Due to this elevation, the mean winter temperature can be colder than preferred tortoise habitat.

There is a low possibility of desert tortoises occurring at the project site. Based on RCA's focused desert tortoise survey and project scoping efforts, desert tortoises do not currently occupy the project site. Therefore, no effect on individual tortoises should occur. However, the removal of vegetation and soil as a result of implementing the proposed project could eliminate future habitat occupancy opportunities for desert tortoises, especially in the midst of shifting climatic factors within the Mojave Desert.

No tortoises were observed during the RCA May 2019 survey, nor were any active tortoise burrows, scat, or other signs observed. Therefore, the Makayla 2 Mine project is not likely to jeopardize the continued existence of the desert tortoise.

Mohave Ground Squirrel: The Mohave ground squirrel is a California Threatened Species (CDFW). It is not listed as a Threatened or Endangered Species under federal law (USFWS), however, the project area is entirely within the Mohave Ground Squirrel (MGS) Area of Critical Environmental Concern, outlined within the DRECP. Mohave ground squirrel populations have been documented in the region and this species is dependent upon desert scrubs and based on its behavior, the species infrequently observed above ground except during favorable weather, typically in early February to March, when breeding season typically occurs. According to California Natural Diversity Database (CNDDB), Mohave ground squirrels have been documented within the Coso Mountains approximately 1.5-to-2 miles east of the proposed project site near the BLM and Naval Air Weapons Station-China Lake property boundary.

A habitat assessment was performed for the Mohave ground squirrel as per CDFW protocol during the RCA Survey. No Mohave ground squirrels were observed during the Survey conducted in May 2019, however due to the proximity of documented Mojave ground squirrel occurrences in the CNDDB, wildlife corridors are expected to exist between the mine site and habitat occupied by Mojave ground squirrels. Therefore SWP applicant has elected to assume the presence of Mojave ground squirrels within the boundaries of the mine and will provide mitigation to fully offset the impacts of the proposed mining activities on the Mojave ground squirrel and its habitat by providing mitigation funding.

The DRECP establishes one-percent threshold for Allowable Ground Disturbance within the Mohave Ground Squirrel ACEC which equates to 38.4 acres (3 x 12.8).

The proposed new expansion is in the region marked as a 3:1 compensation area for new disturbance. This is based on the limited amount of moderate to high quality Mohave ground squirrel habitat within the mine area, lack of confirmed observation of the species within the mine area, and the mine's location outside of the core population areas. Implementation of the proposed mining activities would not appreciably reduce the Mohave ground squirrel population. Furthermore, the proposed mining activities are unlikely to reduce the connectivity of the Mohave ground squirrel habitat in the surrounding area during mining activities.

CDFW shall be contacted and any regulations or mitigations proposed by this agency shall be completed, including an incidental-take permit authorizing the take of the Mohave ground squirrels. Further mitigation to reduce the impacts to less than significant levels would be specified in the 2021 Incidental Take Permit issued by CDFW.

An operator is also allowed to receive Habitat Rehabilitation Credits for successful rehabilitation of previously degraded habitat. (see Section 3.6 for DRECP disturbance cap and compensation information.)

Other Wildlife

Desert adapted birds, such as sage sparrow, Le Conte's thrasher, black-throated sparrow, and cactus wren use this area for a variety of habitat needs, including nesting. Raptors have been observed soaring over the area, probably searching for prey. A variety of lizards and snakes also inhabit the area. Small mammals, such as various rodents and lagomorphs utilize habitats in the project area.

The only bird species observed included mourning dove and common raven. No sensitive habitats such as blue-line channels, vernal pools, or critical habitats for sensitive species were noted during the 2019 Survey.

All native breeding birds, (except game birds) regardless of their listing status, are protected under the Migratory Bird Treaty Act (MBTA). Potential impacts to 24 nesting birds are significant. When mining occurs between April 15th and July 15th, a survey (within three days prior to work in those areas) is required and must be conducted by a qualified biologist to determine presence/absence of active nests within or adjacent to the area to be mined. This stipulation prevents killing the young of federally and state protected migratory birds. If no nesting activities are detected within 200 feet of the proposed work area, mining activities may proceed. If nesting activity is confirmed, work activities within 200 feet of the active nest shall be delayed until the young birds have fledged and left the nest. Work shall proceed in another location that is at least 200 feet from the nest.

2.0 MINING PLAN

2.1 MINING OPERATION

Southwest Pumice LLC proposes to mine approximately 25 acres and remove 100,000 tons of pumice with a proposed start date of October 1, 2022 and continuing until September 30, 2027 from BLM-managed public lands located in the Coso Mountains north and east of Coso Junction, Inyo County, California (see Figure 1 for a Project Vicinity Map). The Proposed Project is approximately 5.4 miles northeast of the intersection of U.S. 395 and Gill Station Coso Road, approximately 2.5 north of Gill Station Coso Road. The legal land description is within the NW1/4 of Sec. 22, T21S, R38E of the Mount Diablo Meridian. The site is also approximately 2 miles west of the China Lake Naval Weapons Center, 10 miles east of the Sequoia National Forest, 35 miles north of the City of Ridgecrest, and 20 miles southwest of Death Valley National Park.

It is anticipated that mining efforts has the capacity to produce a maximum production of 100,000 tons assuming full production and market demand, however, GP believes that an annual production process rate of 20,000 to 25,000 tons is currently more realistic. BLM has executed a 5 year Contract for the Sale of Mineral Materials to Applicant for 100,000 tons, conditional upon all governmental approvals being received prior to mining commencement. Such Sales Contract will be provided to Inyo County.

The Makayla 2 mine site had been previously explored by CLP and others disturbing approximately 12.2 acres. The 25 acre mining project will consist of an open pit aggregate mining operation with an approved permit with a proposed start date of October 1, 2022 and continuing until September 30, 2027. The mining process has several components: (1) the removing and transplanting of 8 Joshua trees, (2) the removing and/or transplanting of 3 evening-primrose plants (3) excavation, removal of the top soil and stockpiling: (4) construct screening and crusher plant (5) completing reclamation on the Makayla 2 mine site.

SWP will begin by removing and transplanting 8 Joshua trees which are suitable for transplanting based on the criteria noted in Section 1.6 above.

SWP will relocate the 8 Joshua trees along the southern and eastern boundaries of the Makayla 2 Mine at least 40-feet from where mining activities will occur. The 8 trees will be relocated in an area along the eastern boundaries where they can remain in perpetuity. The four trees not suitable for transplanting will be discarded as per recommendations of the County and CDFW. Based on the proposed relocation of the eight Joshua trees and discarding only four trees, the proposed mining activities are not expected to jeopardize the continued existence of the western Joshua tree. (see Figure 5)

As discussed in above Paragraph 1.6, 3 Booth's evening-primrose plants were observed on the site, and the mitigation measures described therein Paragraph 1.6 will be implemented to minimize impacts. Booths' evening-primrose in the area where ground disturbance activities occur will be avoided, if possible. Where avoidance is not possible, the plant areas as shown on Mine Plan Map – Figure 2, will be salvaged prior to ground disturbance activities and relocated to the relocation area as depicted on Mine Plan Map – Figure 2, and approved by BLM, under the direction of a licensed biologist.

The mining preparation activities will include vegetation clearing followed by the removal of overburden with a D-9 Dozer and 637E scraper and stockpiled in the northeastern portion of the mine site as topsoil and reapplied during future reclamation.

A dozer will be used to rip the pumice seam allowing the pumice to be picked up by a scraper and hauled to the crushing and processing plant to be constructed on-site at Makayla 2. (see Figure 2)

The construction of the plant will entail leveling off a minimum 1 acre portion of the mine site to set up the following:

- ***Roll Crusher Assembly will be used to crush the raw pumice and then be fed onto conveyor belts and transported into the screening plant to screen out various size pumice aggregate – 1/8" to 3/8" sizes;***

- ***The screening plant will be constructed adjacent to the roll crusher;***
- ***Conveyor belt system will be constructed next to the screening plant to enable the screened pumice to be transported and placed into large piles (up to 20' tall) for inventory stockpiling.***
- ***Trucks with the ability to haul up to 25 tons of crushed aggregate pumice will come on-site via an access road where a loader will load the truck with pumice.***
- ***A scale house will be constructed on the mine site to allow trucks to be weighed after being loaded with pumice for shipment.***
- ***Incoming trucks will continue to use the access road that has been used for the current Makayla 1 mining operation and should present no new environmental impacts. The access road is a gravel road that comes off of County maintained Gill Station Road and leads to the Makayla 2 entrance point.***

SWP, during mining activities, will **concurrently** reclaim the mined area for the Makayla 2 mine site as noted herein. SWP has already removed the 50-75 foot high walls on the two previous CLP bulk sampling areas by cutting a 3:1 slope into the high walls. This required SWP to cut back from the high wall area at least 150-225 feet to achieve a 3:1 slope. As SWP performed this activity, SWP stockpiled the excess pumice for sale to customers from this reclamation activity. See Paragraph 3.1 for additional details and BLM approval for such reclamation activity.

On occasion, a dozer or grader may be used on-site for road maintenance. To minimize dust generated, a water truck is retained for use during mining, stockpiling and loading of haul trucks prior to them departing from the site.

The mine operator shall water spray the working mine area and access roads on a regular basis and more frequently as needed during windy conditions. Un-surfaced haul roads and access roads shall be maintained with water spray as needed. All refuse is disposed into approved trash bins and removed by a commercial vendor. Portable toilets are used on-site and serviced by a commercial vendor.

The equipment to be used for the mining project consists of:

1 D-9 dozer; 2-637E Caterpillar Scrapers;
1 Caterpillar Excavator; 1 Caterpillar Wheel Loader and
1Water Truck (4000 gallon) for dust control.

SWP will operate 10 hours a day, 5 days per week, and will maintain a crew of 7 – 10 employees.

While mining the 25 acre area, SWP will **concurrently** reclaim the mined area by using a dozer and scraper to maintain the required 2:1 and/or 3:1 slopes for future re-seeding.

SWP anticipated the complete mine out of the 25 acres to take approximately 5 years.

2.2 MINE WASTE

Tailings or waste from mineral processing are not produced on-site. Over burden is really spec

material, that is, unwanted material that does not meet various product specifications. Approximately 50% of the excavated material is non-spec material to be placed in the overburden stockpiles and filled into complete sections of the Main Quarry. It is conveyed either directly into the overburden stockpiles or from the crushing/screening plant. Equipment and vehicle maintenance is conducted in the shop building on concrete floors. Maintenance and refueling complies with all rules and regulations with regard to implementing proper fueling procedures, fuel and waste oil storage, and spill control measures and employee training per their Emergency Response Plans and Procedures on file with the Inyo County Environmental Health Services (EHS). EHS is the Certified Unified Program Agency (CUPA) that oversees hazardous materials storage, use, generation and disposal.

2.3 ORE PROCESSING AND PRODUCTION WATER

Ore Processing

The pumice is mined by open pit method with a bulldozer ripper, scrapers and a front-end loader. The pumice is processed by crushing and screened for sizing (1/2' to 1/8'), utilizing a roll crusher, a 3-decker screen and a system of conveyors to properly stack the processed pumice. It is then transported off site by trucks for use in lightweight concrete blocks, cultured stone, horticulture and other commercial uses.

Production Water

The source of water will continue to be obtained from the China Naval Base north of the mining site on Gill Station/Coso Road. Potable drinking water will be provided to all employees to ensure adequate hydration while working on site.

BMP's and CMA's will be implemented therefore the project will not affect water resources to the degree that it needs to be analyzed in depth.

2.4 EROSION AND SEDIMENTATION CONTROL

The project area contains sedimentary type alluvium and volcanic tuff soils typical of the Coso Formation within the Coso Mountain range at approximately 4.600ft elevation. The surface soil type at the proposed quarry site is a gravelly loam - coarse sand but has pumice below and also at the surface. This sandy soil type supports plant species which are dependent upon scarce nutrients found in the thin topsoil layer. Soil types found within the project site include pumice tuffs (Qti), flows of Ondesite and Tuffoceous (Qtc) sedimentary rock and granitic basement rock (gr). The coarse topsoil layer required for growing can be one to six inches in depth. Due to its coarseness, it tends to be less susceptible to erosion by wind and water on low to moderate slopes. The quarry area has been previously disturbed on approximately 10 acres or 40% of the site. No topsoil was stockpiled at the time of previous disturbance.

If erosion is evident on-site, the operator will implement measures to control surface runoff to protect surrounding lands in a manner commensurate with modern engineering practice. They may include, but not limited to, larger rock, drainage ditches, straw mulch, hay bales, sediment containment basins, and localized control and maintain measures to intercept and control disturbed area drainage. If any rills or gullies in excess of 8 square inches in cross section area

and more than 10 linear feet from on final slopes, they shall be arrested using larger rocks, rock mulch, any damage to the drainage system will be repaired within one month of observation. Access roads and mined surfaces will be sprayed as necessary to reduce wind erosion.

2.5 BLASTING

There is and will be no blasting conducted on this project site, therefore, no explosives will be used or stored on site.

3.0 RECLAMATION PLAN

3.1 RECLAMATION

The specific proposed area of use will be approximately 25 acres and across routes, which includes: 2.4 acres of the Main Access Road. Within the specific area of use, approximately 12.2+ acres are already disturbed from previous mining exploration activities. Any prior disturbance, as well as newly disturbed areas will fall under the requirements of this reclamation plan. BLM gave Global Pumice approval in 2019 to perform limited reclamation activity at the northwest section of the 25 acre proposed area of use in order to mitigate potential personal injury liability from public access to the property through County Road SE 431. BLM had granted CLP an Exploration Permit CACA-47476 in 2006, which among other things, created 50' - 75' high walls exposing public access to potential falls. This high wall created by CLP was never properly reclaimed. Global Pumice has removed the high walls down to a 3:1 slope eliminating the potential danger and liability to BLM, however, may have disturbed a small area in the NW corner of site outside proposed area as shown on 2020 NAIP aerial images. Additionally, CLP had disturbed the southerly area of the project site as depicted on Mine Maps – Figures 2 and 3. During all mining activities, Applicant will provide necessary berms and/or retention basin areas to disallow any mining materials to flow offsite that were caused by any altered natural drainage flows due to this prior land disturbance, as shown on Figures 2 and 3. During the final reclamation of the 25 acre proposed sit, all drainage systems impacted by this prior reclamation work and any additional impacts will be mitigated and the site will be contoured to maintain all existing natural drainage systems on site in accordance with all local, state and federal agency requirements.

The intent of SMARA is to "maintain an effective and comprehensive surface mining and reclamation policy with regulation of surface mining operation so as to assure that: (a) adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable conditions which is readily adaptable for alternative uses; (b) the production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment; (c) residual hazard to the public health and safety are eliminated" (Section 2712).

The reclamation plan for the proposed Makayla Mine Plan will mitigate the potential for erosion, slope failure, water pollution, vegetation loss, and prevent unnecessary and/or undue degradation of the lands within the limits of the mine plan and surrounding area. **Reclamation of the site will take place on a continual and immediate basis to correct all disturbance related to the**

proposed mining activities.

Reclamation will be accomplished by re-contouring, furrowing (slopes), and re-distributing the stockpiled overburden to backfill any open pits created by mining activities. Steep pit walls created by excavation will be graded to 2:1 slopes. Topsoil will be reapplied to the slopes, pit bottom and test pits. (see Figure 3)

Final use of the site after reclamation should be consistent with surrounding land use. The reclaimed site will permit open space uses including recreation and wildlife habitat.

3.2 REVEGETATION

Existing Conditions

A substantial part of the area for this proposed action was previously studied by environmental assessment CA065-NEPA-2005-101 (see Appendix D, Map 4). The purpose of CA650-NEPA-2005-101 concerned assessing the effects of a pumice exploration program by California Lightweight Pumice, LLC, including several bulk sampling localities. Former bulk sampling locations BS-1, BS-2 and BS-4 were/are located within the area of this proposed action. All the described Bulk Sampling Site areas have been mined previously. Based on preliminary field visits and aerial photographs, it is estimated that there is roughly 12.2 ± acres of existing disturbance from past mining and prospecting activities in the general project area, not including the access roads (see Appendix D, Map 6). Numerous test pits occur throughout the area. The existing disturbance is from mining activities conducted from 1945 to 1947, the 1980s, and most recently 2006-2007.

Re-vegetation

Each year, beginning in the late fall, any areas larger than 10 acres that will not be impacted by future mining activities will be reclaimed. The timing sequence will continue until final reclamation of all disturbed areas is completed. Upon termination of mining, all remaining disturbed slopes will be reclaimed within a year of the end of excavating operation.

After the disturbed areas have been graded to blend into the surrounding area, the disturbed surface in compacted working areas, stockpile, and processing areas will be loosened to a depth of one-foot. The surface will be graded to leave rills that will enhance the collection of precipitation and natural wind-blown seeds. The broadcasting method will be used to revegetate the slopes and any other area that cannot be imprinted. No modifier or fertilizer will be added to the topsoil. The seed mix palette will be distributed at a rate of 9.1 lbs. per acre as set forth below. Germination of seedlings may be inhibited by low temperatures. However, planting should take place during the period of October through April, in order for the seeds to receive occasional rainfall/water until the seeds have germinated and the seedlings are established.

Seed Mix Palette species and lbs per acre.

SPECIES	LBS/ACRE
Alkali Sacaton VNS	0.35
Ambrosia Dumosa p	1.00

Buckwheat California p	2.00
Saltbush Fourwing p	2.00
Saltbush Spinach p	2.00
Saltbush Shadscale	1.00
Brittlebush Acton p	0.50
Globemallow Desert	0.25
Area Totals	**9.10**

Success of re-vegetation will be judged upon the effectiveness of the vegetation for the approved end use and by comparing quantified plant density, vegetative cover, species richness of reclaimed areas to the naturally occurring vegetation near or around the site. The following baseline information was obtained from the baseline study performed for the nearby (less than one mile to the west) Makayla 1 Mine prior to disturbance form mining activities:

- ***Average shrub cover baseline 65%/performance standards 20%***
- ***Average Shrub Density (per 25 sq. meter) baseline 17.8%/performance standards 10.7%***
- ***Average Species Richness (per 25 sq. meter plot) baseline 5.1%/performance standards 3.1%;***
- ***(per 100-pace toe-point transect) baseline 10.7%/performance standards 6.4%.***

Maintenance will be performed to prevent weed invasive and exotic species reseeding including Tamerisk (Tamarix chinensis). After completion of reclamation, the site shall be inspected each spring to monitor the progress of the vegetation growth. Monitoring will continue after final reclamation for 3 years, or until performance standards are met, provided that, during the last two years, there has been no human intervention. If progress is not observed within 3 years, remedial measures shall be implemented (re-seeding) as necessary.

Once the vegetation has attained its natural diversity and the re-contoured slopes are softened by weathering, the site will blend with the surrounding area. Final use of the mined land after reclamation should be consistent with the surrounding land use which will permit open space uses that include but are not limited to recreation and wildlife habitat.

3.3 CLEANUP

Within 12 months of the completion of mining activities, all equipment and structures will be removed from the project site. All debris will be removed and disposed of at a permitted facility.

3.4 POST RECLAMATION AND FUTURE MINING

Upon completion of mining activities, will consist of one pit totaling 25 acres to the depth of 120 feet with overall slopes no steeper 2H:1V per the mining plan. The overburden will be contoured to blend into the existing landscape of the area. The reclaimed site will not preclude or necessitate any future mining activities or surface modification. Upon completion of mining activities, the site will be open space/habitat and its blend in with the surrounding areas.

3.5 SLOPE AND SLOPE TREATMENT

Stabilization of the mine slopes, which includes backfilling and regarding procedure, is vitally

important to the reclamation plan. Included among benefits of slope stabilization are the following:

- ***Aesthetic improvement of the land surface;***
- ***Reduction of erosion;***
- ***Elimination of land sliding; and***
- ***Elimination of hazards associated with high-walls.***

All disturbed areas will be re-contoured to blend with the surrounding natural terrain. The reclaimed wall slopes will be graded to a maximum slope ratio of 2:1 (h:v) slope or flatter to provide a transition between reclaimed terrain and natural terrain.

A protective brow ditch will be constructed at the top of all slopes to protect them from storm water flows during the winter months. Slopes will be manicured with stockpile topsoil and plant material. All reclaimed slopes will be landscaped with native vegetation as reclaimed proceeds to ensure slope stability and prevent erosion from occurring. All slopes will be furrowed to retain water and encourage growth of the vegetation. Furrows shall be constructed parallel to the slope (parallel with the contours).

3.6 PONDS, WASTE

There are no ponds on-site either natural or constructed. Chemicals are not used on-site; no chemical processing occurs on-site, only crushing and screening. There will be no chemical waste or pollution from the mining operation.

3.7 GEOLOGY AND SOILS

The topography of the Makayla 2 mine site is open desert with rolling hills containing little vegetation, and maintains an elevated slope area ranging between 10-20%. The soil stability consists of overburden topsoil with pumice located at depths ranging from 3-15 feet beneath the overburden occurs in a pumice tuff layer interbedded with tuffaceous lake deposit.

The sequence of pumice tuff and tuffaceous lake deposits rest unconformably upon friable, deeply weathered granite. The sequence strikes N40°E and dips about 20 degrees north-westward. Exposure of the pumice layer is rare, but as much as 15 feet in depth of pumice was encountered in open cuts and equal amounts in the small open pit indicate at least 10 feet of pumice.

The sequence of pumice tuff and tuffaceous lake deposit (Plio-Pleistocene Coso formation) is cut by a small north-trending normal fault. The amount of movement is not known, but from the relative position of the pumice layer on both sides of the fault, the displacement in a vertical direction was probably no more than a few tens of feet.

Overburden consists of pumiceous soil which is from 1 to 3 feet thick.

The pumice layer consists principally of pumice fragments and minor amounts of rounded boulders and cobbles of hornblende andesite, red granite, and dark mica schist. Angular grains of glassy quartz, black biolite, and fieldspar constitute the crystalline portion that represents a

few percent of the pumice tuff layer.

3.8 CULTURAL

Archaeological investigations in the Owens Valley, Rose Valley, and Coso Mountains indicate that the area was occupied by at least the Middle Archaic, or Pinto Period, which began approximately 7000 years ago. By the Late Archaic, or Gypsum Period, the number of habitation locations in the Coso Mountains and Owens Valley seems to have risen dramatically with evidence of occupation moving into previously unexploited or under-exploited areas. This change seems to have coincided with climatic changes that resulted in cooler and moister conditions. Sum 333.925 Safety factor considering larger equipment 1.5 500.8875

Around 800 years ago the expansion of Numic-speaking peoples within the region brought Shoshone people into the area. During the ethno- historic period, the area of the proposed project area was occupied by Koso Shoshone peoples. Various Tribal communities from the region around the Coso Mountains visited the Coso Hot Springs routinely for their healing properties. The Coso Mountains were central to a large community inhabited by the Koso Shoshone. Their winter villages were located in the Coso Mountains, and during the rest of the year they moved out in family groups into the surrounding areas to exploit seasonally available resources.

Silver and gold were both reported in the Coso Range in the 1860s and a short- lived mining boom occurred. Chesterman, though, states (1956: 62-67) that most of the mines in the Coso Range region began serious commercial operations after the war. The Makayla (Ray-Gill #7) Mine was operated in the late 1940s by the Crownite Corporation for the purposes of making lightweight building blocks. Previous to this, the Desert Materials Corporation owned and operated the mine. Beginning in 1946-47, the Crownite operation consisted of an open pit where the overburden was scraped off with a bulldozer and the pumice mined with a dragline, and the pumice was then loaded onto trucks. The ore was sent to a processing plant along the Southern Pacific Railroad siding at Sykes, some eight miles distant, where it was sorted and loaded onto railcars (Dice, 2001).

An archaeological Class III cultural resource study and field inventory (pedestrian surface inspection) for this project was conducted by Duke Cultural Resource Management during the summer 2019 ("Duke") (See Appendix E). Duke located and monitored the current surface conditions of four prehistoric archaeological sites that occur within the boundary of the 25 acre Area of Potential Effects (APE) proposed to be mined. All of these four sites consist of surface obsidian debitage from the manufacture of stone tools by the prehistoric inhabitants. Subsequently, Duke conducted a subsequent Research Evaluation (See Appendix F) and sub-surface archaeological test excavation at three of these sites and established that all are surface manifestations only, and do not contain enough substantiative data potential that would allow them to be determined as eligible for National Register status. The fourth site previously identified by Duke within the APE was recently inadvertently removed by required mining reclamation.

The current study identified five cultural resources within the approximately 25-acre Makayla 2

Mine Project. This evaluation determined that all sites are just surface lithic debitage manifestations only, and do not have any depth to their deposits. None of the cultural resources are considered eligible for the CRHR/NRHP and are not considered potential historical resources/historic properties for the purposes of the CEQA/NHPA.

All five sites will be directly impacted and avoidance is the preferred mitigation measure for archaeological resources under CEQA. However, if avoidance is not feasible, no additional measures are recommended to discover potential historical resources/historic properties which would potentially need mitigation.

3.9 DRAINAGE AND EROSION CONTROLS

The project area contains sedimentary type alluvium and volcanic tuff soils typical of the Coso Formation within the Coso Mountain range at approximately 4.600ft elevation. The surface soil type at the proposed quarry site is a gravelly loam - coarse sand but has pumice below and also at the surface.

If erosion is evident on-site, the operator will implement adequate measures to control surface runoff to protect surrounding lands in a manner commensurate with modern engineering practice. They may include, but not limited to, larger rock, drainage ditches, straw mulch, hay bales, sediment containment basins, and localized control and maintenance measures to intercept and control disturbed area drainage. See Paragraph 3.1 for more detailed analysis and description of mitigation measures to ensure proper surface runoff controls to be implemented.

If any rills or gullies in excess of 8 square inches in cross sectional area and more than 10 linear feet from on final slopes, they shall be arrested using larger rock, rock mulch and any damage to the drainage system will be repaired within one month of observation.

3.10 PUBLIC SAFETY

All equipment and debris will be removed from site upon completion of mining. Public access to the site will be restricted by the site perimeter berm and fence and locked gate to the mine site. Any other access roads will be blocked with large boulders or berms. Warning signs with contrasting background lettering will be installed along the approved surface mine boundary stating "No Trespassing – Keep Out – Surface Mining Operation" or similar. The reclaimed slopes will be of sufficient low gradient as not to cause a hazard to public safety if the public illegally trespasses onto the site past the berms, fences and signs.

3.11 MONITORING AND MAINTENANCE

Inyo County, as the lead agency that implements SMARA, requires annual reporting of Mining and Reclamation activities. The reports are filed with the State Division of Mine Reclamation (DMR) and Inyo County. Monitoring and maintenance of reclamation is an ongoing responsibility of SWP who will be responsible to maintain berms, gates, and signs and remove illegal dumping.

3.12 RECLAMATION FINANCIAL ASSURANCE

The Reclamation Financial Assurance shall be reviewed by the Lead Agency annually as required by the SMARA. Inyo County is the lead agency for SMARA compliance and will review the reclamation FACE and inspect the mine site annually.

In addition to the monitoring through inspection and reporting, the operator is required to assure reclamation of the site in accordance with the approved Reclamation Plan in compliance with Section 2773.1 of SMARA.

SWP does have an existing FAM on file with Inyo County in the amount of $70,000 for the remaining reclamation of the Makayla 1 mine to ensure adequate funds for the completion of the Makayla 1 mining project.

The Makayla 2 reclamation plan proposes that the reclamation be done **concurrently** with the mining activities. SWP will post a reclamation assurance mechanism in the amount of $ 35,000 for the reclaiming of the Makayla 2 mining project. The financial assurances must be approved by and payable to Inyo County as lead agency, California Department of Conservation and the Bureau of Land Management.

REFERENCES

Michael and LeAnne Hattig; 2001; California Lightweight Pumice Makayla Mine Expansion: A

Class III Intensive Field Survey of Properties located within Section 21 and 28, T21S-R38W, Coso

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"2010 Maintenance Plan and Redesignation Request for the Coso Junction Planning Area", at

https://www.gbuapcd.org/Docs/District/AirQualityPlans/Coso/2010CosoPM10MaintenancePlan.pdf (a revision to the State Implementation Plan for Coso Junction Planning Area).

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https://www.gbuapcd.org/Docs/District/AirQualityPlans/Coso/2021DRAFTCosoPM10SecondMaintenancePlan.pdf.

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CA650-NEPA-2001-94- Tiered Environmental Assessment for the Makayla Pumice Quarry

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USGS ScienceBase- Surface Disturbance Analysis (previously called Sdartt). www.sciencebase.gov

ACRONYMS

amsl	above mean sea level
APN	Assessor's Parcel Number
bgs	below ground surface
BLM	Bureau of Land Management
BMP	Best Management Practices
BUOW	burrowing owl
CCR	California Code of Regulation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CLP	California Lightweight Pumice
CNDDB	California Natural Diversity Database
CUPA	County EHS Certified Unified Program Agency overseer of hazardous material
cy	cubic yards
DMR	Division of Mine Reclamation (State)
DOC	Department of Conservation (State)
EHS	Environmental Health Services
EIR	Environmental Impact Report
FACE	Financial Assurances Cost Estimate
FAM	Financial Assurance Mechanism
FGC	Fish and Game Code
GBUAPCD	Great Basin Unified Air Pollution Control District
H: V	Slope description (x height to x vertical; Typically in feet)
GP	Global Pumice
mcy	million cubic yards
msl	mean sea level
OS-40	Open Space, one dwelling unit per 40 acres (County Zoning designation)
OSR	Open Space Recreation (County General Plan designation)
RWQCB	Regional Water Quality Control Board (Lahontan Region)
SMARA	Surface Mining and Reclamation Act
SWP	Southwest Pumice
SPCC	Spill Prevention, Control, and Counter-measure
SSC	Species of Special Concern
SWPPP	Storm-water Pollution Prevention Program
tpd	tons per day
tpy	tons per year
USACE	US Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Attachment 7