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

Phone: (760) 878-0263
FAX: (760) 878-0382
E-Mail: inyoplanning@inyocounty.us

AGENDA ITEM NO.: 7 (Action Item – Public Hearing)

PLANNING COMMISSION MEETING DATE: October 22, 2025

SUBJECT: Amendment to Conditional Use Permit No. 73-14 and Reclamation Plan No. 90-3 BYK Hectorite Mine; General Plan Amendment 2025-03

EXECUTIVE SUMMARY

The applicant, BYK USA Inc., has submitted a request for a minor amendment to extend the term of Conditional Use Permit (CUP) No. 73 and associated Reclamation Plan No. 90-3. The project site is the California Hectorite Mine (Mine ID #91-14-0013), previously operated by Industrial Mineral Ventures (IMV) and Floridin Company. The current CUP and reclamation plan are scheduled to expire on February 27, 2024. The operator has been working with Inyo County since June 2023 to pursue this extension.

The amendment proposes a 25-year extension through February 27, 2049, with no changes to the approved scope, intensity, or methods of mining and reclamation.
During the County's review, it was identified that the project site includes parcels that were transferred from federal to private ownership in 2017. However, the General Plan designation still reflects public (federal) land status. In order to maintain consistency between land use designation and current ownership, the County is proposing to correct the General Plan map as part of this project.

Pursuant to CEQA Guidelines §15061(b)(3), this project qualifies for a General Rule Exemption from environmental review. There is no possibility that the proposed CUP extension or the associated General Plan correction would result in a significant effect on the environment, as the project does not involve any changes to physical operations, land disturbance, or use intensity beyond those already permitted.

PROJECT INFORMATION.

Supervisory District: 5

Project Applicant: Lee Magana BYK USA Inc., a New York Corporation

Property Owner: BYK USA Inc. 1212 Church St Gonzales, TX 78629

Site Address: The project site is located approximately 0.9 miles northeast of the community of Death Valley Junction and roughly two miles west of the California–Nevada state line. The site is situated within Section 6, Township 26 North, Range 5 East, San Bernardino Base and Meridian (SBB&M), in unincorporated Inyo County

Community: Independence

A.P.N.: 043-030-04,041-380-01, 041-380-02

General Plan: State and Federal Lands (SFL)

Zoning: Open Space (OS)

Size of Parcel: Approximately 202.94-acres

Surrounding Land Use:

Location:	Use:	Gen. Plan Designation	Zoning
Site	Mine	State and Federal Lands (SFL)	Open Space - 40 acre minimum (OS-40)
North	Vacant/Open Space	State and Federal Lands (SFL)	Open Space - 40 acre minimum (OS-40)
East	Vacant/Open Space	State and Federal Lands (SFL)	Open Space - 40 acre minimum (OS-40)
South	Vacant/Open Space	State and Federal Lands (SFL)	Open Space - 40 acre minimum (OS-40)
West	Vacant/Open Space	Natural resources (NR) State and Federal Lands (SFL)	Open Space - 40 acre minimum (OS-40)

Staff Recommended Action: **1.)** Approve the Amendment to CUP No. 73-14 and associated Reclamation Plan No. 90-3 General Plan Amendment (GPA) 2025-03., with the Findings and Conditions as identified in the Staff Report and find the project is exempt under CEQA.

Alternatives: 1.) Deny the requested amendment to CUP No. 73-14 and associated Reclamation Plan No. 90-3 GPA 2025-03 This alternative would not allow the applicant to update the existing operational or reclamation framework. The operator would be required to commence reclamation immediately in accordance with the currently approved plan.

2.) Approve the Amendment CUP No. 73 and associated Reclamation Plan No. 90-3 GPA 2025-03 with additional Conditions of Approval.

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

Project Planner: Ryan Standridge, Associate Planner

STAFF ANALYSIS

Background and Overview

The California Hectorite Mine has operated under Conditional Use Permit (CUP) No. 73-14 and Reclamation Plan No. 90-3 since the early 1970s. Following the adoption of the Surface Mining and Reclamation Act (SMARA), the associated reclamation plan was formally approved by Inyo County on September 26, 1990. The mine was originally developed by Industrial Mineral Ventures (IMV), later operated by the Floridin Company, and is now managed by BYK USA Inc., a subsidiary of ALTANA AG.

The facility is one of the only known commercial sources of high-purity hectorite clay in North America. Hectorite is a rare, magnesium-rich smectite clay used in high-value industrial and consumer products, including rheological additives in paints and coatings, cosmetics, and emerging energy storage technologies. The mine uses conventional surface mining methods involving ripping, dozing, and hauling. No drilling or blasting is required due to the naturally soft nature of the deposit.

The existing CUP and Reclamation Plan authorize this method of operation and establish final reclamation goals. The project site includes three assessor parcels across two primary land holdings:

Parcel A (APNs 041-380-01 and 041-380-02), originally patented by the State of California in 1959, and

Parcel B (APN 043-030-04), federally patented by the United States in 2009.

While the land was legally patented earlier, BYK USA Inc. did not complete the purchase and consolidation of both parcels into private ownership until 2017. However, the Inyo County General Plan continues to designate the affected parcels as State and Federal Land (SFL) (federal) land, a legacy of their previous Bureau of Land Management (BLM) status.

To correct this inconsistency and ensure that the land use designation aligns with current private ownership and permitted mining use, a General Plan Amendment (GPA) is

proposed. The amendment would redesignate the parcels from "State and Federal Lands" to "Natural Resource", consistent with the site's long-standing mining use and Inyo County's General Plan policies supporting responsible mineral resource development.

Because the land is no longer under BLM jurisdiction, the County must ensure that all aspects of the amended permit reflect current private ownership responsibilities and remain consistent with local land use regulations and SMARA. BYK USA Inc. has been working with Inyo County since June 2023 to pursue a 25-year extension of the CUP and Reclamation Plan. The amendment proposes to extend the expiration date from February 27, 2024, to February 27, 2049, with no changes to the approved mining methods, reclamation phasing, or intensity of operations.

Inyo County Code

Surface Mining and Land Reclamation in Inyo County are 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.)

General Plan Consistency

The subject property is currently designated State and Federal Lands in the Inyo County General Plan. This designation no longer reflects the current ownership or jurisdiction, as the site is no longer managed by a federal agency. Because the existing designation does not support private mining or reclamation, a General Plan Amendment (GPA) is proposed to re-designate the site as Natural Resource.

The Natural Resource land use designation is intended to support the responsible development of mineral resources and is consistent with the existing zoning (OS-40), the current mining use, and the approved reclamation framework. Adoption of the GPA will resolve the land use inconsistency and bring the project into full conformity with the General Plan.

The project also directly supports General Plan Policy 08.4.4, which calls for the County to:

"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."

This minor amendment to the CUP and Reclamation Plan allows the continued production of an important industrial mineral under existing environmental safeguards. It does not expand the mining footprint or increase operational intensity. Reclamation will continue in phases to ensure the site is restored to a vacant and stable condition in line with the long-term open space land use objective

Zoning Ordinance Consistency

The project site is zoned Open Space – Forty Acre (OS-40), which allows for mining and reclamation activities subject to approval of a Conditional Use Permit (CUP). The existing CUP and Reclamation Plan are consistent with the OS-40 zoning designation,

which permits the extraction and processing of natural resources and requires that land be reclaimed to a stable condition following mining.

The proposed amendment does not involve a change in zoning or an expansion of mining activities. Instead, it involves a minor update to the reclamation plan text and maps to reflect the existing operation and support future closure in compliance with SMARA.
The concurrently processed General Plan Amendment to designate the site as Natural Resource will bring the General Plan into alignment with the existing zoning and approved mining use. Therefore, the project remains consistent with the Inyo County Zoning Ordinance, and the proposed amendment supports continued implementation of an approved CUP and reclamation plan under the OS-40 designation.

ENVIRONMENTAL REVIEW
Given that the proposed project involves no new ground disturbance, no changes to the approved land use or mining operations, and only a correction to an outdated General Plan land use designation in conjunction with a time extension, the County has determined that the project qualifies for a General Rule Exemption under CEQA Guidelines §15061(b)(3).This exemption applies where it can be seen with certainty that the activity in question will not have a significant effect on the environment. The proposed amendment does not expand the approved mining footprint, increase production, or modify operational practices. Likewise, the correction to the General Plan designation reflects an ownership change that occurred in 2017 and does not authorize any new development. As such, there is no possibility that the proposed Conditional Use Permit extension or General Plan update would result in a significant environmental impact.

NOTICING & REVIEW
Amendment to Conditional Use Permit No. 73-14 and Reclamation Plan No. 90-3 BYK Hectorite Mine; GPA2025-03 was noticed in the Inyo Register and sent to all property owners within 300 feet of the project ~~T~~thirty days before the Planning Commission Hearing. No public comments have been received to date.

RECOMMENDATION
Planning Department staff recommends the approval of the Amendment to Conditional Use Permit No. 73-14 and Reclamation Plan No. 90-3 BYK Hectorite Mine; GPA2025-0 with the following Findings and Conditions of Approval:

FINDINGS
1. The proposed Conditional Use Permit amendment, associated Reclamation Plan amendment, and General Plan map correction are exempt from environmental review pursuant to CEQA Guidelines §15061(b)(3), the General Rule Exemption, and the provisions of the California Environmental Quality Act have been satisfied.

[Evidence: The General Rule Exemption applies where it can be seen with certainty that the proposed activity will not have a significant effect on the environment. The project involves a time extension to an existing Conditional Use Permit and Reclamation Plan, with no changes to the approved mining footprint, methods, or

intensity of use. The associated General Plan correction updates the land use designation to reflect a 2017 transfer from federal to private ownership and does not authorize new physical disturbance. Reclamation will continue in accordance with the previously approved plan. There is no possibility that the project would result in a significant environmental effect.].

2. The proposed amendment to Conditional Use Permit No. 73-14 and Reclamation Plan No. 90-3 for the California Hectorite Mine is consistent with the Inyo County General Plan, designation subject to correction of the outdated land use designation.).

   [Evidence:

   The project site includes parcels that were patented and transferred into private ownership in 2017 but are still designated as State and Federal Land (SFL) in the Inyo County General Plan. The SFL designation is no longer applicable, as the property is no longer under federal ownership or subject to federal permitting authority. The County is proposing to update the General Plan map to reflect a more appropriate land use designation of Natural Resources (NR), which supports private mining operations and is consistent with the current ownership and use of the property. The proposed amendment supports the continued extraction and reclamation of a high-purity industrial mineral consistent with Section 08.4.4 of the General Plan Goals and Policies, which 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. "No change in the scope or intensity of mining is proposed, and reclamation will continue under the approved framework, consistent with long-term land use goals.].

3. The proposed amendment to Conditional Use Permit No. 73-14 and Reclamation Plan No. 90-3 for the California Hectorite Mine is consistent with the Inyo County Zoning Ordinance, which permits "Mining Uses" as a Conditional Use in the Open Space (OS) Zoning District.

   [Evidence:

   The project site is zoned Open Space (OS), and the OS designation allows mining and resource extraction as a conditional use, subject to County approval. The California Hectorite Mine has operated under Conditional Use Permit No. 73-14 in this zoning district for several decades. The existing permit and reclamation plan authorize ongoing surface mining and phased reclamation consistent with zoning provisions for the extraction and processing of natural resources. This amendment proposes only a time extension and a General Plan map correction and does not modify the permitted scope, intensity, or method of operations. Reclamation activities will continue in accordance with the approved plan, and the ultimate end use of the site remains consistent with the Open Space zoning designation. Therefore, the project remains consistent with the County's Zoning Ordinance.].

4. The proposed amendment to Conditional Use Permit No. 73-14, Reclamation Plan No. 90-3, and General Plan Amendment (GPA) 2025-03 for the California Hectorite Mine is necessary and desirable.

[Evidence: General Plan Policy Section 08.4.4 of the General Plan 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. "The California Hectorite Mine is one of the only known sources of high-purity hectorite clay in North America, a specialized mineral used in advanced industrial and consumer products. The proposed amendment allows continued extraction and phased reclamation of this valuable mineral resource under the oversight of an approved CUP and Reclamation Plan. This time extension ensures that reclamation activities remain enforceable through the life of the project and provides regulatory certainty for a long-term operation that supports local economic and scientific industries. No changes to the intensity of mining, environmental impacts, or final land use are proposed, making the amendment both necessary and beneficial to ensure continued conformance with County policies and SMARA requirements.]

5. The proposed amendment is properly related to other uses and transportation and service facilities in the vicinity.
[Evidence: The amendment does not change the permitted use, operational intensity, or access routes. Existing transportation and service facilities are adequate to support the continued operation, and no additional infrastructure or services are required]

6. The proposed amendment to Conditional Use Permit No. 73-14, Reclamation Plan No. 90-3, and General Plan Amendment (GPA) 2025-03 would not, under all the circumstances of this case, adversely affect the health or safety of persons living or working in the vicinity or be materially detrimental to the public welfare. *[Evidence: The amendment involves a time extension and a map correction to reflect current land ownership. No changes are proposed to the approved mining methods, operational intensity, or environmental safeguards. All activities will continue to be regulated under existing permit conditions, ensuring ongoing protection of public health, safety, and welfare.].*

7. Reclamation requirements necessitate the amendment for the site.
[Evidence: The amendment is required to extend the term of the existing Conditional Use Permit and Reclamation Plan so that reclamation activities can continue in compliance with SMARA and Inyo County Code. This update ensures that the operator remains subject to an active, enforceable reclamation plan throughout the remaining life of the project. It also maintains the mine's active status with the Division of Mine Reclamation until final closure requirements are met.].

CONDITIONS OF APPROVAL

1. Any expansion of the mining activity or surface disturbance beyond the limits depicted in the approved amended Reclamation Plan No. 90-03 shall require a formal amendment approved by Inyo County, consistent with Inyo County Code §7.70.050 and PRC §2772.

2. To promote re-establishment of native vegetation, pockets of undisturbed flora shall be retained where feasible. Where mesquite is impacted, transplanting to designated reclaimed areas is required.

3. Concurrent reclamation is encouraged. Native seed mix shall include appropriate desert species such as saltbush (Atriplex spp.), burrobush (Ambrosia dumosa), shadscale (Atriplex confertifolia), Mormon tea (Ephedra spp.), and creosote (Larrea tridentata), as outlined in 14 CCR §3705.

4. The upper 12 inches of topsoil shall be salvaged and stockpiled separately for use during final reclamation, per 14 CCR §3704.1.

5. Vegetation and stockpiled materials shall not obstruct natural drainage paths or ephemeral washes, consistent with 14 CCR §3706.

6. Wildlife protection measures shall be implemented, including the use of 2.5-foot berms or 35-degree escape ramps in open pits or trenches.

7. Pits and trenches shall be backfilled to approximate pre-disturbance contours. If left open overnight, appropriate signage and safety barriers must be used.

8. All disturbed areas and material stockpiles shall be recontoured to blend with surrounding terrain upon cessation of mining activities.

9. Compacted surfaces, excluding areas of natural desert pavement, shall be scarified during final reclamation to promote infiltration and revegetation success.

10. The operator shall maintain the site in a clean and orderly condition through proper storage, housekeeping, and trash disposal.

11. All trash, abandoned equipment, and debris shall be removed from the site upon completion of mining and reclamation.

12. If cultural or paleontological resources are discovered during operations, work shall immediately stop within 100 feet of the find and Inyo County shall be notified. A qualified professional shall evaluate the discovery prior to the resumption of work, consistent with CEQA Guidelines Appendix G.

13. Long-term on-site habitation (e.g., RVs, trailers) is not permitted under the approved plans.

14. All new structures shall be reviewed and permitted by the Inyo County Building & Safety Department. BLM review is no longer required due to the property's conversion to private ownership.

15. The site shall not be used for the storage of inoperable vehicles, household appliances, or unrelated equipment.

16. Storage of equipment and materials shall be managed to minimize additional surface disturbance.

17. During periods of temporary inactivity, all facilities shall be maintained in a safe, secure, and orderly condition.

18. Written notification shall be provided to Inyo County Planning within 30 days of completing both mining and reclamation activities.

19. The operator shall comply with all applicable provisions of Inyo County Code, SMARA (PRC §2710 et seq.), 14 CCR, and applicable state and federal regulations.

20. The operator shall maintain a current Financial Assurance Mechanism (FAM) in an amount approved by Inyo County sufficient to ensure reclamation in accordance with the approved Reclamation Plan. The FAM shall be reviewed annually as required by PRC §2773.1.

21. A signed Statement of Responsibility acknowledging reclamation obligations under PRC §2772(c)(10) shall be submitted to Inyo County within 30 days of project approval.

22. Inyo County reserves the right to inspect the site at any time to verify compliance with CUP 73-14, Reclamation Plan No. 90-03, and applicable laws.

23. Every ten (10) years, the operator shall submit an updated site condition map to Inyo County Planning. The map shall show current disturbance boundaries and elevation contours at five-foot (5') intervals. The map shall be prepared, stamped, and signed by a California-licensed civil engineer or land surveyor. As an alternative, the operator may provide a County-approved aerial photogrammetric or LiDAR survey, or a survey-grade GPS/GNSS survey prepared by a qualified professional, provided that the data are certified as accurate and meet the five-foot (5') contour interval requirement.

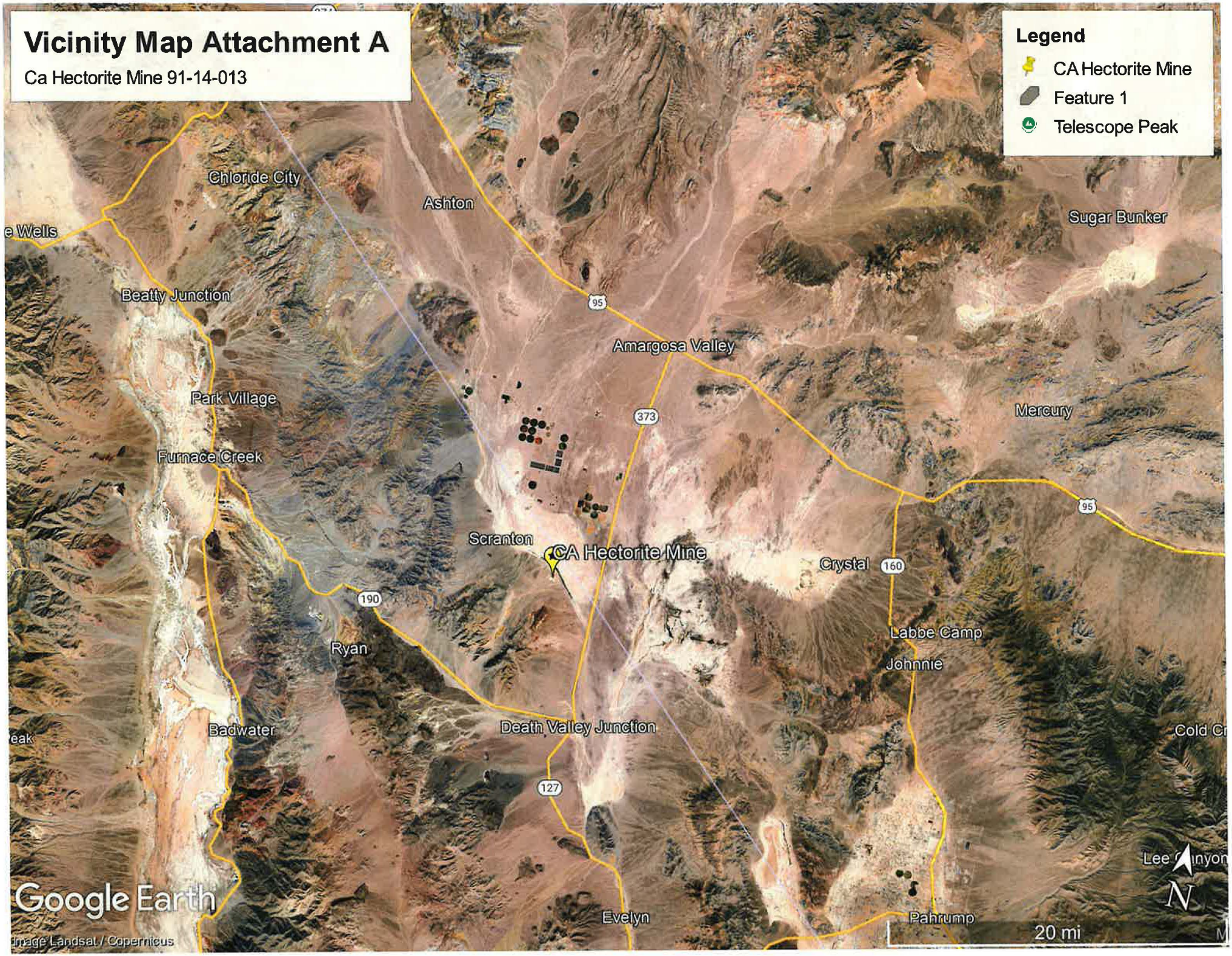
24. The approved amended Reclamation Plan No. 90-03 shall be recorded by the Planning Department and shall serve as the official plan governing mine closure and reclamation activities.

25. If mining operations cease for more than ninety (90) consecutive days outside of scheduled campaign activities, the operator shall notify Inyo County Planning. Because mining under this permit may occur on an intermittent campaign basis with material stockpiled for later processing or sale, such campaign-related pauses shall not, in themselves, be considered "idle" operations. However, if no active mining or processing occurs for one (1) year or more, the operator must submit an Interim Management Plan (IMP) to the County for approval pursuant to PRC §2770(h). Failure to submit an approved IMP may result in the operation being deemed abandoned under SMARA.

26. Indemnification: The applicant, landowner, and operator shall defend, indemnify, and hold harmless Inyo County, its agents, officers, and employees from any claim, action, or proceeding brought to attack, set aside, void, or annul the County's approval of CUP 73-14, Reclamation Plan No. 90-03, or any related entitlement. The County reserves the right to select its own legal counsel and to participate in the defense at the applicant's expense.

Attachments:

A. Vicinity Map
B. Revised Reclamation Plan text
C. Approved Reclamation Plan
D. MAP current General Plan designation
E. Map of propose designation
F. Draft resolution for PC
G. Draft board of supervisor resolution


Vicinity Map Attachment A
Ca Hectorite Mine 91-14-013
Legend
CA Hectorite Mine
Feature 1
Telescope Peak
Chloride City
Ashton
Sugar Bunker
Beatty Junction
95
Amargosa Valley
Park Village
373
Mercury
Furnace Creek
95
Scranton
CA Hectorite Mine
Crystal
160
190
Ryan
Labbe Camp
Johnnie
Badwater
Death Valley Junction
127
Evelyn
Pahrump
20 mi
N
Google Earth
Image Landsat / Copernicus

Attachment B

UPDATED MINING AND RECLAMATION PLAN FOR BYK USA INC.

INYO COUNTY, CALIFORNIA

PREPARED BY
Dan Hoyer, PE
Bryan Hathaway, PE
Jonathan Slezak
Stephanie Von Flue

RESPEC
660 Rood Avenue, Suite A
Grand Junction, Colorado 81501

PREPARED FOR
BYK USA Inc.
1212 Church Street
Gonzalez, Texas 78629
+1 (830) 672-2891

DECEMBER 2024

RESPEC.COM

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

1.0 INTRODUCTION

1.1 INTRODUCTION AND BACKGROUND

BYK USA Inc. is submitting a minor amendment to its approved Plan of Operations and Reclamation Plan to authorize a 50-year extension of the permitted operational timeframe. BYK USA Inc. currently surface mines hectorite clay on patented claims in Inyo County, California. Hectorite ($Na_{0.3}(Mg, Li)_3Si_4O10(OH)_2$) is a light colored, trioctahedral, magnesium-based smectite clay primarily used in the manufacture of organoclays for industrial applications in paints and coatings and in oil well drilling. It is a hydrothermal alteration of volcanic ash formed in closed basins in arid environments. The state of California classifies (PRC 2772) hectorite clay as a Number 1 commodity, that is, a clay industrial mineral in the same category of aggregates. All volumes reported here are in short tons.

BYK USA Inc. (BYK) began operations in 1974 (as IMV). BYK is submitting this updated Mine and Reclamation Plan for their mining project (**CA Mine ID #91-14-0013**) in Inyo County, California to the Inyo County Planning Department, the State of California Department of Conservation - Division of Mine Reclamation, and Barstow Resource Area office of the U.S. Department of Interior, Bureau of Land Management (BLM), in compliance with BLM Surface Management of Public Lands Regulations 43 CFR 3809.

BYK currently operates under **Conditional Use Permit #73-14** (CUP), originally issued in 1973. While the CUP remains in effect, BYK is submitting a minor amendment to the approved Plan of Operations and Reclamation Plan to extend its applicability for the upcoming 50-year period, from December 2024 through December 2074. Since the mineral resource within the project area is expected to support operations beyond this 50-year extension, mine closure planning will be addressed in a future amendment. BLM estimates the deposit "contains 33,000,000 tons of hectorite reserves and another 33,000,000 short tons of resources." (*Wilkerson et al 2001*).

A more detailed resource and environmental assessment study executed in 2000 with Dr. Gregg Wilkerson and Larry Vredenburgh, Lead Mineral Examiners and Geologists for the Bureau of Land Management (BLM) Bakersfield Field Office, to validate the mineral patent claims in 2002, concluded that a resource of 2,300,000 tons of hectorite clay existed. The average grade of the hectorite was estimated at 13%.

This updated Mine and Reclamation Plan will supersede that originally provided to the BLM in the Plan of Operations (POO) March 20, 1981, by Steffen, Robertson, and Kirsten (SRK) that was prepared for Industrial Mineral Ventures, Inc. (IMV), the former operator of the project. The original POO for the hectorite mine was approved by the SMARA-Designated Agent, the Inyo County Planning Department, California in Independence, California in September of 1990, and the BLM Barstow Field Office.
This updated Mine and Reclamation Plan for the BYK USA Inc. **CA Mine ID # 91-14-0013** (BYK CA Mine) describes the existing mining project which has been owned and operated since the early 1970's by

several different successive corporate entities. This plan does not represent a significant departure from the previous Plan and describes present and future mining and exploration activities, reclamation plans, environmental controls, and includes a brief discussion of past mining operations.

The BYK California Hectorite Pit presently involves mining from a small hectorite clay open pit mine. The activities occur on patented land in California and include the hectorite clay mine and access to the mining facilities. These activities are described in detail in this updated POO.

1.2 OPERATOR AND LANDOWNER

BYK is the owner and operator. BYK California Hectorite Pit was founded in 1972 to acquire and develop all rights from a partnership formed in the 1960's Industrial Mineral Ventures (IMV) holding a group of claims that contained several clay deposits in the Amargosa Valley. The project of mining and milling operations has been operating since 1974. IMV was acquired in June of 1989, by the Floridin company, a subsidiary of U.S. Silica Company, a natural resources company whose business is the acquisition, exploration, and development of industrial mineral resources. The Floridin company purchased the IMV facilities with the intent to continue mining and processing the clay deposits. In 1980, a business acquisition was completed by Southern Clay Products (SCP), Gonzales, Texas with the intent to continue mining and processing clay at the IMV facility and transport to its main clay production facility located in Gonzales, Texas. In 2013, SCP was acquired by BYK Additives, then known as BYK USA.

BYK USA is located at 1212 Church Street in Gonzales, Texas. The BYK USA Inc. corporate office is located in Wallingford, Connecticut and incorporated in the state of New York.

The company representative is:
Mr. Roy Garrido, Mine Manager
1212 Church Street
Gonzales, Texas 78629
+1 (512) 558-1587
Roy.Garrido@altana.com

The agent is:
California Registered Corp. Agent 1505
CT Corporation System
Address: 300 North Brand Blvd.
Suite 700
Glendale, California 91203
(213) 627-8252
CT-StateCommunications@wolterskluwer.com

1.3 LOCATION

The BYK California Hectorite Pit area is located in the Amargosa Desert, east of Death Valley, approximately 100 miles northwest of Las Vegas, Nevada, shown in Figure 1.1. The operations consist of one small mining operation located in Inyo County, California, 0.9 mi north-east of Death Valley Junction and about two miles from the California - Nevada border. The nearest towns to the project site

are Amargosa Valley (previously known as Lathrop Wells), Nevada and Pahrump, Nevada. The mining operation is located about 15 miles south of Amargosa Valley and 22 miles northwest of Pahrump.

All current areas of disturbance are within the permitted boundaries. This is a remote, sparsely vegetated, arid setting in which the dominant landform consists of flat, slightly undulating dry lake beds.

The BYK California Hectorite operation is reached by traveling about 15.4 miles south from Amargosa Valley intersection of State Highway 95 and State Route 373, then traveling west for approximately 2.5 miles west on the haul road to the pit. Access to the mining area is along preexisting county or other gravel roads, shown in Figure 1.1.

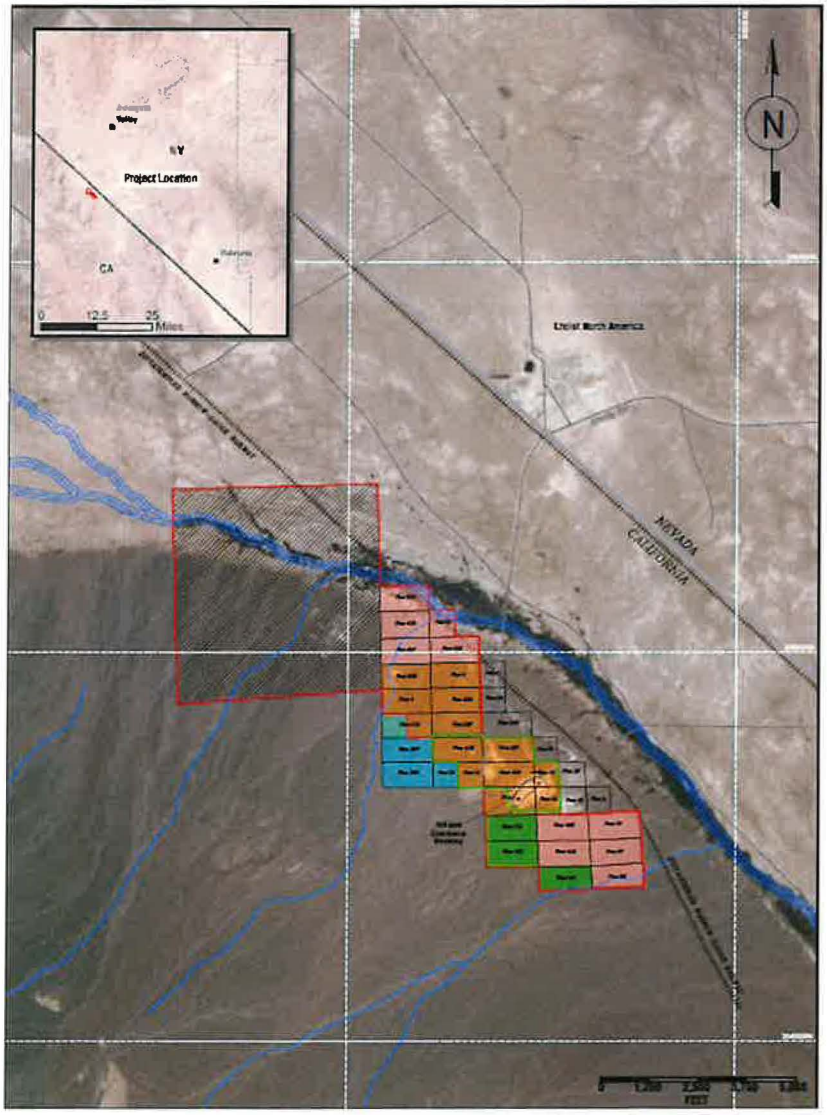


Figure 1.1. General Vicinity & Claims Map for BYK California Hectorite Pit

1.4 PROJECT AREA AND LAND STATUS/ZONING

The BYK California Hectorite Pit land position in Inyo County consists of approximately 547 acres of patented and unpatented claims, composed of 205.91 acres of patented and 341 acres unpatented claims, tabulated in Table 1.1. The Floridin Company filed Mineral Patent applications with the Bureau of Land Management (BLM) on or about October 7, 1991. Those claims were subsequently transferred to Southern Clay Products (SCP) on March 31, 2009; then to its successor BYK USA on November 19, 2013. At that same time 3 claims were dropped by SCP as those areas were deemed uneconomic by the BLM. The patented claims are described from the San Bernadino Base and Meridian (SBM) as:

- T26N, R5 E, Section 6: lots 22, 23, 25, 26, 27, 29, 30, 32, 33, 34 and
- 35, NW ¼, NE ¼, of SE ¼, and NE ¼, NW ¼, SE ¼;
- T27N, R5E, Section 31: lots 15 and 16.

Containing 205.01 acres.

In 2000, the 22 patented mining claims were converted as part of the application process to prove economic viability with the BLM's Bakersfield Office. In October 1998, Dr. Greg Wilkerson and Larry Vredenburgh of that office were assigned as the mineral appraisers and prepared a detailed Environmental Assessment (EA) (Wilkerson, et al 2000). Part of that process was verification drilling and testing (Bestram, B., 1985) to "provide samples to prove the existence of valuable mineral".

The 13 unpatented claims (~341 acres) maintained by BYK USA are located in Sections 6 and 31 TRN, R5E. The unpatented lands are administered by the Barstow Resource Area office of the BLM.
In addition, BYK holds the surface right to California State Land Section 36, T26N, R5E. Minerals are owned by the State of California.

The mining operations described in this revised Mine and Reclamation Plan are confined to a portion of Section 6, T26N, R5E.
The lands are zoned as open space.

Table 1.1.1. Claims and Property held by BYK USA

Claims and Property Held by BYK USA Inc.						
No.	**Mining Claim Name**	**Location***	**CAMC No.**	**Former Mining Claim Name**	**Former CAMC No.**	**Area (acres)**
Unpatented Claims maintained by BYK USA Inc.						**341**
1	Flow A	T26N R5E Sec. 5	248526	White King A	215667	10
2	Flow CD	T26N R5E Sec. 5	248527	White King CD	215668	20
3	Flow EF	T26N R5E Sec. 5	248528	White King EF	215669	20
4	Flow GH	T26N R5E Sec. 5	248529	White King	215666	20
5	Flow 1CD	T26N R5E Sec. 6	280556	White King 1CD	215671	20
6	Flow 1EF	T26N R5E Sec. 6	280557	White King 1EF	215672	20
7	Flow 1JK	T26N R5E Sec. 6	280558	White King 1JK	215665	20
8	Flow 1LM	T26N R5E Sec. 6	248534	White King 1LM	215673	20
9	Flow 1NP	T26N R5E Sec. 6	248535	White King 1NP	215674	20
10	Flow 1R	T26N R5E Sec. 6	248537	White King 1QR	215675	10
11	Flow 2A	T26N R5E Sec. 6	248538	White King 2A	215677	10

No.	Mining Claim Name	Location*	CAMC No.	Former Mining Claim Name	Former CAMC No.	Area (acres)
12	Flow 2CD	T26N R5E Sec. 6	248539	White King 2CD	215678	20
13	Flow 2K	T26N R5E Sec. 6	248543	White King 2	215676	10
14	Flow 2L	T26N R5E Sec. 6	248544	White King 2L	215681	10
15	Flow 6AB	T27N R5E Sec. 31	248555	White King 6AB	215698	17
16	Flow 6CD	T27N R5E Sec. 31	248556	White King 6CD	215699	17
17	Flow 6EF	T27N R5E Sec. 31	248557	White King 6EF	215700	17
18	Flow 6LM	T27N R5E Sec. 31	248559	White King 6LM	215702	20
19	Flow 6N	T27N R5E Sec. 31	248560	White King 6N	215703	10
20	Flow 7	T27N R5E Sec. 31	248561	White King 7	215704	10
21	Flow 3CD#	T26N R5E Sec. 6	248530	White King 3CD	215683	10
22	Flow 1#	T26N R5E Sec. 6	248546	White King 1	215670	10
Claims Under Patent No. 04-2009-0001 by BYK USA Inc.†						**205.91**
23	Flow 6GH	T27N R5E Sec. 31		White King 6GH	215701	
24	Flow 6	T27N R5E Sec. 31		White King 6	215697	
25	Flow 3	T26N R5E Sec. 6		White King 3	215682	
21	Flow 3CD#	T26N R5E Sec. 6		White King 3CD	215683	10
26	Flow 3QR	T26N R5E Sec. 6		White King 3QR	215689	
27	Flow 3NP	T26N R5E Sec. 6		White King 3NP	215688	
28	Flow 3LM	T26N R5E Sec. 6		White King 3LM	215687	
29	Flow 3K	T26N R5E Sec. 6		White King 3JK	215686	
30	Flow 2EF	T26N R5E Sec. 6		White King 2EF	215679	
31	Flow 2GH	T26N R5E Sec. 6		White King 2GH	215680	
22	Flow 1#	T26N R5E Sec. 6		White King 1	215670	10
32	Flow 2J	T26N R5E Sec. 6		White King 2	215676	
33	Flow 1Q	T26N R5E Sec. 6		White King 1QR	215675	
Claims Dropped by BYK USA Inc.						
34	Flow 3EF	T26N R5E Sec. 6		White King 3EF	215684	
35	Flow 3GH	T26N R5E Sec. 6		White King 3GH	215685	
36	Flow 3J	T26N R5E Sec. 6		White King 3JK	215686	
State Patented Property owned by BYK USA Inc.‡						**360**
1		T27N R4E Sec. 36‡				
					TOTAL	**546.91**

* SBM San Bernardino Base and Meridian

† Application approved and finalized; received by Southern Clay on February 19, 2009

‡ Surface of entire Section 36 is owned by BYK USA Inc.; minerals are owned by the State of California

Only one half of these claims were included in the Patent, the other half require Claim Maintenance fees as of 2009

1.5 DEFINITIONS

- AB3098 List: The Division of Mine Reclamation periodically publishes a list of mines regulated under SMARA that met provisions set forth under California's Public Resources Code, Section 2717(b). This list is generally referred to as the AB 3098 list, in reference to the 1992 legislation that established it. Sections 10295.5 and 20676 of the Public Contract Code preclude mining operations that are not on the AB 3098 list from selling sand, gravel, aggregates, or other mined materials to state or local agencies.
- Minerals: Include any naturally occurring chemical element or compound, or groups of elements and compounds, formed from organic and inorganic processes. Clay, sand, gravel, rock, decomposed granite, slats, alumina, silica, alkali, topsoil or growth medium, organic humus, and gems represent the aggregate of different materials.
- Produced Minerals: Produced minerals as defined in California Code of Regulations (CCR) Section 3501 includes all minerals sold, given, or otherwise moved off the site of the operation, as defined in the approved reclamation plan. Recycled products (e.g. broken concrete, bricks, asphaltic concrete, etc.) or stockpiles of mineral products that remain on the site are not produced minerals for purposes of CCR Section 3695(b).
- Construction and Demolition: (C&D) is waste material that is produced in the process of site clearing activities, construction, renovation, or demolition of structures of all types to include road and bridges. Waste material includes, but is not limited to concrete, asphalt, wood, metals, gypsum wallboard and brick.
- Exploration or prospecting: Exploration or prospecting includes the activities in search for minerals by geological, geophysical, geochemical, or other techniques, including, but not limited to, sampling, assaying, drilling, or any surface or underground works needed to determine the type, extent, or quantity of minerals present.
- Surface Mining Operations: Surface mining operations include all, or any part of, the process involved in the mining of minerals on mined lands, borrow pitting, segregation and stockpiling of mined materials (and recovery of the same).
- Mined Lands: Include the surface, subsurface, and groundwater of an area in which surface mining operations will be, are being, or have been conducted, including private ways and roads appurtenant to any such area, land excavations, workings, mining waste, and areas in which structures, facilities, equipment, machines, tools, or other materials or property which result from, or are used in, surface mining operations are located.

2.0 MINING

2.1 MINING OPERATION INTRODUCTION

The BYK California Hectorite Pit site has been the site of clay mining and milling since the 1970's. Prior to that date the project area was the site of mineral prospecting, sporadic mining, and limited production. As early as the 1920's the site was mined for carbonate to be used as whitening or whitewash (Wilkerson 2001).

The total disturbed area ranges from 10 to 20 acres and does not vary from year to year due to small volumes of material mined and continuous cut and fill operations. BYK operates exclusively in the disturbed area. At the permitted production rate of 10,000 tons of hectorite per year, BYK will reach the 100-acre boundary limit about 16 years into this permit. However, typical operations do not exceed 1,000 tons/year. Due to continuous operations and the desert landscape no reclamation has been completed.

The hectorite mining operation is confined to portions of the Flow 1, and Flow 2 GH patented claims, located near the center of Section 6, T26N, R5E, as shown in Appendix A – Map 1: Vicinity & Claims Map.

The mine is not operated year-round, rather, it is typically campaign mined for annual production in the spring. The hectorite clay mining operation starts by stripping the overburden with a bulldozer and placing the overburden in overburden storage areas. Typically, the overburden is approximately 10 to 20 feet thick. The overburden is either placed in overburden storage areas or in temporary piles adjacent to the pits; the overburden is used as backfill material to reclaim some of the previously mined out pit.

Once exposed, the clay is mined by a one or two-person team operating a bulldozer and a loader. The loader collects the clay and places it onto a set of mechanical screens. The mechanical screens separate the waste calcium carbonate material from the finer clay. The clay is then removed from the pit by the loader and placed in stockpiles adjacent to the pit. Enough clay is mined from the pit to load haul trucks that are arranged for shipments to the Gonzales production facility in Gonzales, TX, where it is processed into various industrial specialty clay products. After the production campaign ends for the year, some screened material is stored on location for later loading and hauling. The total hectorite pit typically covers less than two acres in area (of which only small portions are mined at one time) and ranges from ten to forty feet deep.

Pit access is provided by two roads into and out of the pit; the pit access roads have a maximum grade of 10 percent. Berms of 2-3 feet height surround the pit. The haul road used to transport the hectorite from the mine area is a pre-existing gravel road. The road is watered on a regular basis during active operations for dust control and is also bladed to facilitate vehicle traffic. There are no structures located at the site.

2.1.1 OPEN PIT MINING OPERATION

The BYK California Hectorite Pit is a near-surface soft rock deposit which can be mined using shallow, open-pit mining methods utilizing a light-duty dozer. Mining may require some drilling to delineate the clay, but no blasting of the ore or overburden is required.

Typically, BYK will campaign mine once a year for a period of 6 to 8 weeks. Berms surround the pit area and are opened and ramped at the beginning of each campaign. Berms to restrict access to the pit are rebuilt at the end of each mining campaign.

BYK has operated in the same pit (Pit 1) since the beginning of mining in 1974.

Historically, the hectorite was mined and hauled to the processing plant by one three-person mining/hauling crew working up to ten hours per day, and up to five days per week. Mining occurred in campaigns about every other month in which approximately 1,800 tons of hectorite ore were mined from one pit and hauled to the plant or stockpiled adjacent to the pit for a short time. Mining this quantity of hectorite ore would take the mining crew from a week to a week and a half depending upon the mining schedules for the other IMV Project clay mines. Once the hectorite ore has been mined from a pit, the mining effort shifts to either the bentonite, saponite, or sepiolite mining deposits in Nevada. This mining schedule provided approximately 10,000 tons of hectorite mill feed per year. Hauling occurred on the same schedule as mining.

BYK is currently permitted to mine up to 10,000 tons of hectorite ore per year but has taken smaller volumes of less than 2,000 tons per year. The hectorite deposit has a low stripping ratio of approximately 1:1, overburden to ore. Thus, the average 10,000-ton mining campaign could mine about 20,600 tons of combined ore and overburden. The mining method used is cut and fill. Overburden is stockpiled in an overburden storage area and at the end of mining campaign is replaced in the pit as backfill.

In current practice, BYK typically uses approximately 200 tons of screened hectorite ore per year. In order to produce this quantity, between 400 and 600 tons of material has to be produced from the initial screening. Larger volumes may be mined to increase cost efficiencies. In 2010, 1,451 tons of material were mined.

Mined material is screened on site to separate out the calcium carbonate matrix from the smaller volume (~10 to 25%) of hectorite clay, the latter being made up of smaller agglomerates. A mobile screen with 2" x 1 3/8" grid is leased for the duration of the mining campaign and demobilized at the end. Alternative sizes of grids in the range of 1" to 1 ½" have been used to test to increase clay recoveries. A fixed screen has also been used for primary separation. Typically, the recovery of the initial screening is approximately 30% and the secondary screening is approximately 50%. The waste material from the two screenings is returned to the pit.

In some cases, material is mined and sent to toll process at the Lhoist North America (formerly IMV) plant 1.5 miles to the north. Material is hauled and stored at that location.

The open pit is rectangular in shape with a single or double bench configuration based on mineralization depth, with a maximum anticipated depth of 40 feet; generally comprised of 10 feet of overburden and 30 feet of ore. Depending upon local characteristics, pit walls may be nearly vertical. Because the hectorite is laterally continuous, the mined areas are contiguous. Depending upon logistical considerations and whether additional clay ore reserves exist at depth, the hectorite pits are backfilled with overburden material and regraded to blend in with the local flat-lying topography. Backfilling, where appropriate, occurs in a consecutive mode, and overburden material removed from the active mining site is placed in the adjacent pit in which mining was most recently completed. A generalized pit configuration with access ramp and berms is shown in Appendix A – Map 2: Mining Plan, Map 4: Model Pit Design, and Map 7: Current Pit Layout.

Groundwater at the site is expected to vary in depth from 20 – 50 feet. The mine will take note of the water table during exploratory drilling prior to excavating a new pit or reference historic exploratory drill logs for localized groundwater data. The mine will maintain a 5-foot buffer between the operation and the top of the water table. The pit layout maintains a 100-foot buffer to the ephemeral Amargosa River path.

2.1.2 EQUIPMENT AND PERSONNEL REQUIREMENTS

The deposit is quite friable and poorly consolidated. Mining is by scraper and bulldozer which is mobilized to the site during the mining campaign with the loader and mobile vibrating screen; Table 2.1 tabulates the equipment utilized. The equipment and operators are contract miners employed by BYK. Crew personnel are typically one bulldozer operator and one loader operator. Equipment is brought in and removed as needed, with equipment remaining on-site during the length of the campaign.

The equipment is stored overnight in a designated equipment yard and refueling area over an impermeable liner covered by soil surrounded by an earthen berm as a barrier. The equipment use various petroleum products and lubricants. To prevent pollution generated from an unexpected spill, a spill kit of absorbent pads, a waste container, drip pans, along with clean up supplies is to be maintained and kept available on-site when equipment is parked. As there is no permanent on-site storage of these potentially hazardous products and equipment is to be inspected daily, the observed risk of a spill is relatively small. Any waste material collected from a spill kit is to be disposed of in compliance with applicable state and local health and safety regulations. In addition, any routine maintenance of mobile power equipment will not be performed on-site; instead, all preventative maintenance activities will be scheduled and completed off-site.

TABLE 2.1. BYK Mining Equipment List

MINING EQUIPMENT LIST
CAT 632B Scraper
CAT D8N Dozer
CAT 928G Front end Loader
John Deere 320G Skid Steer with Bucket
Grizzly Screen with 2" x 1 3/8" Spacing

2.1.3 CLAY STOCKPILES

Clay is stockpiled at each pit in heaps 10 to 12 feet high with volumes up to 500 tons. If more than one clay type or grade is present in the pit, they are segregated into discrete stockpiles. Non-hectorite clays are replaced in the pits during reclamation.

2.2 MINE WASTE

2.2.1 MINE WASTE

Stockpiles of unusable material, overburden, and waste material will be stored within the operation area. Waste fines may be used in the construction of the material berms that protect the pit. Stockpile heights will not exceed 15 feet, with slopes no greater than 2:1 (H:V). In general, this stockpiled material will be reused later during the reclamation process as part of the progressive reclamation. All trash, equipment, and supplies are picked up at the end of the campaign season and disposed of at an appropriate offsite location.

2.2.2 FOREIGN MATERIAL

No foreign material is on the mine site nor to be accepted unless noted in the reclamation plan.

2.3 ORE PROCESSING METHODS

Ore and waste are separated at the screening plant and stored in the stockpile area. Saleable material will be mixed on site and then transported offsite to areas of use. Non-usable material will be used for berms construction and regrading of the site during reclamation.

2.4 PRODUCTION WATER

Water requirements for the operation are limited specifically for mitigating fugitive dust emissions from the active operation. A water truck with an approximate capacity of 4,000 US gallons and a sprayer unit are operated in minimal quantities to areas of the active pit and on the unpaved road surfaces where mobile equipment operates. Water supply will continue to be provided as it has since the original CUP approval, sourced from an existing non-potable water well in Nye County, Nevada.

2.4.1 FRESH WATER

There will be no fresh water source onsite. Potable water is only available on the site by personnel that bring their own water from offsite sources.

2.4.2 WASTEWATER

The only type of wastewater to be produced by this mining operation will be screening water that will be collected in the operations area and allowed to evaporate or infiltrate.

2.5 EROSION AND SEDIMENTATION CONTROL

Dirt berms (2-3' in height) are constructed around all open pits and shallow trenches with slopes no steeper than 35 degrees, which divert runoff around the pits. Outside of the mining campaign period, stockpiles are excavated and placed back into the pits. While the stockpiles are outside of the pits, the

clay hardens, preventing fine materials from being blown away in the wind or being carried away with runoff. Undisturbed land will not be stripped of topsoil and vegetation until within the current mining pit area.

2.6 BLASTING

There is no blasting at the mine site.

3.0 RECLAMATION

Reclamation will return the location to designated "open space." BYK operates in such a way to minimize impact to the terrain during operation, limiting the extent of the disturbed area. All currently disturbed lands, as well as those disturbed in the future, will be reclaimed to the standards of SMARA.

Reclamation of a mined phase shall occur either before or during mining of a new phase. Mining operations shall not commence on a new phase until only one phase requires reclamation. In this way, no more than two phases will be disturbed at any given time.

Open pits, piles or ore and waste materials/overburden will be leveled to conform as much as possible with the existing terrain. Since the returned volume of material is less than the material extracted, any cut slopes will either be benched or sloped to blend in with the existing contours of the land.

Reclamation of the current open pit will be accomplished by backfilling with overburden. The upper foot (1') of topsoil from excavated areas is placed in a separate stockpile to be used for reclamation. This topsoil will be placed as the final layer during the reclamation process.

Areas under active revegetation shall be marked around their perimeter by signage.

Planned reclamation efforts will impose no limitations on future mining efforts on the site.

3.1 LAND USE

The mine is located approximately 9 miles north of Death Valley Junction and 1.8 miles west of the Inyo County/Nevada border. The surrounding land is left in its natural state and used for recreation.

3.2 VISIBILITY

The operation is not visible from the highway. The BLM does have hiking and ATV trails in the area so some tourist population will see the site.

3.3 VEGETATION

Existing plant species at the Mine include Salt-brush, Burro-bush, Shad-scale, Mormon-tea, and Creosote. Whenever possible, native vegetation will be left to hasten re-establishment of native flora.

Table 3.1. List of Seed Species for Reclamation

Seed Species
Creosote
Ambrosia Dumosa
Saltbush Fourwing
Saltbush Desert Holly
Snakeweed
Plantago Ovata

3.4 WILDLIFE

Reptiles and small mammals are the predominant wildlife of the affected area, though wild horses and coyotes are occasionally observed at nearby water sources. Representative reptile species include western whiptail lizards, zebra-tailed lizards, and sidewinder rattlesnakes. Representative small mammals include pocket mice, Merriam's kangaroo rats, antelope ground squirrels, and desert woodrats. Prairie falcons and golden eagles also occasionally forage near the site, but neither species is known to nest in the immediate vicinity of the affected area. No T&E (Threatened & Endangered) wildlife species are known to inhabit or migrate through the affected area. The project area is within the boundaries of the Upper Amargosa Habitat Recovery ACEC.

3.5 RECLAMATION AND RECLAMATION SCHEDULE

BYK is currently permitted to remove up to 10,000 tons of clay a year. A resource and environmental assessment study executed in 2000 with Dr. Gregg Wilkerson, the Lead Mineral Examiner and Geologist for the Bureau of Land Management (BLM) Bakersfield Field Office, to validate the mineral patent claims in 2002 concluded that a resource of 2,300,000 tons of hectorite clay existed. The average grade of the hectorite was estimated at 13%. Gangue minerals are calcium carbonate and hydrothermal silica.

BYK operates out of Pit 1 which is the original pit. Actual tons mined are <2,000 tpa so reclamation at this time is not necessary. If BYK moves from Pit 1 to a new area, the former shall be reclaimed as indicated. Total time to restore Pit 1 should be less than one year.

The boundaries of economically extractable material as shown in Figure 3.1, remain unchanged from the previous POO and is unlikely to be achieved over the next 50 years of the updated CUP at current extraction rates.

Reclamation shall be conducted in two separate phases. The first phase is the replacement of all overburden/waste material into the old pit. Much of this is done during the mining process, as reject material is stored in stockpiles in older sections of the pit. The replaced material shall be graded to meet slope requirements and restore natural drainage flow across the site. Subsequently, topsoil shall be spread evenly across the graded surface. The second phase, revegetation, shall be conducted during an appropriate season in good weather. The total time to conduct reclamation is not expected to exceed 2 years following completion of mining.

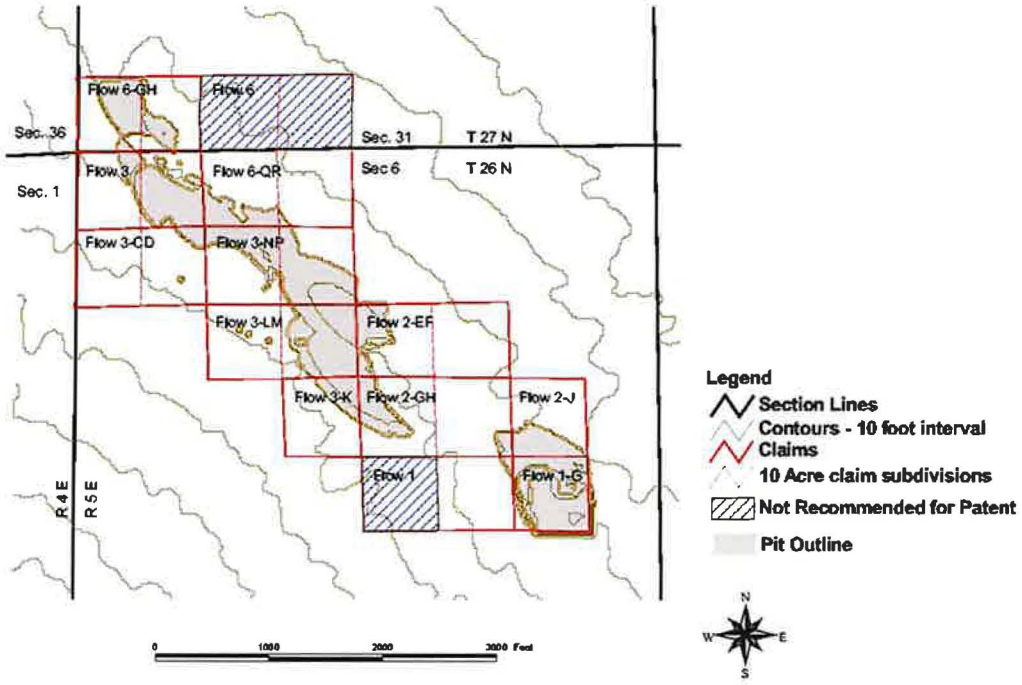


Figure 3.1. Economically Extractable Material

3.6 REVEGETATION

A general revegetation standard is provided in the Inyo County Planning Department Notice of Decision (NOD, 1990), including a seed mixture listed in Table 3.2. In addition, the NOD states that pockets of native vegetation will be left where possible to hasten re-establishment of native flora. Specific seeds recommendations have been revised species list and quantities of each seed species were provided by Leah Gardner of the State of California Department of Mine Reclamation in 2023.

Table 3.2. Seed Mixture Quantity and Expected Cost

Item	Unit	$/unit	Units		Cost
Tractor	Hr	$ 35.36	48		$ 1,697.28
Disk Harrow	Hr	$ 50.00	24		$ 1,200.00
Seed Planter	Hr	$ 50.00	24		$ 1,200.00
				Equipment Total:	**$ 4,097.28**
Operator Group 6	Hr	$ 92.49	48		$ 4,439.52
				Operator Total:	**$ 4,439.52**
Seed Species	**Unit**	**$/unit**	**Units**	**Sales Tax**	**Cost**
Creosote	lb	$ 55.20	55.2	0.0775	$ 3,283.19
Ambrosia Dumosa	lb	$ 55.20	55.2	0.0775	$ 3,283.19
Saltbush Fourwing	lb	$ 55.20	55.2	0.0775	$ 3,283.19
Saltbush Desert Holly	lb	$ 55.20	55.2	0.0775	$ 3,283.19
Snakeweed	lb	$ 41.40	41.4	0.0775	$ 1,846.79
Plantago Ovata	lb	$ 13.80	13.8	0.0775	$ 205.20
				Seeds Total:	**$ 15,184.73**
				Revegetation Total:	**$ 23,721.53**

Once the pit(s) have been backfilled and topsoil spread, the area will be scarified and seed spread. During scarification, care will be taken to provide low areas for water to temporarily pond during rain events due to what was learned from the earlier revegetation project. Once scarification is complete, the seed mixture will be spread using a seed spreader. The scarification and the spreading will be accomplished using a rubber-tired farm tractor. Monitoring of the reclaimed site shall continue until success standards have been achieved. This monitoring effort will include the removal of any noxious weeds that grow in the area.

3.7 CLEANUP

No permanent structures or equipment are on the site.

3.8 POST-RECLAMATION AND FUTURE MINING

The end use is to return the pit to the open space and blend it with the surrounding undeveloped open space.

3.9 SLOPES AND SLOPE TREATMENT

The final grading of the reclaimed area will have a maximum grading of 2.5H:1V and an average grading of 3H:1V.

Open pits, piles or ore and waste materials/overburden will be leveled to conform as much as possible with the existing terrain. Any cut slopes will either be benched or sloped to blend in with the existing contours of the land. Appendix A – Map 5: Reclamation Map shows the current topography, as well as the projected reclaimed topography with selected slopes presented in Map 6: Pit Cross Sections.

3.10 PONDS, RESERVOIRS, TAILINGS, WASTE

There are no ponds, reservoirs, tailings, or waste on the property.

3.11 SOILS AND FINE TEXTURED WASTE

Topsoil (~1') from excavated areas is placed in a separate stockpile to be used for reclamation.

A mechanical screen separates the oversize, calcium carbonate material from the finer clay material. Screened oversize material and non-hectorite clays are used for building berms and replaced in the pit. Hectorite clay is stored in stockpiles on the site. Natural crusting of the stockpiles stabilizes the finer material.

3.12 DRAINAGE AND EROSION CONTROLS

Annual precipitation reported in nearby Amargosa Valley in Nye County Nevada is 4.3 inches. The reclaimed land will be graded to maintain natural drainage paths. The slopes of the reclaimed area are extremely shallow, with the steepest being 5H:1V. Reseeding the ground with natural vegetation will further erosion prevention.

3.13 PUBLIC SAFETY

When operating on mine property, employees and contractors follow a site-specific safety plan with contacts to the Nye County Sheriff's Office, the nearby Lhoist plant, and area hospitals.

BYK adheres to MSHA Part 46 (surface operations) practice and procedure. Earthwork at the BYK California Hectorite Pit consists of an open pit, an overburden stockpile, a small stockpile of screened hectorite ore, and a working area used for screening material located adjacent to the open pit to the southeast. After completing a mining campaign, BYK employees and/or contractors move all waste rock into the open pit, pick up all debris from the area, install or repair earthen berms around the entire pit and across the entrance to the mine ramp, and lastly remove all equipment from the site. The earthen berms are nominally three feet tall and serve as erosion control to prevent loose material from the mine from washing offsite and provide a barrier to prevent the public from driving vehicles into the pit. BLM has hiking/ATV trails on the property, but the berms prevent easy access to the pit.

3.14 MONITORING AND MAINTENANCE

Pit access is provided by two roads into and out of the pit area; the pit access roads have a maximum grade of 10 percent. Those roads and numerous BLM hiking and ATV paths cross the area. Representative(s) of BYK visit the site annually, at a minimum, to ensure that the berms are in place and that the site has not been disturbed. BYK is subject to Annual Reporting and Inspection by Inyo County on behalf of The State of California, Department of Conservation, Division of Mine Reclamation. Mitigation and deficiencies are addressed at that time. If needed, a contractor is hired to repair berms.

3.15 RECLAMATION ASSURANCE

In December 2024, BYK submitted a Surety Bond (800179131), Permit number 73-14, for the amount of $375,000 to replace the existing Irrevocable Letter of Credit (IS013707U) as a Financial Assurance Mechanism (FAM) with the County in the event of unsecured costs at end of mining. That amount was based on 2023 revised Financial Assurance Cost Estimate (FACE-1) FAM to account for inflation.
By the Surety Bond, BYK assumes responsibility for reclamation of the mined lands.
The previous bonded amount was $265,000 as approved on 04/04/2017. The beneficiary of the existing and updated FAM is Inyo County, as the Lead Agency and the State of California Department of Conservation, Division of Reclamation. On 18 March 2025, pursuant to PRC § 2773.4(e)(1), formal notice was issued from Inyo County to DMR that the Financial Assurance Mechanism (FAM) has been approved and processed. With this acceptance, the FAM update is fully executed in compliance with all regulatory requirements under SMARA. Inyo County requests a letter of concurrence for the release of the Letter of Credit account #IS0137027U. Those funds were released in early April 2025.

4.0 GEOLOGY

In the preparation of the EA completed by BLM in support of the Application for Patented Claims, a detailed geologic review of literature, combined with extensive field work was completed at that time. That work is heavily referenced here.

4.1 DESCRIBE GEOLOGY

4.1.1 REGIONAL GEOLOGY

The Amargosa Valley is a basin-and-range structure with the Greenwater Range and Funeral Mountains to the west and the Amargosa Desert to the east. The Greenwater/Funeral Mountains are fault-controlled with narrow interior valleys and are bounded by broad, coalescing alluvial fans (Armstrong et al., 1987). The Greenwater/Funeral Mountains are composed of lower Paleozoic marine and metamorphic rocks (Streitz and Stinson, 1974).

The regional geology for the area of this report was summarized by Bestram (1985), who performed a validity examination of the Ash Meadows clay deposits, 8 miles east of the BYK property.

4.1.2 DEPOSIT GEOLOGY

Hectorite ($Na_{0.3}(Mg, Li)_3Si_4O10(OH)_2$) is a light colored, trioctahedral, magnesium-based smectite clay primarily used in the manufacture of organoclays for industrial applications in paints and coatings and in oil well drilling. It is a hydrothermal alteration of volcanic ash formed in closed basins in arid environments.

Hectorite occurs with other saponite and bentonite clays, which are minerals found in flat lying beds within the same valley. The clay-bearing rocks are the youngest in the valley and are Pleistocene or late Pliocene in age. Bentonite is the oldest clay formed. Hectorite was formed later and occurs in discrete beds that occur above, below, and sandwiched between the hosting carbonates.

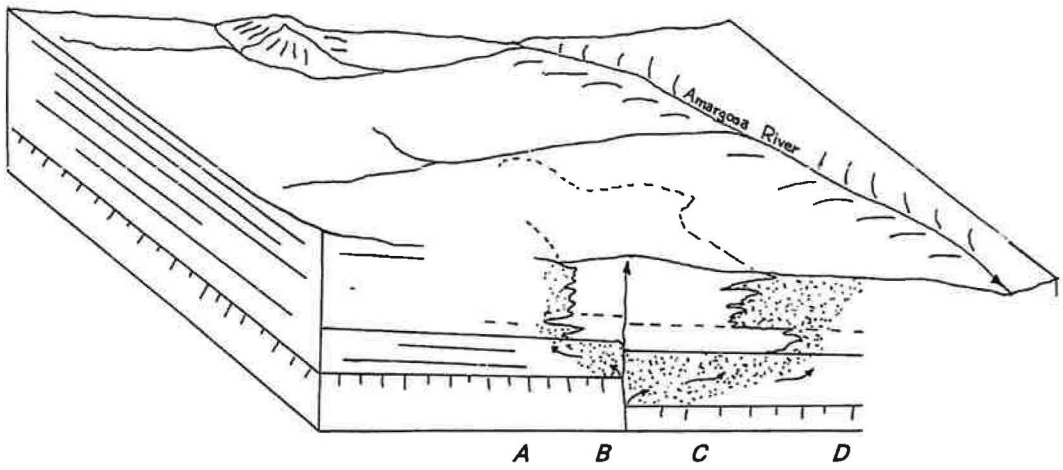
Sediments of the closed-basin lake environments share similar characteristics whereby clays are found interbedded with carbonates, silica, and volcanic ash, and where there is evidence of hot-spring activity along nearby faults. The Li, F, and Sr components of the clay result from interaction with hydrothermal fluids. Clays form both through alteration of volcanic ash and by direct precipitation from hydrothermal fluids, depending upon location (Stillings 2012).

Figure 4.1 is a cross-section showing the geology of the hectorite deposit.

Within the California Hectorite Pit area, the ore consists of a mixture of hectorite (10-25%) and microcrystalline, highly porous calcium carbonate (+75%) with accessory silica in the form of siliceous sinter and opal. The ore is highly brecciated and is devoid of bedding. The hectorite clay deposit is about 2 miles in length and averages 600 to 800 feet in width. The average thickness is about 15 feet, but thicknesses vary from zero to 40 feet.

The association of the hectorite deposit with siliceous sinter suggests that it formed by precipitation of calcite and hectorite from hot springs as the spring water reached the surface. The linear shape of the

deposit indicates that there was a line of closely spaced springs. The hectorite and calcite deposited by the springs eventually coalesced into a single linear deposit.



Zone A - Reworked alluvial gravels and hectorite
Zone B - Hectorite [$CaCO_3$, gravelly away from spring centers]
Zone C - Reworked gravels and hectorite
Zone D - Alluvial and Amargosa River gravels

Figure 4.1. Hectorite Mineralization Model

4.1.3 USE AND APPLICATION

The crystal structure of hectorite is similar to that of other clays, containing two silica tetrahedra sheets and a central sheet of magnesium ions. In hectorite lithium is substituted frequently for magnesium in the central cation layer of the crystal. This substitution results in an unbalanced charge which gives rise to a high cation exchange capacity for the mineral. It also causes distortions in the crystal lattice which result in the typical needle or hair shaped hectorite crystal. This shape and the high cation exchange capacity are the primary factors that give hectorite its extremely high viscosity characteristics.

Organics react with hectorite more readily than with other clay minerals. Hectorite is therefore used extensively to produce exotic organoclad products used for making high-temperature greases, thickeners for oil-based paints, oil-based drilling muds, and cosmetics. Dispersed hectorite has a greater thickening effect on aqueous suspensions than any other clay.

4.2 DESCRIBE ANY GEOLOGIC CONDITIONS WHICH COULD ADVERSELY AFFECT THE PROJECT

There are no earthquake faults, special studies zones, County Fault Hazard Zones, ground shaking, landslides, mudflows, liquefaction hazard areas, differential settlement, hydro-consolidation, collapsible or expansive soils, wind erosion, water erosion, sedimentation, and inundation due to earthquake induced dam failure risks associated with this site.

5.0 HYDROLOGY/GROUNDWATER

5.1 SURFACE AND GROUNDWATER

5.1.1 GROUND WATER

Ground water encountered in the Amargosa Desert Basin area originates primarily in the highlands to the north and northeast. Two major regional ground water systems, the Pahute Mesa and the Ash Meadows systems, meet in the Basin and discharge water by evapotranspiration. Water is also discharged southward from the Basin as underflow beneath the Amargosa River and westward through and under the Funeral Range into Death Valley. Very small quantities of water reach the ground water reservoir from local precipitation in the Amargosa Desert or in the immediately surrounding mountains.

Annual recharge to the Basin is estimated at about 45,000 acre-feet. Discharge estimates based primarily on evapotranspiration rates fall in the order of 24,000 to 30,000 acre-feet annually (Steffen Robertson and Kirsten, Inc. 1990). The difference between the recharge and discharge by evapotranspiration, some 15,000 to 21,000 acre-feet of water annually, may be discharged from the basin as outflow into Death Valley. Much of the water is believed to be in a deep carbonate aquifer that underlies the central part of the Basin. About 17,000 acre-feet per year of water is discharged from the basin in springs that occur primarily in the southeastern part of the basin. Water also moves upward through the valley fill from the deep carbonate aquifer and reaches the land surface or depths close enough to the land surface to discharge by evapotranspiration.

Ground water levels in the basin range from 7 to 52 feet deep in the vicinity of the mine site, with the water table becoming shallower closer to the Amargosa Creek. This water has been exploited for agricultural development from approximately 175 wells in the area south of Amargosa Valley.

5.1.2 SURFACE WATER

There is no surface water in the mine area.

The site is in a desert climate, which is characterized by limited rainfall and extreme high and low temperatures. Due to the remote location of the site, Amargosa Valley was selected, as it rests in the same valley about 20 miles away. The hottest recorded temperature near the site was 116 °F, with the record cold being 21 °F. Average annual rainfall at the site is 3.66 inches, with the highest recorded annual rainfall being 5.35 inches.

Drainage on the site travels from west to east, where it enters the Amargosa River just to the east of the site. The watersheds that traverse the disturbed areas of the site are temporal and consist of 0.5 mi^2. Streams will be diverted around the pits using ditches and berms. A series of ditches and berms will be used to divert surface runoff from pits and stockpiles on site.

The active area of the site is not located in any floodplains, though access to the site passes through the Amargosa River floodplain. The site is projected to move northwest, where it may enter the 100-year floodplain. The pit will be protected by a combination of ditches and berms. Due to limited

interference with the floodplain, and the wide, shallow nature of the river, it is unlikely that the project will intensify flooding effects on other properties. (There are also no other properties nearby that could be affected.)

The site is not within or directly upstream of a groundwater recharge area.

The operation will not introduce any toxic substance or contaminate stream runoff or groundwater.

There are no stream gauging stations within the site.

6.0 REFERENCES

Armstrong, A.K., J.G. Frisken, RC. Jachens and T.R. Neuman, 1987, Mineral Resources of the Funeral Mountains Wilderness Study Area County, California, USGS Bulletin 1709, p. A1-A14.

Bestram, B., 1985, Mineral Patent Application of Industrial Mineral Ventures, Inc for the Cat, Dry, and Ewing Placer Mining Claims, BLM report on file at the BLM Worland Office, Worland, WY

Hay, R.L., 1985, Clays of the Amargosa Desert, in Clays and Zeolites Los Angeles, California to Las Vegas, Nevada, Field Trip Guidebook, 1985 International Clay Conference, Clay Minerals Society and U.S. Geological Survey on behalf of AIPEA., p.57-59.

Hay, R.L., R.E. Paxton, T.T. Teague and T.K. Kyser, 1986, Spring-related carbonate rocks, Mg clays and associated minerals in Pliocene deposits of the Amargosa Desert, Nevada and California, Geological Society of America Bulletin, v. 97, p. 1488-1503

Inyo County, 1971, Conditions placed on the Conditional Use Permit (CUP 73-14) for Industrial Mineral Ventures, February 27, 1971, Inyo County Planning Commission.

Robertson, Steffen and Kirsten, 1990, Revised Plan of Operations and Reclamation Plan for IMV, Division of Floridin Company, Inyo County, California, submitted to U. S. Department of Interior, Bureau of Land Management, District office, Barstow Resource Area, June 1990.

Stillings, Lisa L., and Morissette, Claude L., 2012, Lithium Clays in Sediments from Closed-Basin Evaporative Lakes in the Southwestern United States, Geological Society of America, Abstracts with Programs, vol 44, No. 7, p 210, Charlotte, NC.

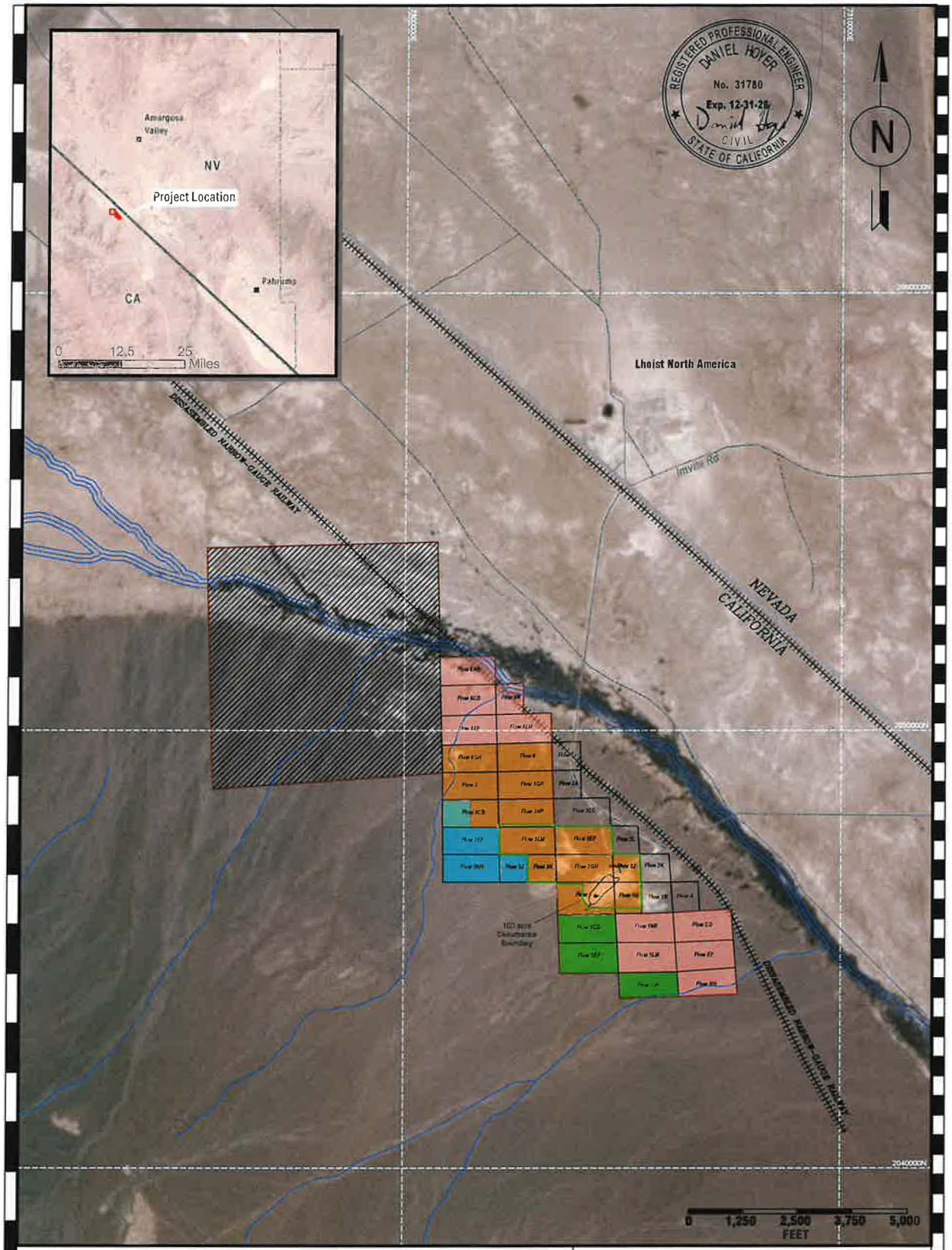
Wilkerson, G., and Vredenburgh, L., 2000, Determination of Discovery and Mineral in Character Determination for claims in the Amargosa Valley, California under patent application to Floridin Company, United States Department of the Interior Bureau of Land Management Mineral Report Serial Number CA 2942.

Wilkerson, G., Vredenburgh, L., Serenko, T.J., and Eyde, T.H., 2001, The Franklin Wells hectorite deposit, Inyo County, California, in Reynolds, R.E., ed., The changing face of the east Mojave Desert and Abstracts from the 2001 Desert Symposium: Fullerton, Calif., Desert Studies Consortium, California State University, p. 61–64.

APPENDIX A – MAPS

RESPEC

MAP 1 – VICINITY AND EXTENT



REGISTERED PROFESSIONAL ENGINEER
DANIEL HOYER
No. 31780
Exp. 12-31-25
CIVIL
STATE OF CALIFORNIA

- Claims of BYK USA, Inc.
- Claims amended
- Claims Dropped by BYK USA, Inc.
- Claims relocated in 2002
- Patented Claims Maintained by BYK USA, Inc.
- California State Lease T27N, R4E, Section 36*
- Patented Claims Maintained by BYK USA, Inc.
- Intermittent waterway and Drainage
- Roads
- 100-Acre Disturbance Boundary

*Surface owned by BYK USA, Inc., minerals owned by the State of California.

BYK

Prepared By: BERPAC

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 (US Feet)

Imagery: ©2024 Microsoft Corporation © 2024 Maxar © CNES (2024) Distribution Airbus DS

Drawn By: S. VON FLUE
Checked By: V. SANTOS
Date: May 8, 2025
Scale: AS SHOWN

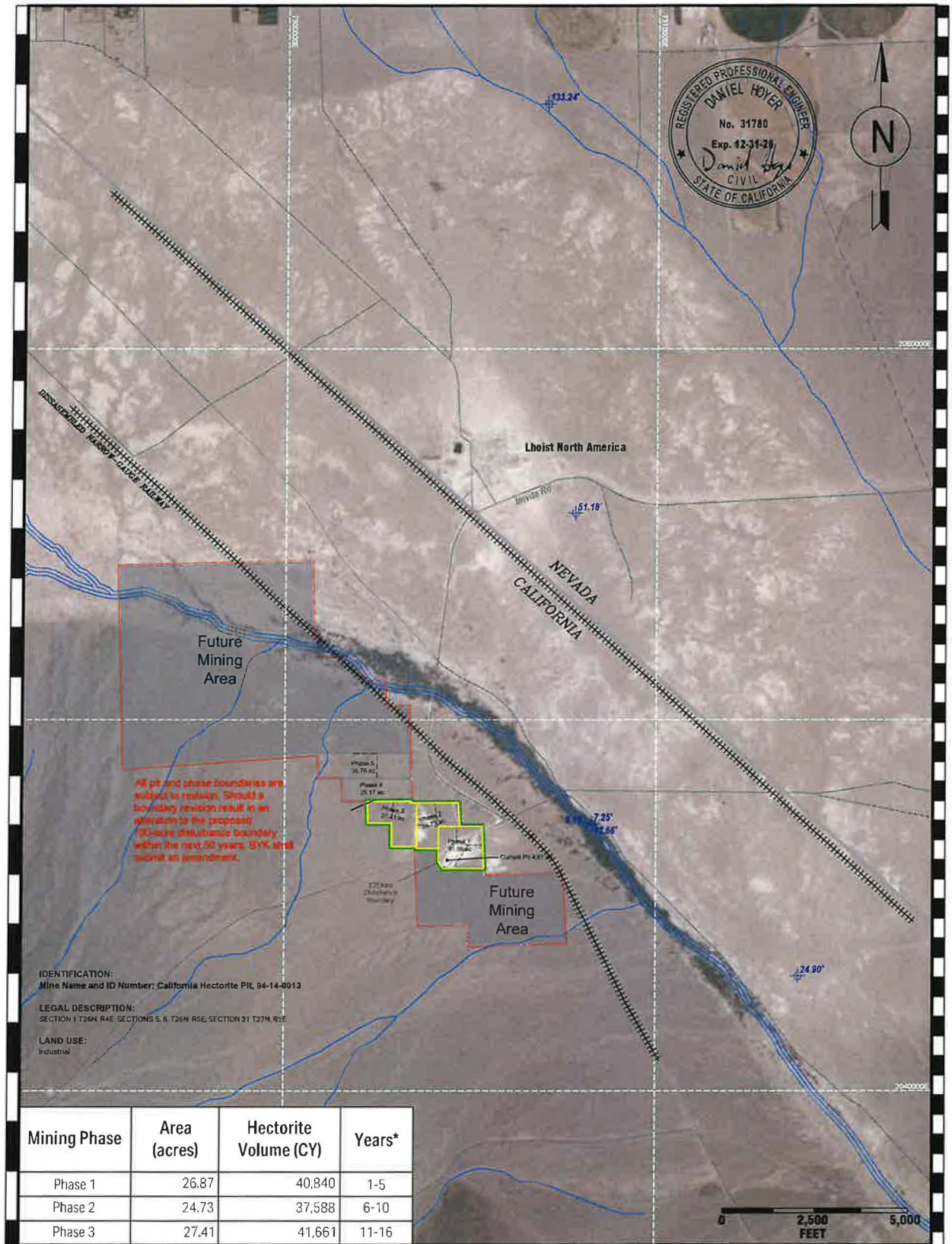
Project Name

CALIFORNIA HECTORITE PIT
Vicinity Map

MAP 1

RESPEC

MAP 2 – MINING PLAN



Mining Phase	Area (acres)	Hectorite Volume (CY)	Years*
Phase 1	26.87	40,840	1-5
Phase 2	24.73	37,588	6-10
Phase 3	27.41	41,661	11-16

Mining Boundary
Mining Buffer (50')
Proposed Pit Boundary
Active Pit Boundary
Intermittent Waterway and Drainage
Roads
Phase Boundary
100 Acre Disturbance Boundary
Groundwater Wells (Water Depth: 00.00')

The most recently mined phase shall be reclaimed either before or during mining of the current phase. Mining shall not commence on a new phase until only one mined phase needs reclamation.

*Based on a production rate of 10,000 tons/year hectorite

BYK

Prepared By

Coordinate System
NAD 1983 StatePlane California IV FIPS 0404 (US Feet)

Imagery from U.S. Geological Survey, NAIP\USDA_CONUS_PRIME, dated June 11, 2022.

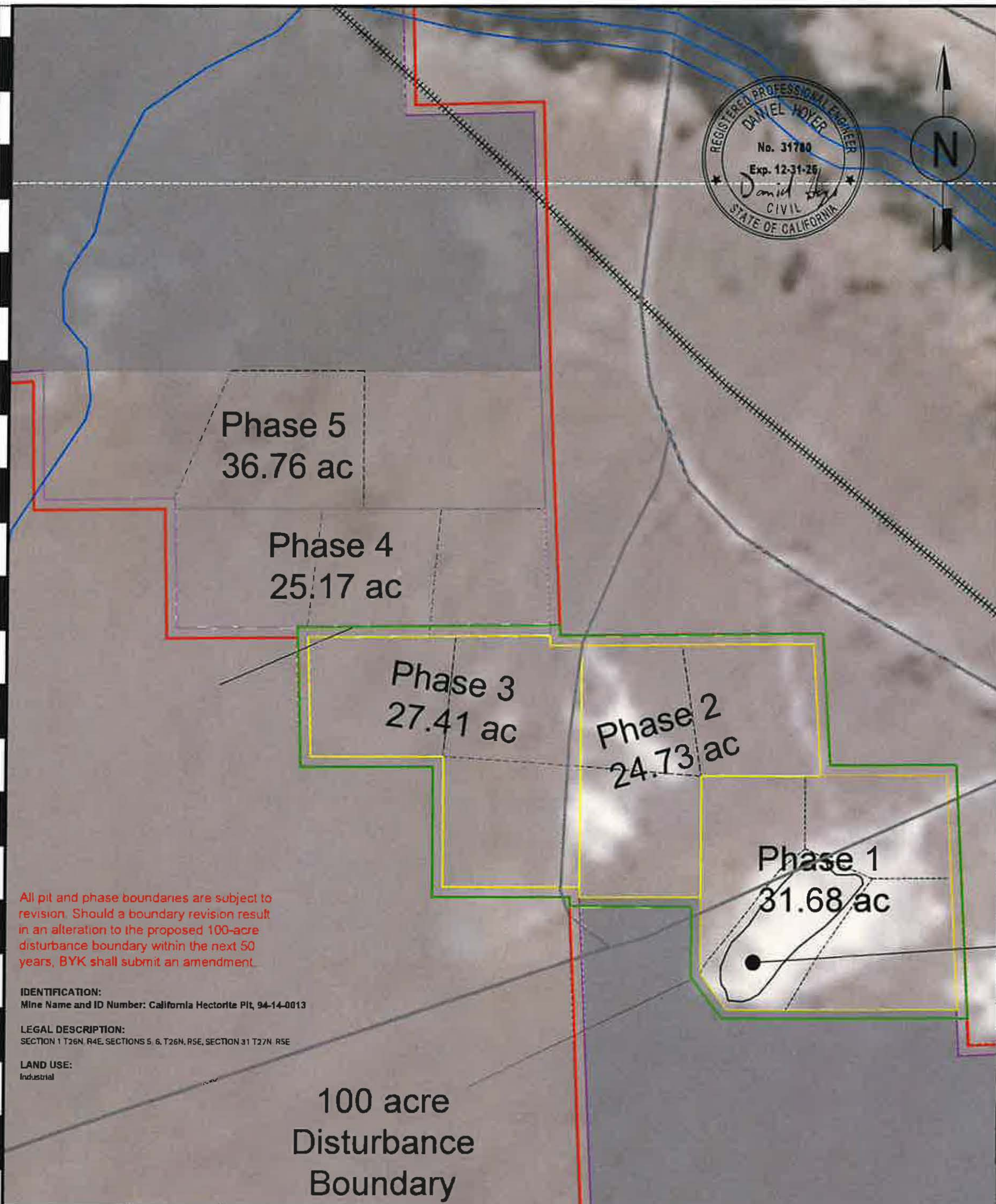
Drawn By
S. VON FLUE/J. SLEZAK
Checked By
V. SANTOS/B. HATHAWAY
Date
May 8, 2025
Scale
AS SHOWN

Project Name

CALIFORNIA HECTORITE PIT
MINING PLAN
MAP 2

RESPEC

MAP 3 – MINING PLAN



Mining Phase	Area (acres)	Hectorite Volume (CY)	Years*
Phase 1	26.87	40,840	1-5
Phase 2	24.73	37,588	6-10
Phase 3	27.41	41,661	11-16

- Mining Boundary
- Mining Buffer (50')
- Proposed Pit Boundary
- Active Pit Boundary
- Intermittent waterway and Drainage
- Roads
- Phase boundary
- 100 acre disturbance boundary
- Groundwater Wells (Water Depth: 00.00')

The most recently mined phase shall be reclaimed either before or during mining of the current phase. Mining shall not commence on a new phase until only one mined phase needs reclamation.

*Based on a production rate of 10,000 tons/year hectorite

BYK

Prepared By

Coordinate System
NAD 1983 StatePlane California IV FIPS 0404 (US Feet)

Imagery from U.S. Geological Survey, NAIP\USDA_CONUS_PRIME, dated June 11, 2022.

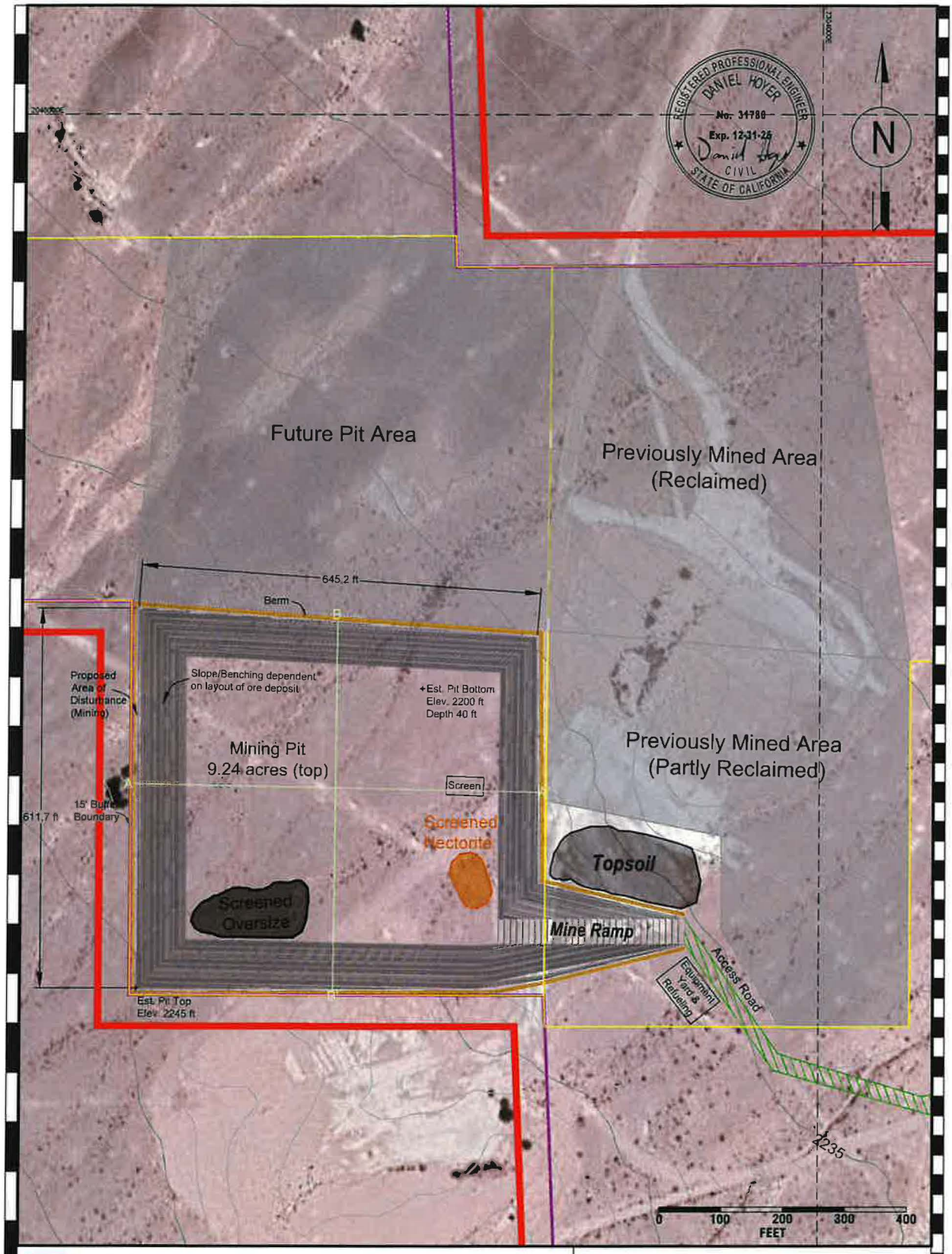
Drawn by S. VON FLUE/J. SLEZAK
Checked by V. SANTOS/B. HATHAWAY
Date May 8, 2025
Scale AS SHOWN

Project Name

CALIFORNIA HECTORITE PIT
MINING PLAN
MAP 3

RESPEC

MAP 4 – MODEL PIT DESIGN



MINING BOUNDARY

MINING BUFFER (50')

The most recently mined pit shall be reclaimed either before or during mining of the current pit. Mining shall not commence on a new pit until only one mined pit needs reclamation.

BYK

PREPARED BY	COORDINATE SYSTEM NAD 1983 StatePlane California IV FIPS 0404 (US Feet)	DRAWN BY J. SLEZAK/S. VON FLUE CHECKED BY V. SANTOS/B. HATHAWAY DATE May 8, 2025 SCALE AS SHOWN	PROJECT NAME **CALIFORNIA HECTORITE PIT** **MODEL PIT DESIGN** **MAP 4**
	Imagery from U.S. Geological Survey, NAIP\USDA_CONUS_PRIME, dated June 11, 2022.		

RESPEC

MAP 5 – RECLAMATION PLAN

MINING BOUNDARY

MINING BUFFER (50')

RECLAMATION CONTOURS

The most recently mined pit shall be reclaimed either before or during mining of the current pit. Mining shall not commence on a new pit until only one mined pit needs reclamation.

BYK

PREPARED BY

COORDINATE SYSTEM
NAD 1983 StatePlane California IV FIPS 0404 (US Feet)

Imagery from U.S. Geological Survey, NAIP\USDA_CONUS_PRIME, dated June 11, 2022.

DRAWN BY
J. SLEZAK/S. VON FLUE

CHECKED BY
V. SANTOS/B. HATHAWAY

DATE
May 8, 2025

SCALE
AS SHOWN

PROJECT NAME

CALIFORNIA HECTORITE PIT RECLAMATION PLAN

MAP 5

RESPEC

MAP 6 – PIT CROSS SECTIONS

Unbenched Pit (W-E)

A A'

REGISTERED PROFESSIONAL ENGINEER
DANIEL HOYER
No. 31780
Exp. 12-31-25
CIVIL
STATE OF CALIFORNIA

Unbenched Pit (N-S)

B B'

Benched Pit (W-E)

A* A'*

Benched Pit (N-S)

B* B'*

Reclaimed Pit (W-E)

*Reclaimed contours do not reflect areas that remain disturbed following partial reclamation of a mining pit

C C'

Reclaimed Pit (N-S)

D D'

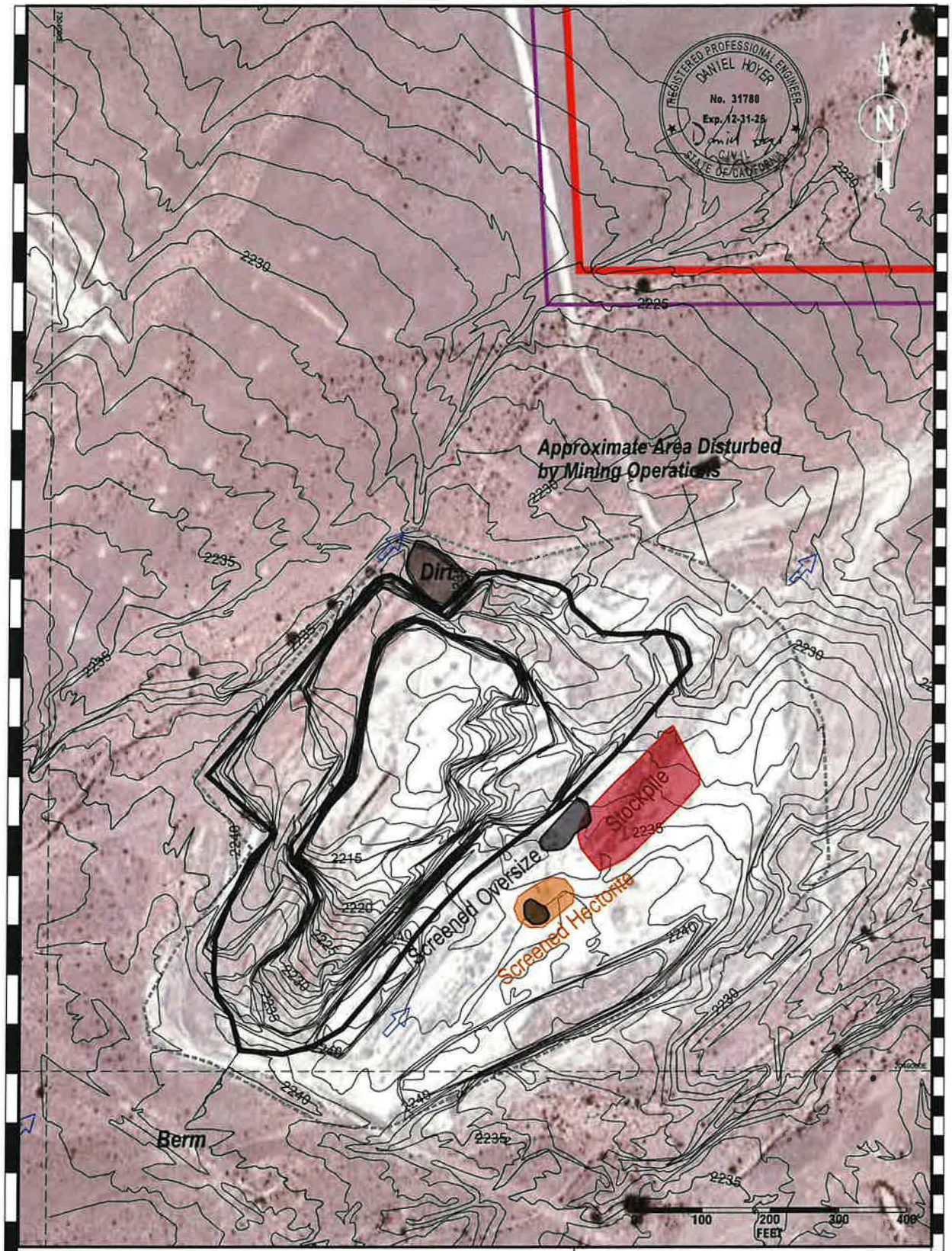
*Benched and unbenched pits share the same cross-sectional view lines within a pit. Pits are only intended to be benched if the depth of the pit exceeds 40 feet, though ground conditions may affect this.

BYK

PREPARED BY: RESPEC	COORDINATE SYSTEM: NAD 1983 StatePlane California IV FIPS 0404 (US Feet) Imagery from U.S. Geological Survey, NAIP\USDA_CONUS_PRIME, dated June 11, 2022.	DRAWN BY: J. SLEZAK/S. VON FLUE CHECKED BY: V. SANTOS/B. HATHAWAY DATE: May 8, 2025 SCALE: AS SHOWN	PROJECT NAME: CALIFORNIA HECTORITE PIT PIT CROSS SECTIONS MAP 6

RESPEC

MAP 7 – CURRENT PIT LAYOUT



Mining Boundary

Mining Buffer (50')

2235 Current Elevation Contours (C.I. = 1')

Direction of Surface Water Flows

BYK

Prepared By	Coordinate System	Drawn By	Project Name
R RESPEC	NAD 1983 StatePlane California IV FIPS 0404 (US Feet)	J. SLEZAK/S. VON FLUE	CALIFORNIA HECTORITE PIT CURRENT PIT LAYOUT MAP 7
		Checked By V. SANTOS/B. HATHAWAY	
	Imagery from U.S. Geological Survey, NAIP\USDA_CONUS_PRIME, dated June 11, 2022.	Date May 9, 2025	
		Scale AS SHOWN	

APPENDIX B – SMARA CONTENTS CHART

Reclamation Plan Content Checklist

The Division of Mine Reclamation (DMR) reviews reclamation plans for compliance and completeness pursuant to Public Resources Code (PRC) Section 2772.1(b)(1). When submitting a reclamation plan to DMR, the lead agency must certify that the reclamation plan is a complete submission and is in compliance with SMARA and associated regulations and the lead agency's mining ordinance pursuant to PRC 2772.1(a)(3)(A-E). Additionally, pursuant to PRC 2772.1(a)(2), information prepared as part of a permit application or environmental document (pursuant to CEQA) shall be incorporated into the reclamation plan if it is used to satisfy the requirements of SMARA and associated regulations. These items shall be properly indexed in a Required Contents Chart and included in an appendix to the reclamation plan.

This checklist may assist operators and lead agencies when preparing and reviewing draft proposed reclamation plans and reclamation plan amendments in determining if they meet the minimum content requirements of the Surface Mining and Reclamation Act of 1975 (SMARA) and associated regulations (see box below for sections relevant to reclamation plans).

Surface Mining and Reclamation Act of 1975
Public Resources Code (PRC)
Division 2. Geology, Mines and Mining
Chapter 9. Surface Mining and Reclamation Act of 1975
Section 2710 et seq.

This portion includes requirements for reclamation plans.

Associated Regulations
California Code of Regulations (CCR)
Title 14. Natural Resources
Division 2. Department of Conservation
Chapter 8. Mining and Geology
Subchapter 1. State Mining and Geology Board

Article 1. Surface Mining and Reclamation Practice. Commencing with Section 3500

This portion includes minimum acceptable mining and reclamation practices for surface mining operations.

Article 9. Reclamation Standards. Commencing with Section 3700

This portion includes performance standards, which may apply to surface mining operations pursuant to CCR Section 3700.

The checklist is divided into seven topical areas: General Considerations, Geology and Geotechnical, Hydrology and Water Quality, Sensitive Species and Habitat, Topsoil, Revegetation, and Agriculture. To use the checklist, place a checkmark next to items that have been addressed by the reclamation plan or leave it blank if the reclamation plan is deficient. Alternatively, write N/A if the item is not applicable to the specific surface mining operation being reviewed.

Disclaimer: This checklist, prepared by DMR, paraphrases portions of SMARA and associated regulations that address the content of reclamation plans and plan amendments. DMR staff uses this checklist internally in performing our review of reclamation plans. However, use of this checklist is not required and it is provided only as a helpful tool. DMR always recommends consulting the full text of SMARA and associated regulations, available at the link below. Additionally, completion of this checklist does not guarantee completeness or compliance of the reclamation plan pursuant to PRC Section 2772.1(b)(1). Analysis of completeness and compliance requires thorough review of each specific project.

http://www.conservation.ca.gov/index/Pages/lawsregs.aspx

Mine Name:	Checklist Completed by:
End Use:	Date:

GENERAL CONSIDERATIONS

Authority	Requirements/Practices/Standards	✓ or N/A
PRC 2772(b)	Required contents chart: A chart identifying the location (e.g. page number, chapter, appendix, or other location in the reclamation plan) of content that meets the requirements of PRC Sections 2772, 2773, 2773.3 and CCR Articles 1 and 9 (as delineated in this checklist).	A-9
PRC 2772(c)(1)	Contact information: Name and address of the surface mining operator and any person designated by the operator as an agent for service of process (must reside in CA).	5
PRC 2772(c)(2)	Material quantity and type: The anticipated total quantity and type of minerals to be mined (see Annual Report Instructions, Exhibit B, for mineral types and units of measure).	10, 11
PRC 2772(c)(3)	Dates: The initiation and termination dates of mining (be as specific as possible, e.g. December 31, 2030).	A-3
PRC 2772(c)(4)	Depth of mining: The maximum anticipated depth of the surface mining operation.	11
PRC 2772(c)(5) (A-F)	Reclamation plan maps shall include: Size and legal description of lands affected by surface mining operations;	A-5
	Names and addresses of owners of all surface interests and mineral interests;	5, 7
	Property lines, setbacks, and the reclamation plan boundary;	A-3
	Existing and final topography with contour lines at appropriate intervals;	A-7
	Detailed geologic description of the area of the surface mining operation;	19
	Locations of railroads, utility features, and roads (access roads, temporary roads to be reclaimed, and any roads remaining for the end use).	A-2
	All maps, diagrams, or calculations that are required to be prepared by a California-licensed professional shall include the preparer's name, license number, signature & seal.	A1-8
PRC 2772(c)(6)	Mining method and schedule: A description of the mining methods and a time schedule that provides for completion of mining on each segment so that reclamation can be concurrent or phased.	11, A-3
PRC 2772(c)(7)	Subsequent use(s): A description of the proposed subsequent use(s) after reclamation	14
	Evidence that all landowners have been notified of the proposed use.	7
PRC 2772(c)(9)	Impact on future mining: A statement regarding the impact of reclamation on future mining on the site.	15
PRC 2772(c)(10)	Signed statement: Statement signed by the operator accepting responsibility for reclamation of the mined lands per the reclamation plan.	A-10
PRC 2776(b-c)	Pre-SMARA areas: Reclamation plans shall apply to operations conducted after January 1, 1976 or to be conducted in the future. Mined lands disturbed prior to January 1, 1976 *and not disturbed after that date* may be excluded from the reclamation plan.	14
CCR 3502(b)(2)	Public health and safety: A description of how any potential public health and safety concerns that may arise due to exposure of the public to the site will be addressed.	18
CCR 3709(a)	Equipment storage and waste disposal: Designate areas for equipment storage and show on maps.	A-5
	All waste shall be disposed of in accordance with state and local health and safety ordinances.	12
CCR 3709(b)	Structures and equipment removed:	17

	Structures and equipment should be dismantled and removed at closure, except as demonstrated to be necessary for the proposed end use.	17
CCR 3713(a)	Well closures: Drill holes, water wells, monitoring wells will be completed or abandoned in accordance with laws, unless demonstrated necessary for the proposed end use.	N/A
CCR 3713(b)	Underground openings: Any portals, shafts, tunnels, or openings will be gated or protected from public entry, and to preserve access for wildlife (e.g. bats).	N/A

GEOLOGY AND GEOTECHNICAL

Authority	Requirements/Practices/Standards	✓ or N/A
PRC 2772(c)(5)	A description of the general geology of the area	19
	A detailed description of the geology of the mine site.	19
PRC 2773.3	If a metallic mine is located on, or within one mile of, any "Native American sacred site" and is located in an "area of special concern, " the reclamation plan shall require that all excavations and/or excess materials be backfilled and graded to achieve the approximate original contours of the mined lands prior to mining.	N/A
CCR 3502(b)(4)	The source and disposition of fill materials used for backfilling or grading shall be considered in the reclamation plan.	14
CCR 3502(b)(3)	The designed steepness and treatment of final slopes must consider the physical properties of slope materials, maximum water content, and landscaping.	17
	The reclamation plan shall specify slope angles flatter than the critical gradient for the type of slope materials.	A-7
	When final slopes approach the critical gradient, a Slope Stability Analysis will be required.	N/A
CCR 3704.1	Backfilling required for surface mining operations for metallic minerals.	N/A
CCR 3704(a)	For urban use, fill shall be compacted in accordance with Uniform Building Code, local grading ordinance, or other methods approved by the lead agency.	N/A
CCR 3704(b)	For resource conservation, compact to the standards required for that end use.	A-6
CCR 3704(d)	Final reclamation fill slopes shall not exceed 2:1 (H:V), except when allowed by site-specific engineering analysis, and the proposed final slope can be successfully revegetated. See also Section 3502(b)(3).	A-7
CCR 3704(e)	At closure, all fill slopes shall conform with the surrounding topography or approved end use.	A-7
CCR 3704(f)	Final cut slopes must have a minimum slope stability factor of safety that is suitable for the end use and conforms with the surrounding topography or end use.	A-7

HYDROLOGY AND WATER QUALITY

Authority	Requirements/Practices/Standards	✓ or N/A
PRC 2770.5	For operations within the 100-year flood plain (defined by FEMA) and within one mile up- or downstream of a state highway bridge, Caltrans must be notified and provided a 45-day review period by the lead agency.	N/A
PRC 2772(c)(8)(A)	Description of the manner in which contaminants will be controlled and mine waste will be disposed.	12
PRC 2772(c)(8)(B)	The reclamation plan shall include a description of the manner in which stream banks/beds will be rehabilitated to minimize erosion and sedimentation.	N/A
PRC 2773(a)	The reclamation plan shall establish site-specific sediment and erosion control criteria for monitoring compliance with the reclamation plan.	17
CCR 3502(b)(6)	Temporary stream and watershed diversions shall be detailed in the reclamation plan.	N/A
CCR 3503(a)(2)	Stockpiles of overburden and minerals shall be managed to minimize water and wind erosion.	13

CCR 3503(b)(2)	Operations shall be conducted to substantially prevent siltation of groundwater recharge areas.	N/A
CCR 3503(a)(3)	Erosion control facilities shall be constructed and maintained where necessary to control erosion.	17
CCR 3503(b)(1)	Settling ponds shall be constructed where they will provide a significant benefit to water quality.	N/A
CCR 3503(d)	Disposal of mine waste and overburden shall be stable and shall not restrict natural drainage without suitable provisions for diversion.	A-6
CCR 3503(e)	Grading and revegetation shall be designed to minimize erosion and convey surface runoff to natural drainage courses or interior basins.	A-6
	Spillway protection shall be designed to prevent erosion.	N/A
CCR 3706(a)	Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses of water.	N/A
CCR 3706(b)	Water quality, recharge potential, and groundwater storage that is accessed by others shall not be diminished.	N/A
CCR 3706(c)	Erosion and sedimentation shall be controlled during all phases of construction, operation, reclamation, and closure of surface mining operations to minimize siltation of lakes and water courses as per RWQCB/SWRCB.	N/A
CCR 3706(d)	Surface runoff and drainage shall be controlled to protect surrounding land and water resources.	13
	Erosion control methods shall be designed for not less than 20 year/1 hour intensity storm event.	13
CCR 3706(e)	Impacted drainages shall not cause increased erosion or sedimentation. Mitigation alternatives shall be proposed in the reclamation plan.	17
CCR 3706(f)(1)	Stream diversions shall be constructed in accordance with the Lake and Streambed Alteration Agreement (LSAA) between the operator and the Department of Fish and Wildlife.	N/A
CCR 3706(f)(2)	Stream diversions shall also be constructed in accordance with Federal Clean Water Act and the Rivers and Harbors Act of 1899.	N/A
CCR 3706(g)	All temporary stream diversions shall eventually be removed and the affected land reclaimed.	N/A
CCR 3710(a)	Surface and groundwater shall be protected from siltation and pollutants in accordance with the Porter-Cologne Act, the Federal Clean Water Act, and RWQCB/SWRCB requirements.	N/A
CCR 3710(b)	In-stream mining shall be conducted in accordance with Section 1600 et seq. of the California Fish and Game Code, Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act of 1899.	N/A
CCR 3710(c)	In-stream mining shall be regulated to prevent impacts to structures, habitats, riparian vegetation, groundwater levels, and banks.	N/A
	In-stream channel elevations and bank erosion shall be evaluated annually using extraction quantities, cross-sections, and aerial photos.	N/A
CCR 3712	Mine waste and tailings and mine waste disposal units are governed by SWRCB waste disposal regulations and shall be reclaimed in accordance with this article: CCR Article 1. Surface Mining and Reclamation Practice. Section 3500 et seq.	N/A

SENSITIVE SPECIES AND HABITAT

Authority	Requirements/Practices/Standards	✓ or N/A
CCR 3502(b)(1)	A description of the environmental setting (identify sensitive species, wildlife habitat, sensitive natural communities, e.g. wetlands).	14
	Impacts of reclamation on surrounding land uses.	14
CCR 3503(c)	Fish and wildlife habitat shall be protected by all reasonable measures.	15
CCR 3703(a)	Sensitive species shall be conserved or mitigated as prescribed by the federal and California Endangered Species Acts.	N/A
CCR 3703(b)	Wildlife habitat shall be established on disturbed land at least as good as pre-project, unless end use precludes its use as wildlife habitat.	N/A
CCR 3703(c)	Wetlands shall be avoided or mitigated at 1:1 minimum for both acreage and habitat value.	N/A
CCR 3704(g)	Piles or dumps shall not be placed in wetlands without mitigation.	N/A
CCR 3710(d)	In-stream mining shall not cause fish to be trapped in pools or off-channel pits, or restrict migratory or spawning activities.	N/A

TOPSOIL

Authority	Requirements/Practices/Standards	✓ or N/A
CCR 3503(a)(1)	Removal of vegetation and overburden preceding mining shall be kept to a minimum.	14
CCR 3503(f)	When the reclamation plan calls for resoiling, mine waste shall be leveled and covered with a layer of finer material. A soil layer shall then be placed on this prepared surface.	14
	The use of soil conditioners, mulches, or imported topsoil shall be considered where such measures appear necessary.	N/A
CCR 3704(c)	Mine waste shall be stockpiled to facilitate phased reclamation and kept separate from topsoil or other growth media.	12
CCR 3705(e)	If soil is altered or other than native topsoil, soil analysis is required. Add fertilizers or soil amendments if necessary.	N/A
CCR 3711(a)	All salvageable topsoil shall be removed as a separate layer.	14
	Topsoil and vegetation removal should not precede mining by more than one year.	16
CCR 3711(b)	Topsoil resources shall be mapped prior to stripping and location of topsoil stockpiles shown on map included in the reclamation plan.	A-8
	Topsoil and other growth media shall be maintained in separate stockpiles.	A-8
	Test plots may be required to determine the suitability of growth media for revegetation purposes.	N/A
CCR 3711(c)	Soil salvage operations and phases of reclamation shall be set forth in the reclamation plan to minimize the area disturbed and to achieve maximum revegetation success.	15
CCR 3711(d)	Topsoil and growth media shall be used to phase reclamation as soon as can be accommodated following the mining of an area.	15
	Topsoil stockpiles shall not be disturbed until needed for reclamation.	15
	Topsoil stockpiles shall be clearly identified.	A-8
	Topsoil shall be planted with vegetation or otherwise protected to prevent erosion and discourage weeds.	N/A
CCR 3711(e)	Topsoil shall be redistributed in a manner resulting in a stable, uniform thickness consistent with the end use.	15

REVEGETATION

Authority	Requirements/Practices/Standards	✓ or N/A
PRC 2773(a)	The reclamation plan shall be specific to the property and shall establish site-specific criteria for evaluating compliance with the reclamation plan with respect to revegetation.	16
CCR 3503(g)	Available research regarding revegetation methods and selection of species given the topography, resoiling characteristics, and climate of the mined areas shall be used.	16
CCR 3705(a)	Baseline studies shall be conducted prior to mining activities to document vegetative cover, density, and species richness.	14
	Vegetative cover shall be similar to surrounding habitats and self-sustaining.	14
CCR 3705(b)	Test plots shall be conducted simultaneously with mining to ensure successful implementation of the proposed revegetation plan.	N/A
CCR 3705(c)	Decompaction methods, such as ripping and disking, shall be used in areas to be revegetated to establish a suitable root zone for planting.	17
CCR 3705(d)	Roads shall be stripped of roadbase materials, resoiled, and revegetated, unless exempted.	N/A
CCR 3705(f)	Temporary access shall not disrupt the soil surface on arid lands except where necessary for safe access. Barriers shall be installed to keep unauthorized vehicles out.	A-6
CCR 3705(g)	Use local native plant species (unless non-native species meet the end use).	14
	Areas to be developed for industrial, commercial, or residential shall be revegetated for the interim period to control erosion.	N/A
CCR 3705(h)	Planting shall be conducted during the most favorable period of the year for plant establishment.	15
CCR 3705(i)	Use soil stabilizing practices and irrigation when necessary to establish vegetation.	17

CCR 3705(j)	If irrigation is used, demonstrate that revegetation has been self-sustaining without irrigation for two years prior to the release of financial assurance.	N/A
CCR 3705(k)	Noxious weeds shall be monitored and managed.	17
CCR 3705(l)	Plant protection measures such as fencing and caging shall be used where needed for revegetation success. Protection measures shall be maintained until revegetation efforts are successfully completed and the lead agency authorizes removal.	N/A
CCR3705(m)	Quantitative success standards for vegetative cover, density, and species richness shall be included in the reclamation plan.	N/A
	Monitoring to occur until success standards have been achieved.	17
	Sampling techniques for measuring success shall be specified. Sample size must be sufficient to provide at least an 80 percent statistical confidence level.	N/A

AGRICULTURE

Authority	Requirements/Practices/Standards	✓ or N/A
CCR 3707(a)	Where the end use will be agriculture, prime agricultural land shall be returned to a fertility level specified in the reclamation plan.	N/A
CCR 3707(b)	Segregate and replace topsoil in proper sequence by horizon in prime agricultural soils.	N/A
CCR 3707(c)	Post reclamation productivity rates for prime agricultural land must be equal to pre-project condition or to a similar site for two consecutive years.	N/A
	Productivity rates shall be specified in the reclamation plan.	N/A
CCR 3707(d)	If fertilizers and amendments are applied, they shall not cause contamination of surface or groundwater.	N/A
CCR 3708	For sites where the end use is to be agricultural, non-prime agricultural land must be reclaimed to be capable of sustaining economically viable crops common to the area.	N/A

RESPEC

APPENDIX C – STATEMENT OF RESPONSIBILITY

Attachment C

PLANNING COMMISSION
DRAWER L • INDEPENDENCE • CALIFORNIA 93526
(619) 878-2411 *(Ext 2263)*

County of
INYO

September 28, 1990

Mr. Joseph Wujcik
IMV/Floridin
Star Route 15, Box 549
Amargosa Valley, Ca. 89020

RE: RECLAMATION PLAN #90-3/ IMV/Floridin

NOTICE OF DECISION

On September 26, 1990 the Inyo County Planning Commission held a public hearing to consider your Reclamation Plan application (RP #90-3). The Commission approved the Reclamation Plan subject to the conditions listed below as required by the Surface Mining and Reclamation Act of 1975.

CONDITIONS:

1. Any expansion of the mining activity or surface disturbance beyond that depicted on the map of mineral properties submitted with Reclamation Plan #90-3 shall require the submission of an amended reclamation plan to be approved by Inyo County.

2. Wherever possible, pockets of native vegetation will be left, to hasten re-establishment of native flora. Where mesquite would be impacted by proposed mining, transplantation to reclaimed pit areas is required.

3. Seeding with native plant species, including saltbrush (Atriplex spp.), Burrobush (Ambrosia dumosa), shadscale (Atriplex confertifolia), mormon tea (Ephedra spp.), and creosote (Larrea tridentata) is required as soon as practical, to minimize exposed surface and soil loss during operations (concurrent reclamation).

4. Place upper one foot of soil from excavated area in a separate stockpile and spread this material back over the surface when the site is reclaimed.

5. Stockpile all bladed vegetation and excavated materials in such a manner that they do not obstruct the natural flow of water down wash systems.

6. Construct 2 1/2 - foot high dirt berms around all open pits and trenches to restrict wildlife access, or construct an earthen ramp no steeper than 35 degrees to provide wildlife escape route.

7. Backfill all pits and trenches as to near original profile as possible upon completion of activities. If pits or trenches will be open more than one day, use appropriate warning devices such as signs and flagging.

8. Recontour all piles and disturbed areas to blend with the surrounding terrain upon completion of mining activities.

9. Scarify all compacted soils (except desert pavement) upon completion of mining activities.

10. Practice good housekeeping measures, maintaining the area free of trash and debris. Store trash in proper containers and periodically haul it to an authorized disposal site.

11. Remove and properly dispose of all trash, equipment, and waste upon termination of mining activities.

12. If cultural or paleontological resources are discovered during the course of mining operations, all work at the point of discovery will cease and the Bureau of Land Management Barstow Resource Area Manager will be notified. Surface disturbance within 100 feet of the point of discovery is not authorized until a written notice to proceed is received by the operator from the Barstow Resource Area Manager.

13. Long-term occupancy of any of the mining claims is not authorized.

14. Authorization, in writing from the Bureau of Land Management, must be obtained prior to the building of any structures on the mining claim(s). Building permits will then be obtained from the Inyo County Building and Safety Department.

15. The mining area is not to used for the storage of inoperable appliances, automobiles, or equipment.

16. All storage of equipment, supplies, materials, ore or any residue of the mining operations will be accomplished in a manner which minimizes surface disturbance.

17. All operators shall maintain the site, structures and other facilities of the operations in a safe and clean condition during any non-operating periods.

18. Written notification will be provided to the Bureau of Land Management and County of Inyo Planning Department within 30 days of completion of operations and reclamation by the operator.

19. The operator must comply with all County, State and Federal standards and regulations.

20. A surety bond in the amount of $12,000.00 shall be posted jointly in favor of Inyo County and the Bureau of Land Management in order to insure that the project site shall be reclaimed in accordance with the conditions of the reclamation plan within three (3) months from approval.

21. The applicant shall submit a notarized statement to the Planning Department accepting responsibility for reclaiming the lands as per the conditions specified herein within three (3) months from the date of approval of this plan.

22. Inyo County shall reserve the right to periodically inspect the project site to monitor any or all actions in regards to the fulfillment of the provisions of this reclamation plan.

23. This Reclamation Plan shall be reviewed and the applicant's compliance with the conditions listed above shall be evaluated every three (3) years from the date of approval. The amount of the surety bond shall also be reviewed and adjusted as deemed appropriate.

In reference to Condition #20, which requires a surety bond in the amount of $12,000, enclosed is a standardized form which should be completed, notarized and returned to this office for acceptance. The second page of the bond lists the nineteen (19) reclamation conditions for which the bond is to cover.

As indicated above, we have no objection in accepting a bond with both the BLM and the County of Inyo as designated beneficiaries. This would eliminate the necessity of having two (2) separate bonds covering the same reclamation plan. Our County Counsel is currently reviewing the format for the joint bond and upon his approval we will be sending it to BLM for their review. However, it may take a number of months to finalize the format for a joint bond. We therefore, recommend that the $12,000 bond be filed with Inyo County at this time. At a later date we can see if the separate bonds can be combined.

In regard to Condition #21, which requires a notarized statement to be submitted by the applicant to the Planning Department accepting responsibility for reclaiming the mine site, we have enclosed a statement we wish to have signed and notarized by the applicant.

Failure to comply with the conditions stated above will result in the current use being in violation of State of California Surface Mining and Reclamation Act of 1975 and Title 18 of the Inyo County Code.

If you have any questions regarding the above, please feel free to contact this office.

Sincerely,
ROGER DeHART
Planning Director

Curtis E. Kellogg
Associate Planner

Attachments: Reclamation Statement
Faithful Performance Bond

CEK/cek

Attachment C

PLANNING DEPARTMENT
DRAWER L • INDEPENDENCE • CALIFORNIA 93526
OFFICE: (619) 878-2411 (Ext 2263)
FAX: (619) 878-2542

County of INYO

Roger DeHart RDH
Planning Director

PLANNING DEPARTMENT STAFF REPORT

AGENDA ITEM NO. 7

SEPTEMBER 26, 1990

RE: RECLAMATION PLAN #90-3 / INDUSTRIAL MINERALS VENTURES (Division of Floridin Company)

PROJECT LOCATION:

The project site is located approximately nine (9) miles northwest of Death Valley Junction and two (2) miles west of the Inyo County-Nevada border (Township 26 North, Range 4 East, Section 1; Township 26 North, Range 5 East, Sections 5 and 6; and Township 27 North, Range 5 East, Section 31) (see attached Vicinity Map).

The project site is located entirely on federally owned lands of BLM and are zoned OS - 40 (Open Space - 40 acres minimum). The site is located on the alluvial fans formed on the NE slopes of the Funeral Mountains. The site is slightly dissected and well drained. The alluvial fan area is flat and has an overall slope to the NE where it eventually merges with the Amargosa River flood plain. Most of the alluvial fan is occupied by the creosote bush plant community.

Surrounding land uses are as follows:

North: Vacant BLM lands.

South: Vacant BLM and State lands.

East: Vacant BLM lands.

West: Vacant BLM and State lands.

BACKGROUND:

The project consists of a reclamation plan covering an existing mining operation that has been on-going since the mid 1970's. As the State of California Surface Mining and Reclamation Act of 1975 (SMARA) requires a reclamation plan for any on-going mining operation, the applicant has filed this reclamation plan application.

A Conditional Use Permit was previously approved by the Inyo County Planning Commission on February 27, 1974 (CUP #73-14) for this mining operation. Conditional Use Permit #73-14 is still valid, terminating in the year 2024, unless operations cease for any twenty-four (24) month period.

The mineral mined is a clay material known as Hectorite. It was deposited in flat-lying sedimentary beds formed by a series of prehistoric, closely spaced, hot springs. The entire deposit is approximately two miles (2 mi.) in length, six hundred to eight hundred feet (600' - 800') in width and varies from zero to 40 feet (0' - 40') in depth. The applicant has forty-six (46) unpatented placer claims in Inyo County totaling approximately 800 acres.

Hectorite is a hydrous magnesium silicate (clay) that has many varied applications. This finished milled material can be utilized for a number of products such as:

1. High temperature greases.
2. Thickener for oil-based paints.
3. Oil-based drilling muds.
4. Oil-based cosmetics.
5. Thickening agent for numerous products requiring an aqueous suspension.

The Hectorite is extracted by open pit mining methods. No drilling or blasting is required. The overburden (averaging 10') is stripped by a bulldozer and the Hectorite is excavated by front-end loader. The Hectorite is then trucked to an off-site processing mill just across the State line in Amargosa Valley (Nevada). Access to the site is provided by a mining haul road that connects with Nevada Highway 373.

An estimated 10,000 tons of Hectorite are extracted per year. At the current volume of extraction, the life of the mine operation has not been estimated due to the extensive deposits (both in Inyo County and Nevada).

A standard one-hundred foot by seven-hundred and fifty foot (100' X 750') mining panel (1.7 acres) is exposed for an initial mining pit. These excavated panels are then filled, graded and reclaimed as an adjacent neighboring panel is opened and mined. Approximately one panel is mined per year.

It is estimated that approximately 100 acres will eventually be mined. No waste material, except overburden, is generated by the mining process. No structures exist on the site.

The mining operation employs a three (3) person crew working up to ten (10) hours per day. Mining is not a full time operation at the site. Mining occurs for approximately one week every other month. The mining occurs only when market demands have to be met. These employees commute to the mining site from various surrounding areas.

There is no water supply at the site and water used for dust suppression on the haul roads is taken from the mill site in Nevada. No water is utilized at the site for the extraction process. Potable water is transported to the site on an as needed basis.

There are no sanitary facilities on the site. Solid waste disposal and sanitation facilities are located at the mill site in Nevada.

Equipment is fueled and lubricated as needed by a mobile service truck. No hazardous contaminants are released from the mobile service vehicle.

No additional road construction is required beyond maintenance of the existing roads crossing the property.

RECLAMATION PLAN:

The project before the Commission consists of a reclamation plan submitted to satisfy the state-mandated requirements of SMARA and covers approximately 800 acres. Any expansion of surface disturbance beyond that considered in the reclamation plan (and BLM's plan of operations) will require an application for an amended reclamation plan. This reclamation plan will cover all of the disturbed area and any existing open pit at the end of mining operations.

The reclamation plan calls for the removal of all equipment from the site. All of the internal access and hauling roads are to be contoured, ripped or scarified. All open pits and piles of ore and waste materials/overburden shall be leveled to conform, as much as possible, with the existing terrain. The overall effect will be that of rounded, undulating mounds that will blend in with the surrounding landscape as much as possible. Any cut slopes will either be benched or sloped to blend in with the existing contours of the land.

As previously mentioned, the applicant is proposing on-going reclamation in which only three 100' X 750' mining panels (5-6 acres) will be disturbed at any one time and would take approximately 3 years to accomplish. Upon exhaustion of ore from the mining panels the site will be reclaimed and mining will proceed to another adjacent panel.

According to the applicant, all disturbed areas will not have to be revegetated. However, both the Bureau of Land Management and Staff do not concur. The area disturbed does have poor soils but an effort toward revegetation should be required. In conjunction with the BLM, Staff has determined that this reclamation plan will involve reseeding of the mined area as a condition of approval.

Based upon the long history of continued mining at the site and the large ore reserves it appears that only a major economic event would result in the mining activity being discontinued and abandoned. This may result in a difficult determination as to when the mining activity "ceases" and when the reclamation plan is to be implemented. However, with on-going reclamation it should not be a major problem.

In conference with the Bureau of Land Management - Barstow Resource Area (see attached letter) it was determined that the cost of the reclamation three mining panels (3 years of mining) and reclamation of the internal access roads would be twelve thousand dollars ($12,000). The Planning Department is recommending that a surety bond for $12,000 be submitted with both Inyo County and the Bureau of Land Management being designated as beneficiaries.

ENVIRONMENTAL REVIEW:

In reviewing the reclamation plan in conjunction with the California Environmental Quality Act (CEQA) provisions two determinations can be made.

The first is that the proposed reclamation plan is covered by the "general rule" provision of CEQA (Section 15061(b)(3)) in that it can be clearly seen the project (reclamation plan) will not have any significant effect on the environment. Therefore, no environmental documents are required to be prepared.

The project involves the reclamation of an existing mining site and does not involve further surface disturbance or actions which would result in any environmental impact. If the applicant, at a later date, wishes to expand the mining operation then a amended reclamation plan would be required. At that time, environmental documents may have to be incorporated with the amended plan.

Secondly, the project (reclamation plan) can also be considered as a Class 8 Categorical Exemption (Section 15308). This type of exemption involves actions by the County, as authorized by state or local ordinance, to assure the restoration, enhancement or protection of the environment. A SMARA reclamation plan is compatible with definition of this exemption. Under this type of exemption no environmental document is required to be prepared.

RECOMMENDATIONS:

The Planning Department recommends the Planning Commission approve Reclamation Plan #90-3 by taking the following actions:

A. Find that the proposed reclamation plan is exempt from the provisions of the California Environmental Quality Act pursuant to Section 15061(b)(3) ["general rule] and Section 15308 [Class 8 Exemption] of the CEQA Guidelines.

B. Find that the proposed reclamation plan conforms and meets the requirements of Chapter 18.76 (Mining and Land Reclamation) of the Inyo County Code and the provisions of the State Surface Mining and Reclamation Act (SMARA).

C. Approve Reclamation Plan #90-3 subject to the following conditions:

1. Any expansion of the of the mining activity or surface disturbance beyond that depicted on the map of mineral properties submitted with Reclamation Plan #90-3 shall require the submission of an amended reclamation plan to be approved by Inyo County.

2. Wherever possible, pockets of native vegetation will be left, to hasten re-establishment of native flora. Where mesquite would be impacted by proposed mining, transplantation to reclaimed pit areas is required.

3. Seeding with native plant species, including saltbrush (Atriplex spp.), Burrobush (Ambrosia dumosa), shadscale (Atriplex confertifolia), mormon tea (Ephedra spp.), and creosote (Larrea tridentata) is required as soon as practical, to minimize exposed surface and soil loss during operations (concurrent reclamation).

4. Place upper one foot of soil from excavated area in a separate stockpile and spread this material back over the surface when the site is reclaimed.

5. Stockpile all bladed vegetation and excavated materials in such a manner that they do not obstruct the natural flow of water down wash systems.

6. Construct 2 1/2 - foot high dirt berms around all open pits and trenches to restrict wildlife access, or construct an earthen ramp no steeper than 35 degrees to provide wildlife escape route.

7. Backfill all pits and trenches as to near original profile as possible upon completion of activities. If pits or trenches will be open more than one day, use appropriate warning devices such as signs and flagging.

8. Recontour all piles and disturbed areas to blend with the surrounding terrain upon completion of mining activities.

9. Scarify all compacted soils (except desert pavement) upon completion of mining activities.

10. Practice good housekeeping measures, maintaining the area free of trash and debris. Store trash in proper containers and periodically haul it to an authorized disposal site.

11. Remove and properly dispose of all trash, equipment, and waste upon termination of mining activities.

12. If cultural or paleontological resources are discovered during the course of mining operations, all work at the point of discovery will cease and the Bureau of Land Management Barstow Resource Area Manager will be notified. Surface disturbance within 100 feet of the point of discovery is not authorized until a written notice to proceed is received by the operator from the Barstow Resource Area Manager.

13. Long-term occupancy of any of the mining claims is not authorized.

14. Authorization, in writing from the Bureau of Land Management, must be obtained prior to the building of any structures on the mining claim(s). Building permits will then be obtained from the Inyo County Building and Safety Department.

15. The mining area is not to used for the storage of inoperable appliances, automobiles, or equipment.

16. All storage of equipment, supplies, materials, ore or any residue of the mining operations will be accomplished in a manner which minimizes surface disturbance.

17. All operators shall maintain the site, structures and other facilities of the operations in a safe and clean condition during any non-operating periods.

18. Written notification will be provided to the Bureau of Land Management and County of Inyo Planning Department within 30 days of completion of operations and reclamation by the operator.

19. The operator must comply with all County, State and Federal standards and regulations.

20. A surety bond in the amount of $12,000.00 shall be posted jointly in favor of Inyo County and the Bureau of Land Management in order to insure that the project site shall be reclaimed in accordance with the conditions of the reclamation plan within three (3) months from approval.

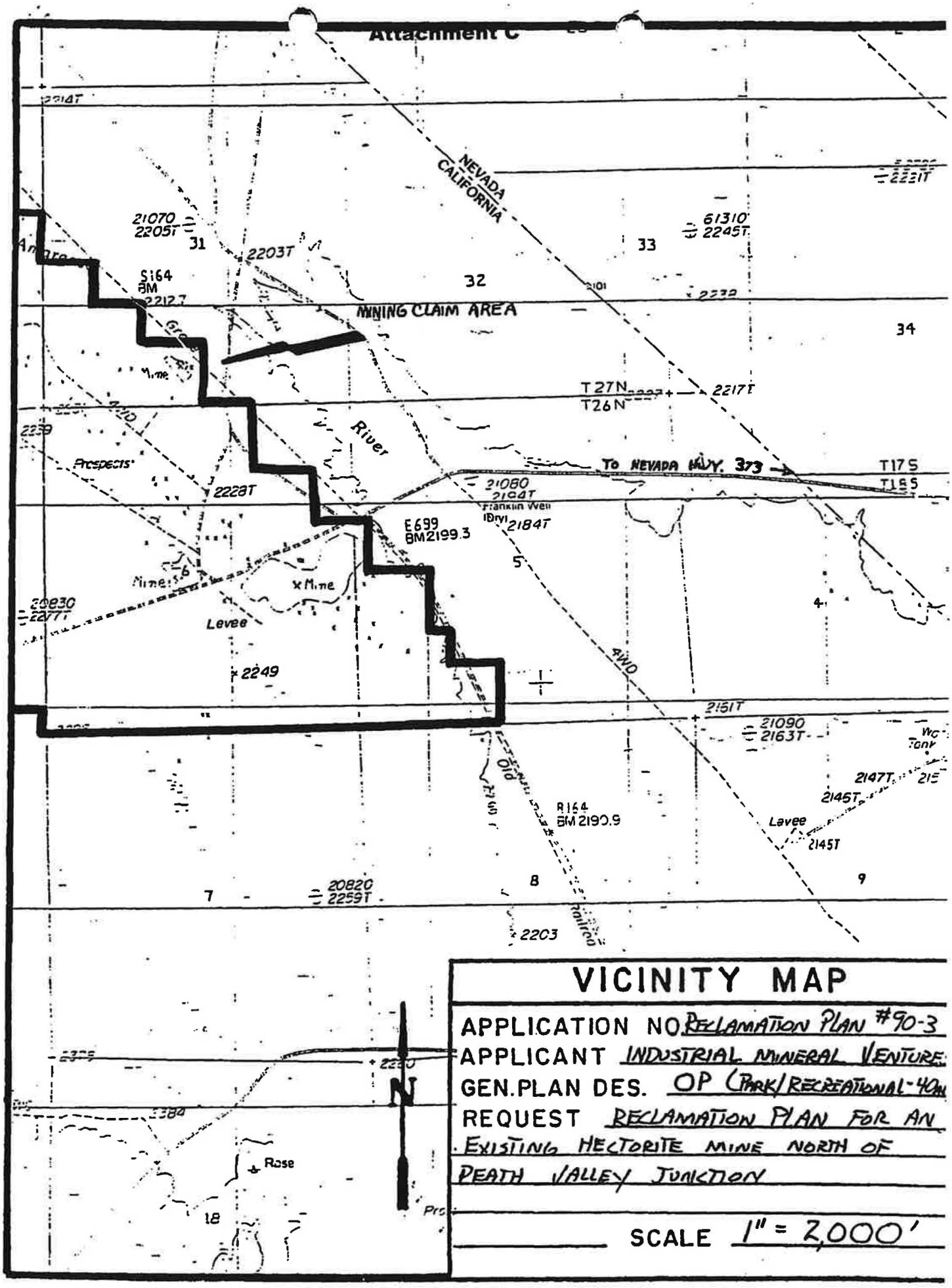
21. The applicant shall submit a notarized statement to the Planning Department accepting responsibility for reclaiming the lands as per the conditions specified herein within three (3) months from the date of approval of this plan.

22. Inyo County shall reserve the right to periodically inspect the project site to monitor any or all actions in regards to the fulfillment of the provisions of this reclamation plan.

23. This Reclamation Plan shall be reviewed and the applicant's compliance with the conditions listed above shall be evaluated every three (3) years from the date of approval. The amount of the surety bond shall also be reviewed and adjusted as deemed appropriate.

Attachments: Vicinity Map
BLM Letter

CEK/cek



VICINITY MAP

APPLICATION NO. RECLAMATION PLAN #90-3

APPLICANT INDUSTRIAL MINERAL VENTURES

GEN. PLAN DES. OP (PARK/RECREATIONAL-40 AC)

REQUEST RECLAMATION PLAN FOR AN EXISTING HECTORITE MINE NORTH OF DEATH VALLEY JUNCTION

SCALE 1" = 2,000'

Attachment C

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
BARSTOW RESOURCE AREA
150 COOLWATER LANE
BARSTOW, CALIFORNIA 92311-3221

(619) 256-3591

IN REPLY REFER TO

CERTIFIED MAIL #559005
RETURN RECEIPT REQUESTED

CAMC 215670
(CA-068.28)

SEP 14 '90

Joseph Wujcik
IMV/Floridin
Star Route 15, Box 549
Amargosa Valley, CA 89020

AUG 30 1990

Dear Mr. Wujcik:

On July 25, 1990, we received your Plan of Operations for mining an open pit on your White King Claims T. 26 N., R. 5 E., Sec. 6. Your plan is approved, subject to the following stipulations:

Per Washington Office Instruction Memorandum (I.M.) 90-582 (8-14-90), it is BLM's policy to require mandatory bonding for all Plans of Operation authorized by 43 CFR 3809, as plans are reviewed and approved. The maximum amount that can be assessed for reclamation by BLM is $2,000 per acre. Your mining operation will cause a minimum cumulative surface disturbance of 100 acres over its anticipated life, and you could be required to provide a bond in an amount not to exceed $200,000 under the I.M. However, the bureau recognizes the existing problems and potential economic impacts to industry in obtaining surety bonds for such large amounts, and has developed a set of options to minimize these financial impacts.

It is our decision to maximize the use of phased bonding and your proposal for concurrent reclamation as a means to reduce the disturbance associated with operations. It is our considered opinion that the reclamation measures you have included in your plan, plus BLM stipulations (described below), would provide for adequate reclamation of those areas disturbed by your open-pit mining operation. It is also our opinion that a re-evaluation of your reclamation efforts at the end of a three-year period would ensure the success of reclamation, and that compliance with imposed stipulations was assured.

All operators who are able to demonstrate the existence of a State bond will not be required to post a bond if that amount is within 75% of BLM's estimated bond amount.

We therefore require that you submit a bond in the amount of $12,000 (2 acres per year at $2,000 per acre for three years), or a State bond of at least 75% of this amount ($9,000) to cover the anticipated costs of reclamation at the end of the third year (from the date of this letter) of operation. At that time, our office will re-evaluate reclamation success, and determine if reclamation efforts are adequate to release the bond for reassignment to the adjacent 6 acre block.

If reclamation is not adequate, or the operator has established a record of noncompliance, the bond cap of $2,000 shall not apply, and the bond must be for the full, estimated amount to reclaim any associated surface disturbance to the original condition.

TAKE PRIDE IN AMERICA

/	ROGER DEHART
/	CURTIS WILCOX
/	[illegible]
	[illegible]
/	FILE RP #90-3

Attachment C

Additional stipulations include:

1. Wherever possible, pockets of native vegetation will be left, to hasten re-establishment of native flora. Where mesquite would be impacted by proposed mining, transplantation to reclaimed pit areas is required.

2. Seeding with native plant species, including saltbush (Atriplex spp.), burrobush (Ambrosia dumosa), shadscale (Atriplex confertifolia), mormon tea (Ephedra spp.), and creosote (Larrea tridentata) is required as soon as practical, to minimize exposed surface and soil loss during operations (concurrent reclamation).

3. Place the upper one foot of soil from excavated area in a separate stockpile and spread this material back over the surface when the site is reclaimed.

4. Stockpile all bladed vegetation and excavated materials in such a manner that they do not obstruct the natural flow of water down wash systems.

5. Construct 2 1/2-foot high dirt berms around all open pits and trenches to restrict wildlife access, or construct an earthen ramp no steeper than 35 degrees to provide wildlife escape route.

6. Backfill all pits and trenches made under this plan of operations to as near original profile as possible upon completion of activities. If pits or trenches will be open for more than one day, use appropriate warning devices such as signs and flagging.

7. Recontour all piles and disturbed areas to blend with the surrounding terrain upon completion of mining activities.

8. Scarify all compacted soils (except desert pavement) upon completion of mining activities. This may be accomplished by ripper, discs, or rakes.

9. Practice good housekeeping measures, maintaining the area free of trash and debris. Store trash in proper containers and periodically haul it to an authorized disposal site, not on public land.

10. Remove and properly dispose of all trash, equipment, and waste upon termination of mining activities.

11. If cultural or paleontological resources are discovered during the course of mining operations, all work at the point of discovery will cease and the Barstow Resource Area Manager will be notified. Surface disturbance within 100 feet of the point of discovery is not authorized until a written notice to proceed is received by the operator from the Barstow Resource Area Manager.

12. Long-term occupancy of any of the mining claims addressed in your plan or notice is not authorized. In addition, this letter does not authorize an extension of the 14-day camping limit in effect within the California Desert Conservation Area, under authority of 43 CFR 8365.1-2, as published under 48 Federal Register 43234 (September 22, 1983).

13. Authorization, in writing from the BLM, must be obtained prior to the building of any structures on the claim.

14. The site is not to be used for the storage of inoperable appliances, autos, or equipment.

15. All storage of equipment, supplies, materials, ore or any residue of the mining operation will be accomplished in a manner which minimizes surface disturbance.

16. All operators shall maintain the site, structures and other facilities of the operations in a safe and clean condition during any non-operating periods. The operator will be required, after an extended period of non-operation for other than seasonal operations, to remove all structures, equipment and other facilities and reclaim the site of operations, unless he/she receives permission, in writing from the authorized officer to do otherwise. For the purpose of 43 CFR 3809.3-7, an extended period of non-operation is considered to be one year.

17. Written notification will be provided to the BLM within 30 days of completion of operations and reclamation by the operator.

18. The operator must comply with all County, State and Federal standards and regulations.

19. Any proposed activity not authorized by this plan shall not proceed without prior approval of a plan amendment by this office.

An appeal from this decision may be taken to the State Director, California State Office, Bureau of Land Management in accordance with the provisions in Title 43 of the Code of Federal Regulations (CFR) Subpart 3809. If an appeal is taken, the notice of appeal must be filed in this Office at 150 Coolwater Lane, Barstow, California, 92311 within thirty (30) days from receipt of this decision.

Do not send the notice of appeal to the State Director. The appeal and the case history will be sent to the State Director from this office. The appeal to the State Director must contain: 1) the name and mailing address of the appellant; 2) when applicable, the name of the mining claim(s) and serial number(s) assigned to the mining claim(s) recorded pursuant to Section 3833 of this title which are subject to appeal; and 3) a statement of reasons for appeal and any arguments the appellant wishes to present which would justify reversal or modification of the decision. To avoid summary dismissal of the appeal, there must be strict compliance with the regulations.

During the appeal to the State Director, all decisions from which the appeal is taken shall be effective during the pendency of the appeal.

If no appeal is taken, this decision constitutes final administrative action of this Department, as it affects the mining claim(s). No appeal, protest, or petition for reconsideration will be entertained from this decision after the appeal period has expired.

You must submit a bond in the amount of $12,000, or a State bond in the amount of $9,000 to BLM, Barstow Resource Area, prior to the onset of any surface disturbance under this plan. Should you have any questions regarding your Plan of Operations, please feel free to contact Michael Ford of my staff.

Sincerely,

TIM READ

Tim Read
Acting Area Manager

cc:
Curtis Kellogg
Inyo County Planning Dept.
P.O. Drawer L
Independence, CA 93526

Attachment C

CA MC-215670
CA-068-0-172
3809(CA-068.28)
1791

DECISION RECORD/FONSI

DECISION: It is my decision to approve Alternative A, the proposed action, as the BLM preferred alternative as evaluated in the attached environmental assessment.

FINDING OF NO SIGNIFICANT IMPACT: Environmental impacts associated with the proposed action have been assessed. I conclude that the proposed action will have no significant impact on the environment and is not a major federal action. Preparation of an Environmental Impact Statement pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969 is not required.

RATIONALE FOR DECISION: The decision to approve Alternative A does not result in any undue or unnecessary environmental degradation and is in conformance with the California Desert Conservation Area Plan (1980), as amended. Consultation will not be required under section 7 of the Endangered Species Act for the proposed action.

Reviewed by: Sharon Paris — Environmental Coordinator, Barstow Resource Area — 8-23-90 Date

Recommended by: _____ — Chief, Resources Branch, Barstow Resource Area — 8/23/90 Date

_____ — acting Chief, Recreation Branch, Barstow Resource Area — 8/23/90 Date

Approved by: _____ — Area Manager, acting Barstow Resource Area — 8/23/90 Date

Attachments:
EA # CA-068-0-172

Attachment C

CA MC 215670
CA-068-0-172
3809(CA-068.28)
1791

ENVIRONMENTAL ASSESSMENT
FOR MINING PLANS OF OPERATIONS
BARSTOW RESOURCE AREA
CALIFORNIA DESERT DISTRICT

I. INTRODUCTION

A. Background

Date of Receipt of Plan: 7-25-90

Mining Claim Numbers: 215670, 215675, 215676, 215679, 215680, 215686, and 215687

Claimant Name, Address, Phone:	Operator, if different:
IMV	Same
Div. of Floridin Company	
Star Route 15	
Box 549	
Amargosa Valley, NV 89020	
(702) 372-5341	

Claim Name: White King Claims (WK 1, WK1QR, WK 2, WK 2EF, WK 2GH, WK 3JK, and WK 3LM)

General Location: Amargosa Valley

Legal Description: T. 26 N., R. 5 E., Section 6

Status Check, (date of MTP reviewed): 10-14-86

B. Need for the Proposed Action:

The operator is amending their Plan of Operations to reflect their current mining activity. This operation would consist of open-pit mining on 100 acres, north of the Funeral Mountains, approximately 9 miles north of Death Valley Junction, California.

III. AFFECTED ENVIRONMENT:

The subject claims lie near the southwestern margin of the basin and range geomorphic province. The claim area displays a typical basin and range topography, and is characterized by a series of steep mountain fronts rising from a relatively low-relief, poorly developed alluvial fan surface. The mountains are typically fault-bounded and tilted by recent (geologically speaking) tectonic activity. Locally, the claim area lies north of the Funeral Mountains and within Amargosa Valley, a broad alluvial valley drained by the Amargosa River.

The site is located within the northern Mojave floristic zone and vegetation in the area is characteristic of a moderate-diversity creosote brush scrub habitat. Dominant species include creosote (Larrea tridentata), burrowbush (Ambrosia dumosa), mormon tea (Ephedra spp.), and shadscale (Atriplex confertifolia). The lowest portions of the alluvial fan are dominated by shadscale, desert holly (Atriplex hymenolytra), mesquite (Prosopis juliflora), and an understory of saltgrass (Distichlis stricta). A major desert riparian corridor exists approximately 0.5 miles east of the site (Amargosa River). No T&E or sensitive plant species are known to occur in the affected area.

Reptiles and small mammals are the dominant wildlife of the affected area, though wild horses (Equus caballus) and coyotes are often observed at nearby water sources. Representative reptile species include western whiptail lizards (Cnemidophorus tigris), zebra-tailed lizards (Callisaurus draconoides), and sidewinder rattlesnakes (Crotalus cerastes). Representative small mammals include pocket mice (Perognathus spp.), Merriam's kangaroo rats (Dipodomys merriami), antelope ground squirrels (Ammospermophilus leucurus), and desert woodrats (Neotoma lepida). Prairie falcons (Falco mexicanus) and golden eagles (Aquila chrysaetos) also occasionally forage near the site, but neither species is known to nest in the immediate vicinity of the affected area. No T&E wildlife species are known to occur in the affected area.

The results of a pedestrian survey and a records search for cultural resources proved negative. The area that comprises the White King Claims has been severely impacted by both open-pit mining and other surface disturbances such as utility access roads, etc. No cultural resources were noted in the project area and it seems likely than none were ever present. Consequently, no further mitigation or Section 106 consultation with the California State Historic Preservation Officer is necessary.

The following list of Critical Elements are required to addressed, under the National Environmental Policy Act (NEPA), in an Environmental Assessment.

Critical Element	Affected	
	yes	no
Air Quality	____	X
ACECs	____	X
Cultural Resources	____	X
Farmland, Prime/Unique	____	X
Floodplains	____	X
Nat. Amer. Rel. Concerns	____	X
T & E Species	____	X
Wastes, Hazardous/Solid	____	X
Water Quality	____	X
Wetlands/Riparian Zones	____	X
Wild & Scenic Rivers	____	X
Wilderness	____	X

IV. ENVIRONMENTAL CONSEQUENCES

Alternative A: Proposed Action

Under the proposed action, approximately 2 acres of public land would be disturbed per year, with an anticipated 100 acres to be disturbed over the life of the operation. Topographic contours would be altered and a complete loss of vegetation is anticipated in the project area.

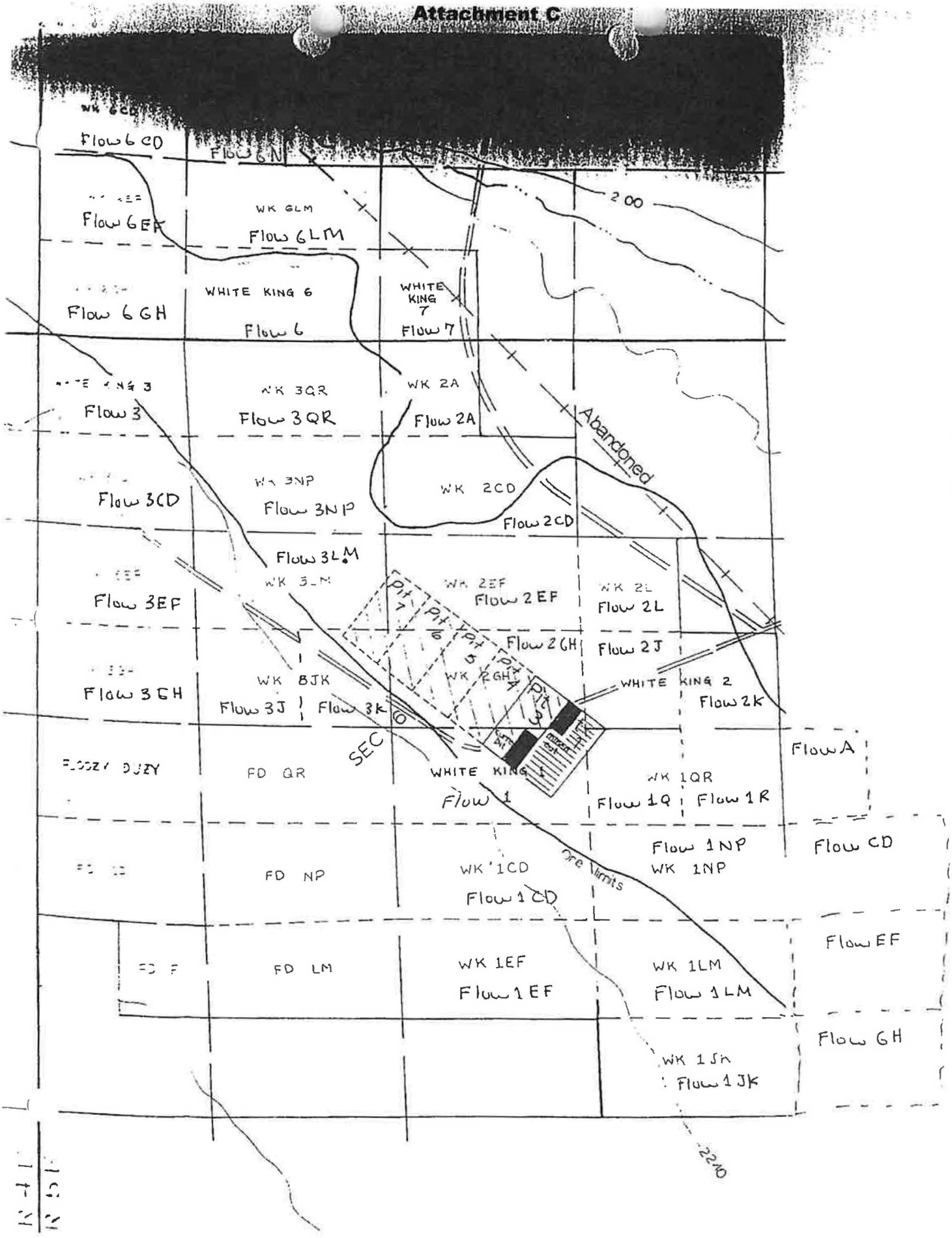
Road proliferation and low-level surface disturbance associated with exploratory drilling/cross-country vehicle travel are likely to occur.

Exploratory holes pose the potential for entrapment/ mortality of small animals and reptiles while open.

1. Mitigation Measures

1. Wherever possible, pockets of native vegetation will be left, to hasten re-establishment of native flora. Where mesquite would be impacted by proposed mining, transplantation to reclaimed pit areas is recommended.

2. Seeding of disturbed areas with native plant species (Atriplex spp., Ambrosia dumosa, etc.) is recommended.


Flow 6 CD
Flow 6 GN
WK 6LM
Flow 6LM
Flow 6EF
WHITE KING 6
Flow 6
Flow 6 GH
WHITE KING 7
Flow 7
200
WK 3QR
Flow 3QR
WK 2A
Flow 2A
Flow 3
Abandoned
WK 3NP
Flow 3NP
WK 2CD
Flow 2CD
Flow 3CD
Flow 3LM
WK 2EF
Flow 2EF
WK 2L
Flow 2L
Flow 3EF
Pit 7
Pit 6
Pit 5
Pit 4
Pit 3
Flow 2GH
Flow 2J
WK 8JK
Flow 3J
Flow 3K
WK 2GH
WHITE KING 2
Flow 2K
Flow 3GH
SEC
FD QR
WHITE KING 1
Flow 1
WK 1QR
Flow 1Q
Flow 1R
Flow A
Flow 1NP
WK 1NP
Flow CD
FD NP
WK 1CD
Flow 1CD
ore limits
FD LM
WK 1EF
Flow 1EF
WK 1LM
Flow 1LM
Flow EF
Flow GH
WK 1JK
Flow 1JK
2240

Attachment C

RP 90-3
91-14-0013

STEFFEN ROBERTSON & KIRSTEN

Consulting Engineers and Scientists

Attachment C

REVISED PLAN OF OPERATIONS AND RECLAMATION PLAN FOR

IMV DIVISION OF FLORIDIN COMPANY

Inyo County, California

Submitted to:
U. S. Department of Interior
Bureau of Land Management
District Office
Barstow Resource Area

Submitted by:
IMV
Division of Floridin Company
Star Route 15
Box 549
Amargosa Valley, Nevada 89020

Prepared by:
Steffen Robertson and Kirsten (U.S.), Inc.
1755 East Plumb Lane Suite 241
Reno, Nevada 89502

June 1990

Attachment C

Attachment C

SUGGESTED FORMAT FOR PLAN OF OPERATIONS

1) Mining Claim Numbers: CA MC Appendix A

2) Mining Claim Name(s): Appendix A

3) Claimant, Operator, Agent:

A. Claimant(s):
Name IMV/Floridin
Address Star Route 15, Box 549
Amargosa Valley, NV 89020
Phone # 702/372-5341

B. Operator(s):
Name
Address
Phone #

4) Location and Access:

Brief description (including legal) of the location and existing or proposed access to the area of operation.

A. General Description of Location: Section 2.1 and Figure2.1-1
T. 26 N. R 4 E. SEC 1 ; T 26 N. R 5 E. SEC. 5 & 6
T. 27 N. R 5 E. SEC. 31

B. Legal Description: Section 1/4 Section 2.2 & Plate 1
Section(s):
Township: Range: Meridian:
County:

C. Estimated total acreage of the area proposed for exploration or mining
800 acres of unpatented claims

D. Estimated acreage per year to be disturbed by mining operation 1.7 acres per year, at current production levels Section 3.4.1

E. Access: Describe the existing or proposed access to the operation site. If new access is proposed, discuss widths, erosion control measures, and grade:
Section 2.1 Access
Section 3.8 Haul Roads

F. What type of stakes/flagging (color?) did you use so that our Specialists can find the site(s) proposed for surface disturbance (not the claim corners) in the field? N/A

==========

G. Location Map: Attach a general location and vicinity map showing claim boundaries, CA MC numbers in the correct areas, and existing and/or proposed access routes, holes, trenches, excavations, structures, wells, waste dumps, tailings disposal, and disturbed areas. A USGS 7.5 minute topographic map is preferred, but an accurate sketch map will do.

See Plate 1

==========

5) General Information

A. Proposed starting date of operation: Started in 1974

Estimated completion date of operation (unknown or lifetime do not provide a definable term of use): Section 3.7 Project Schedule
Estimated 50 years at current production rate.

B. Operation will be (is): Continuous X Seasonal ____ Intermittent ____

Will you operate on weekends? No or weekdays? Yes

During what months will you be operating? Year-round

PUBLIC SAFETY

C. What provisions will you make for Public Safety regarding open pits and trenches?

Will you be using flagging? ____ Barricades? ____

Pit accessed by private company road. See Section 3.8

How long will the trenches remain open? 3-6 months

Will you be backfilling as you go? Yes See Sections 3.4 & 6.2

D. Equipment, Personnel, and Supporting Facilities.

Equipment: List all equipment to be utilized in connection with the proposed activity, e.g.: mining, road maintenance, hauling, etc. If explosives will be used, please indicate. Will explosives be stored on site? NO
Table 3.2-2

Personnel: How many people will be working at the site? Table 3.3-1
Three people mine this site.

How many caretakers, or people will be living at the site? 0

Supporting Facilities: Describe any proposed or existing structures, sanitary facilities, or secured areas, and justify the reasons for continued maintenance and/or construction of these facilities: Support facilities are located at the plant site in Nye County, Nevada.
Section 3.6

6) Proposed Exploration

Dimensions of proposed holes, trenches, or excavations (Specify type):
Section 3.4.1 and Section 3.9
Rectangular: up to 100 feet x 750 feet

7) Proposed (Existing) Mining Operations

A. Estimated size of operations:

Under 500 tons/cu yds per year_____
500 - 5,000 tons/cu yds per year_____
5,000 - 50,000 tons/cu yds per year 10,000 tons
50,000 - 100,000 tons/cu yds per year_____
100,000 - 250,000 tons/cu yds per year_____
250,000 - 1,000,000 tons/cu yds per year_____
Over 1,000,000 tons/cu yds per year_____

B. Total Anticipated Production:

Quantity of ore to be removed (tons/cu yds) 10,000 tons/year
Waste Retained on Site (tons/cu yds) 10,000 tons
Waste Disposed of, off site (tons/cu yds) N/A
Maximum anticipated dimensions of pit area 300x750
Number of linear feet of underground workings n/a

C. Mining Method: Check all that apply.

Underground____	Gravel/Sand Pit____	Truck to Plant X
Open Pit X	Clay Pit X	Borrow Pit____
Single Bench____	Drill & Blast____	Tailing Pond____
Slurry Pump____	Waste Dump____	Rail Line____

Other_____

Quarry:

Hilltop_____	Shovel_____
Multibench_____	Gravel Bar Skimming_____
Sidehill_____	Dragline_____
Low Level_____	Other_____

D. Processing:

If processing of the ore or minerals mined is planned to be conducted on-site or adjacent to the extraction area, briefly describe the nature of the processing, and explain the disposal method for tailings or waste from the processing (Use additional space if necessary). A flow chart or schematic diagram of the processing procedure may be attached

The milling facilities are located on patented claims in Nye County Nevada. A brief description of the milling process is provided in Section 3.11

E. Toxic Substances

Do you plan to use cyanide, aqua regia, mercury, or other toxic materials in your operation? No If yes, please attach a copy of your Waste Discharge Permit or waiver.

Please specify the quantity and type of chemicals to be used on site:

N/A

Please specify the quantity and type of chemicals to be stored on site:

N/A

F. Water

Estimate the quantity (gpd) of water required by the mining and processing operation. Specify the proposed source of this water, the method of transport to the property, and the quantity and method of disposal of used and/or surplus water: N/A

No water is used in the hectorite mining operation.

8) Reclamation Plan and Proposal Measures to Prevent Undue and Unnecessary Degradation:

Describe (in the space provided below) the methods, including the sequence and timing, that will be used to complete the final reclamation of the land disturbed in

your proposed mining operations. Diagrams may be used. Include in your response, a brief discussion of each of the following (if applicable):

1. Backfilling and re-contouring.
2. Scarification of disturbed areas.
3. Stabilization of slopes.
4. Stabilization of permanent waste dumps, tailings, etc.
5. Rehabilitation of pre-mining drainage.
6. Removal, disposal, or utilization of residual equipment, structures, and refuse.
7. Control of contaminants, especially with regard to surface run-off and ground water.
8. Treatments of stream beds and streambanks to control erosion and sedimentation.
9. Removal or reduction of residual mining hazards, such as open pits, trenches, shafts, adits, etc.
10. Re-soiling and re-vegetation of disturbed areas.
11. If new roads are proposed, will these be reclaimed? Chapter 6.0 on reclamation describes the above listed elements in detail, as they apply to the hectorite mine operation.

Operator/Claimant Signature Cecilia A Dees Date 5/31/90

Rev. 12/89

Attachment C

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES AND PLATES

1.0 INTRODUCTION

The IMV Division of Floridin Company (IMV/Floridin) is submitting this revised Plan of Operations and Reclamation Plan (POO) for their mining project in Inyo County, California to the Barstow Resource Area office of the U.S. Department of Interior, Bureau of Land Management (BLM), and Inyo County in compliance with BLM Surface Management of Public Lands Regulations 43 CFR 3809. This revised Plan of Operations augments data originally provided to the BLM in the Plan of Operations submitted March 20, 1981, prepared by Industrial Mineral Ventures, Inc., the former operator of the project. The original Plan of Operations for the hectorite mine was approved by the California Desert District Office of the BLM in Riverside, California in May, 1981. In addition to describing the IMV Project, this revision also discusses environmental controls and reclamation plans for the project.

This revised Plan of Operations for the IMV Project describes an existing mining project which has been owned and operated since the early 1970's by several different corporate entities. This revised Plan of Operations is being submitted by the new owner/operator of the facility, IMV/Floridin, in order to provide the BLM updated information regarding the operation. This revised Plan of Operations thus describes present and future mining and exploration activities planned for the project site, and also includes a brief discussion of past mining operations.

The IMV Project presently involves mining from a small hectorite clay open-pit mine. As described in more detail in Section 2.2, much of the mining and all of the milling activities are occurring on patented mining claims in Nye County, Nevada and are thus not the subject of this revised Plan of Operations. However, the activities occurring on patented land will be described briefly for informational purposes. The activities occurring on unpatented

land in California include a hectorite clay mine and access to the mining facilities in the project area. These activities will be described in detail in this revised Plan of Operations.

1.1 Project Proponent

IMV was founded in 1972 to acquire and develop all rights from a partnership formed in the 1960's (Industrial Mineral Ventures) holding a group of claims that contained several clay deposits in the Amargosa Valley. The IMV Project mining and milling operations have been operated since 1974. IMV was acquired in June of 1989, by the Floridin Company, a subsidiary of U.S. Silica Company, a natural resources company whose business is the acquisition, exploration, and development of industrial mineral resources. The Floridin Company purchased the IMV facilities with the intent to continue mining and processing the clay deposits.

IMV/Floridin's headquarters for the IMV Project are located at their Imvite Plant in Amargosa Valley, Nevada. U. S. Silica Company's corporate headquarters are in Berkeley Springs, West Virginia.

1.1.2 Company Representative

Mr. Joseph S. Wujcik, Plant Manager
IMV/Floridin
Star Route 15, Box 549
Amargosa Valley, Nevada 89020
702/372-5341

Mr. Gregory S. Fell, Mine Planning and Reclamation Engineer
U. S. Silica Company
P.O. Box 187
Berkeley Springs, West Virginia 25411
304/258-2500

2.0 OVERVIEW OF PROPOSED PROJECT

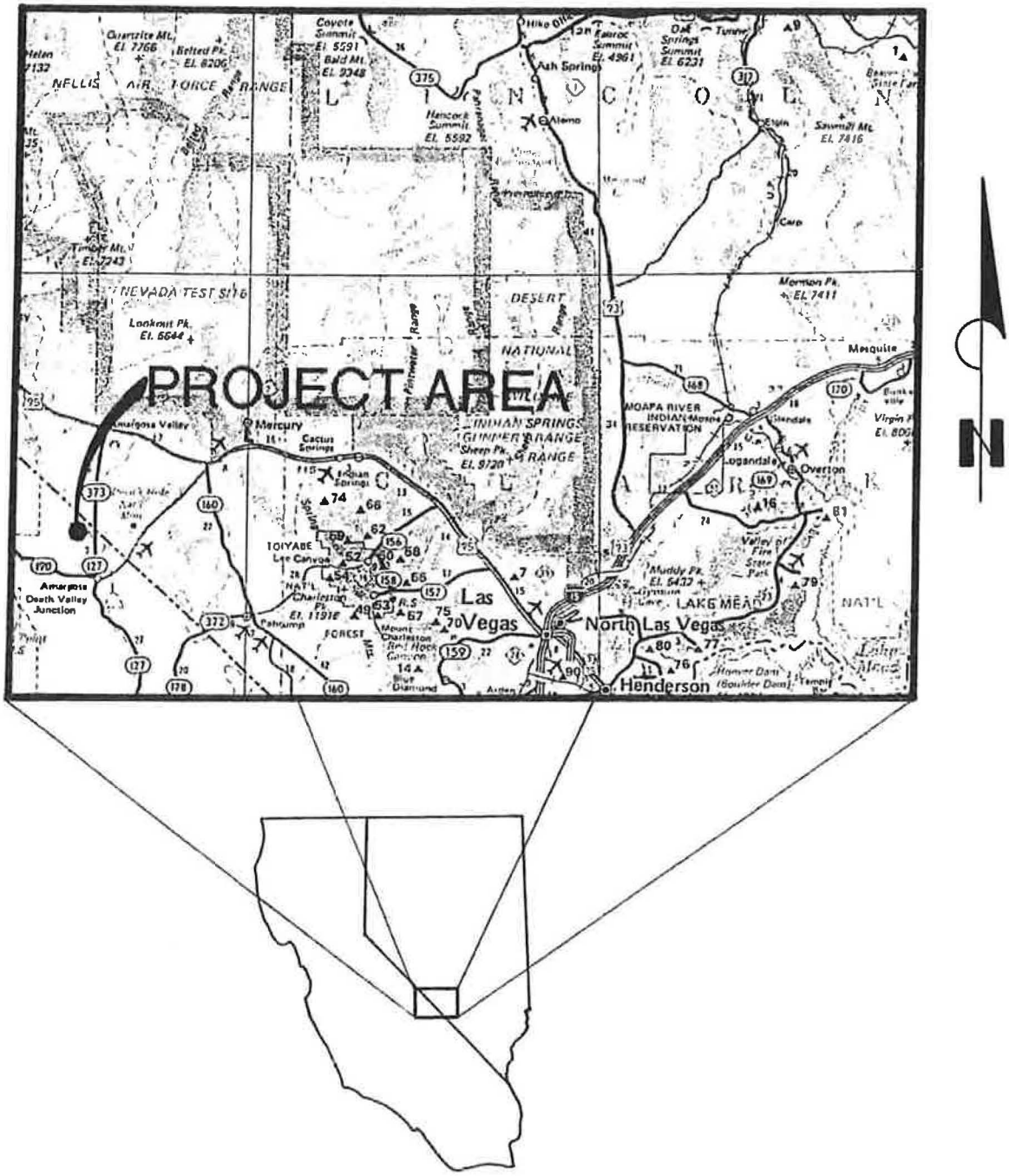
2.1 Project Location and Access

The IMV Project area is located in the Amargosa Desert east of Death Valley, approximately 100 miles northwest of Las Vegas, Nevada (Figure 2.1-1). This is a remote, sparsely vegetated, arid setting in which the dominant landform consists of flat, slightly undulating dry lake beds. The operations consist of a milling facility and three mining areas located within Nye County, Nevada, and one small mining operation located in Inyo County, California, about two miles from the California - Nevada border.

The nearest settlements to the project site are the towns of Amargosa Valley (previously known as Lathrop Wells) and Pahrump, Nevada. The mining operation is located about 15 miles south of Amargosa Valley and 22 miles northwest of Pahrump. The milling facility and company headquarters are located about 13 miles south of Amargosa Valley, just west of State Highway 373.

The IMV Project hectorite operation is presently reached by traveling about 13 miles south from Amargosa Valley on State Route 373, then traveling west for approximately 2-1/2 miles to the plant area and then south 1-1/2 miles on the haul road to the pit. For the most part, access to the mining area is along preexisting county or other gravel roads. See Plate 1.

Attachment C



PROJECT NO. 15506	PREPARED BY: STEFFEN ROBERTSON & KIRSTEN Consulting Engineers	FIGURE 2.1-1
DATE 5-90		GENERAL LOCATION MAP
REVISION		

126840

2.2 Project Area and Land Status

IMV/Floridin's land position in the Inyo and Nye county areas consists of approximately 46,000 acres of patented and unpatented claims. The milling facility and two of the mining areas, the Bentonite and Saponite Mines, are located on patented claims in Nevada and will not be discussed in any detail in this document. The Nevada Sepiolite Mine has been described in a separate Plan of Operations which was submitted to the BLM Las Vegas District Office, Stateline Resource Area in October of 1989 and will not be discussed further in this document. The Hectorite Mine, the subject of this revised POO, is located on 46 unpatented placer mining claims in Inyo County, California on lands administered by the Barstow Resource Area Office of the BLM. Within the Hectorite mining area, IMV/Floridin controls a block of approximately 800 acres of unpatented placer mining claims in portions of Section 1 T26N, R4E; sections 5, 6, T26N, R5E; section 31 T27N, R5E (Plate 1). The mining operations described in this revised Plan of Operation are confined to a portion of Section 6 T26N, R5E. A list of the affected mining claims is included in Appendix A.

2.3 Summary of Project Activities

The IMV Project site has been the site of clay mining and milling since the 1970's. Prior to that date the project area was the site of mineral prospecting, sporadic mining, and limited production. As mentioned above, IMV/Floridin's mining operation consists of four separate mining areas each representing a different type of clay resource. The mineral deposit at each site consists of discrete bodies of minable clay of various grade and mineralogy. Bentonite, hectorite, saponite, and sepiolite clays are presently being mined by IMV/Floridin.

Attachment C

The hectorite mining operation is confined to portions of the White King 1, and White King 2 GH placer claims, located approximately near the center of Section 6, T26N, R5E (Plate 1). The hectorite clay mining operation starts by stripping the overburden with a bulldozer and placing the overburden in overburden storage areas. Typically the overburden is approximately 10 feet thick. The overburden is either placed in overburden storage areas or in temporary piles adjacent to the pits. Where feasible, the overburden is used as backfill material to reclaim some of the previously mined out pit.

Once exposed, the clay is mined by a two-person team operating a combination of a bulldozer and a loader. The clay is removed from the pits and placed in stockpiles adjacent to the pit. Enough clay is mined from the pit to provide mill feed for one to one and one half months. Following mining, the stockpiled hectorite clay is then hauled to the milling facility in Nevada near the Nevada-California border, where it is processed into various industrial specialty clay products. The total hectorite pit typically covers less than two acres in area (of which only small portions are mined at one time) and range from ten to forty feet deep. Pit access is provided by two roads into and out of the pit; the pit access roads have a maximum grade of approximately 10 percent. The haul road used to transport the hectorite from the mine area is a pre-existing gravel road. The road is watered on a regular basis for dust control and is also bladed to facilitate vehicle traffic.

3.0 DETAILED PROJECT DESCRIPTION

3.1 Geology

Hectorite is a hydrous magnesium silicate that occurs with saponite, and bentonite. All of these minerals are found in flat-lying beds within the same valley. The clay-bearing rocks are the youngest in the valley and are probably Pleistocene or late Pliocene in age. Bentonite is the oldest clay formed. Saponite, sepiolite, and hectorite were formed later and occur in discrete beds that occur above, below, and sandwiched between each other.

Within the Hectorite Mine area, the ore consists of a mixture of hectorite (25%) and microcrystalline, highly porous calcium carbonate (75%) with accessory silica in the form of siliceous sinter and opal. The ore is highly brecciated and is devoid of bedding. The hectorite clay deposit is about 2 miles in length and averages 600 to 800 feet in width. The average thickness is about 15 feet, but thicknesses vary from zero to 40 feet.

The association of the hectorite deposit with siliceous sinter suggests that it formed by precipitation of calcite and hectorite from hot springs as the spring water reached the surface. The linear shape of the deposit indicates that there was a line of closely spaced springs. The hectorite and calcite deposited by the springs eventually coalesced into a single linear deposit.

The basic structure of hectorite is similar to that of other clays such as saponite, with two silica tetrahedra sheets and a central sheet of magnesium ions. In hectorite, however, lithium is substituted frequently for magnesium in the central cation layer of the crystal. This substitution results in an unbalanced charge which gives rise to a high cation exchange capacity for the mineral. It also causes distortions in the crystal lattice which

result in the typical needle or hair shaped hectorite crystal. This shape plus the high cation exchange capacity are the primary factors that give hectorite its extremely high viscosity characteristics.

Organics react with hectorite more readily than with other clay minerals. Hectorite is therefore used extensively to produce the exotic organoclad products used for making high temperature greases, for the thickening of oil based paints, and in oil-based drilling muds and cosmetics. Dispersed hectorite has a greater thickening effect on aqueous suspensions than any other clay.

3.2 Mining Schedule and Equipment Requirements

3.2.1 Mining Schedule

The hectorite is mined and hauled to the processing plant by one three-person mining/hauling crew working up to ten hours per day, and up to five days per week. Mining occurs in campaigns about every other month in which approximately 1,800 tons of hectorite are mined from one pit and hauled to the plant or stockpiled adjacent to the pit for a short time. Mining this quantity of hectorite ore takes the mining crew from a week to a week and a half depending upon the mining schedules for the other IMV Project clay mines. Once the hectorite ore has been mined from a pit, the mining effort shifts to either the bentonite, saponite, or sepiolite mining deposits in Nevada. This mining schedule provides approximately 10,000 tons of hectorite mill feed per year. Hauling occurs on the same schedule as mining.

3.2.2 Equipment Requirements

Because the IMV hectorite deposit is shallow and consists of poorly consolidated (i.e., soft) rocks, the clay can be mined using light-

duty equipment. Table 3.2-1 lists the equipment required for the IMV Hectorite Project. This equipment list may be revised during the life of the mine to suit mining conditions.

3.3 Work Force

The IMV Project currently employs 52 hourly and 20 salaried employees. The hectorite mining operation involves three employees for mining/hauling, and another two employees involved with mining equipment maintenance. IMV/Floridin employees commute to the site from a variety of communities including Las Vegas, Amargosa Valley, Pahrump, and surrounding rural areas. Table 3.3-1 shows a breakdown of employee functions for the IMV Project.

Attachment C

Table 3.2-1

MINING EQUIPMENT LIST

EQUIPMENT	QUANTITY
Front-end Loaders	
- Caterpillar 980-B 4 cu yd	1
Haul Trucks	
- Double-tandem, tractor trailer highway trucks (50 ton)	2
Dozers	
- Caterpillar D-8H Tracked Dozer single shank w/ripper and straight blade	1
Motor Grader	
- Caterpillar 12 E w/scarifier	1
Mobile Auger Drill	1
- 3 1/2" Diameter	
Water Truck	
- 3,000 Gallons	1
Maintenance Vehicles	
- Pickup Truck	1
Service/Fuel Trucks	
- 1960 Kenworth	1

NOTE: Equivalent equipment makes and models may be utilized

TABLE 3.3-1
IMV PROJECT WORKFORCE

Project Role	Number of Employees
Mining:	
Mining/hauling/road maintenance	6
Mine Equipment Maintenance	2
Mine Engineer/Supervisor	1
Milling:	
Dry Mill	26
Maintenance	8
Lab (Salaried)	7
Wet Organo Circuit	12
Plant Salaried Employees	9
Plant Manager	1
TOTAL:	72

3.4 Open-pit Mining Operation

3.4.1 Mining

The IMV Hectorite Mine is a near-surface, soft rock deposit which can be mined using shallow, open-pit mining methods and utilizing a light-duty dozer. Mining entails some drilling to locate the clay, but no blasting of the ore and overburden is required.

During the year long mining campaign, 10,000 tons of hectorite ore are mined from one pit as discussed in Subsection 3.2.1. The hectorite deposit has a low stripping ratio of approximately 1.0 to one, overburden to ore. Thus the average 10,000 ton mining campaign involves mining about 20,600 tons of combined ore and overburden. As described in Section 3.5, the mined overburden material is typically placed in the previously mined area as backfill material or is placed in an overburden storage area. Once a hectorite mining campaign has ended, the mining equipment is then

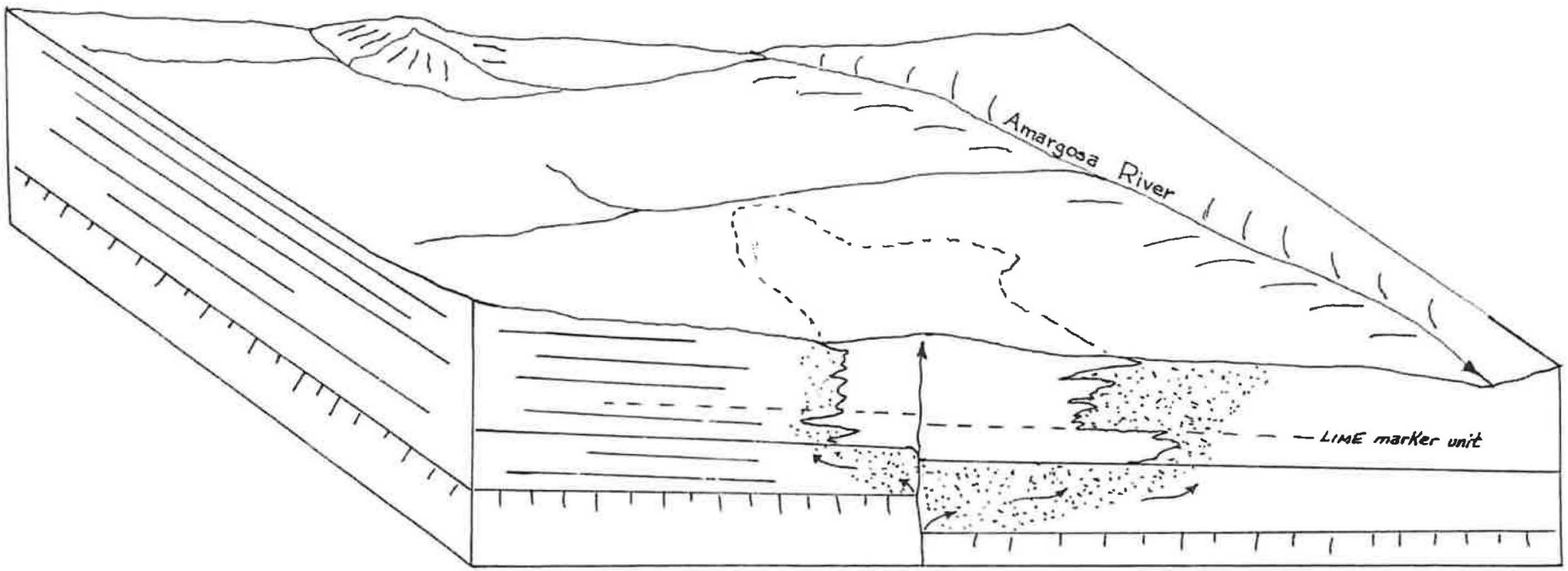
moved to another IMV/Floridin mining site, where a different clay type is produced. Before the hectorite stockpile from one mining campaign is depleted, mining commences on an adjacent hectorite pit.

The mining is performed by stripping an average of 10 feet of overburden from the area above the clay deposit with a bulldozer. Typically, up to 35% of an area about 100 feet by 750 feet is exposed to be mined at one time. Smaller areas are exposed and mined at one time to keep the clay from drying out. After the area is stripped, the dozer is used to segregate ore-grade clay from sub-grade clay to a depth of between 10 and 40 feet, depending on the thickness of the clay bed. The two groups of clay are then removed separately with the front-end loader. Mining currently has not extended to the water table. The mined hectorite clay is then hauled to the processing facilities or stockpiled in the vicinity of the pit for a short time before hauling.

Each open pit is rectangular in shape and at its deepest point is approximately 30 to 40 feet deep. Depending upon local characteristics, pit walls may be nearly vertical and are not typically benched. Because the hectorite is laterally continuous, the pits are contiguous. Depending upon logistical considerations and whether additional clay ore reserves exist at depth, the hectorite pits are backfilled with overburden material and regraded to blend in with the local flat-lying topography. Backfilling, where appropriate, occurs in a consecutive or leapfrogging mode, and overburden material removed from the active mining site is placed in the adjacent pit in which mining was most recently completed. Figure 3.4-1 is a cross section showing the geology of the hectorite deposit. A generalized pit configuration and the backfilling sequence used to reclaim the pits is outlined on Plate 1.

Attachment C

Cross Section



ZONE A - Reworked alluvial gravels & hectorite

ZONE B - Hectorite / $CaCO_3$, gravelly away from spring centers

ZONE C - Reworked gravels & hectorite

ZONE D - Alluvial & Amargosa River gravels

Plate 1 also shows the past, present, and planned locations for hectorite mining. As shown on Plate 1, each mining campaign encompasses a panel of ground approximately 100 by 750 feet. Thus each mining campaign produces less than 2 acres of surface disturbance per year which includes the pit, the temporary overburden storage areas, and ore stockpile areas. The fifty year mining plan described in this revised Plan of Operations will thus disturb approximately 100 acres. Previous mining activities have disturbed approximately 7 acres of land on unpatented claims, about 6 of which have been reclaimed by backfilling some of the mined areas as shown on Plate 1.

3.4.2 Clay Stockpiles

Clay is stockpiled at each pit in heaps approximately 10 to 12 feet high. If more than one clay type or grade is present in the pit, they are segregated into discrete stockpiles. As discussed in Subsection 3.2.1, approximately one and a half months of mill run hectorite is stockpiled at the pit location during a hectorite mining campaign. The clay is hauled to the mill before it dries out. Since the clay is still moist it releases no dust to the atmosphere. Thus it is not necessary to stabilize the hectorite stockpiles to prevent wind erosion.

3.4.3 Ore Loading and Hauling

The stockpiled hectorite is loaded into the haul trucks with a front-end loader and is transported 1-1/2 miles to the mill facility. As described in Table 3.2-1, the haul truck is a double-tandem, tractor trailer highway truck which can carry 50 tons of ore. An average of 10,000 tons of hectorite is hauled from the mine to the mill each year. Hauling takes place on a one ten-hour shift per day, and up to five days per week.

3.5 Overburden Disposal Areas

Approximately 10,000 tons of overburden will be mined from each mine panel during each hectorite mining campaign. Overburden will either be hauled to the existing overburden storage areas, will be placed in temporary new overburden disposal areas located within each mine panel, or will be used as backfill material to fill in adjacent mined out pits. The specific overburden handling routine is determined for each mining campaign and is influenced by the configuration of the ore and consideration of future access to deeper portions of the orebody, the economics of overburden hauling and the need to minimize haulage costs, and site specific logistical constraints. Each mining panel shown in Plate 1 includes enough space for a new 37,500 ton overburden disposal area. The overburden will be moved with the same dozer and loader used to mine the ore.

3.6 Ancillary Facilities

All of the ancillary and support facilities required to mine the hectorite ore are located on patented ground at the mill site in Nye County, Nevada. No electrical power or water supply is required at the mine site, and there are no fuels or reagents stored at the mine site. The mining equipment is refueled as needed by a mobile service truck which brings fuel from the mill area out to the mining equipment. Sanitary and solid waste disposal facilities are also located at the plant site.

3.7 Project Schedule

The mining project shown in Plate 1 and described in this revised Plan of Operations has an approximate 50 year mine life. It is very likely that the future exploration drilling described in Section 3.10 will successfully define additional reserves which

will extend the mine life even further. An Amended Plan of Operations will be submitted to the BLM for future mining operations occurring outside the present mine plan area shown on Plate 1.

The hectorite mining schedule involves one ten-hour shift per day, operating five days per week during the mining campaign. This schedule produces sufficient stockpiles of hectorite ore to last for approximately 1-1/2 months as described in Subsection 3.2.1. Hauling operations for the stockpiled ore involve one ten-hour shift per day, operating up to five days per week. For the most part weather conditions are such that mining and milling can proceed any time of the year. However, operations may be temporarily suspended if severe thunderstorms and wet conditions warrant.

3.8 Haul Roads

Routine access to most of IMV/Floridin's mining and milling facilities is provided by pre-existing gravel roads. Few new roads were constructed by previous operators to access the facilities. As shown on Plate 1, the haul and access road to IMV/Floridin's plant traverses patented and unpatented mining claims as well as public lands not controlled by IMV/Floridin. As presently planned, no new haul roads are planned for any of the mining activities in California, although some internal mine roads may be built within the mining panels shown on Plate 1. Roads are placed over previously disturbed lands when feasible.

Generally speaking, the roads used by IMV/Floridin are 25-ft wide, relatively flat, graveled surfaces. IMV/Floridin maintains these roads on a regular basis using a motor grader. Because these were preexisting roads, the general public is allowed to use all of IMV/Floridin's haul and access roads, but these roads are signed

to indicate that they are used by mining equipment and that IMV/Floridin assumes no liability for public use of the roads.

The road to the pit area is a private road and not used by the general public. No perceivable danger is presented to the public by the pit. The pit is small and not easily accessed due to berms and stockpiles.

IMV/Floridin, to comply with air quality regulations, has a program for controlling fugitive dust from the haul roads. Dust on the roads is minimized by regular passage of a water truck which distributes approximately 6,000 gallons of water per day on the roads on the days mining and hauling takes place. The water for dust control is taken from the mill plant processing supply.

3.9 Exploration Drilling

An exploration drilling program is planned for the project area shown in Plate 1. Exploration drilling will be performed on an incremental basis over the next ten years using a mobile, truck-mounted 3 1/2 inch-diameter auger drilling rig. Approximately 10-15 holes per year will be drilled on already disturbed lands. Generally speaking the holes are drilled to a maximum depth of 45 feet. No drilling fluids are used during drilling thus eliminating the need for mud pits. Due to the flat topography in the hectorite mine area, no drill roads are needed to support this drilling program. Because the drill truck is highly mobile, even over rough terrain, access to the drill sites can be accomplished via cross-country travel. The only disturbance associated with the drilling project will be the drill hole and a small area immediately adjacent to the drill hole.

3.10 Milling Facility

IMV/Floridin's milling facility is located on patented claims near the Nevada-California border as shown on Plate 1. As such the milling operation is not discussed in any detail in this revised Plan of Operations, however, a brief description of the milling process is provided for informational purposes.

The mill plant processes the various clay types through two distinct processes: the first produces industrial gel products, and the second produces organoclays.

Industrial gel production accounts for approximately 95 percent of the IMV plant production volume. The process begins with extrusion of the clay through dieplates at high pressure to mix the clay with an additive and to predisperse the clay needles. Either MgO or soda ash are added at this stage, and are used to enhance the viscosity characteristics of the clay and to improve the stability of the gel mixture. After extrusion, the clay is dried in either a rotary kiln dryer or a flash dryer. Material dried in the rotary dryer is further processed in a Raymond roller mill to reduce the clay to the proper grind. If the material is dried in the flash dryer, it is dried, ground, and sized in the impact mill that is part of the flash dryer circuit.

Typically, the sepiolite clay is treated with MgO and processed through the flash dryer/impact mill circuit. The bentonite and saponite clay types are treated with soda ash and processed through the rotary dryer/roller mill circuit.

The wet organoclay circuit produces highly specialized products known as organoclad or surface modified clays. The products are super dispersible in organic solvents and are used in oil based drilling applications, inks, greases, asphalt cutbacks, and paints.

The process begins with a slurry preparation stage where the dry clay (bentonite or hectorite) is put into a very low solids mixture of clay and water. The slurry then is put through several stages of classification to concentrate the fine, pure clay particles. The classified material is then sent to a reaction tank where the clay is reacted with a surfactant. The material is then filtered, dried, ground to size in a pin mill, and then bagged and weighed. Typical production of the organoclay circuit is two to three tons per day, which makes up about five percent of the plant production.

A settling pond and recharge basin are located near the milling facility. Slurry from the plant is piped to the settling pond, and the remaining water is routed to the recharge basin.

Process water for the mill plant and ancillary facilities is supplied by production wells located northwest of the milling facility in Nevada. Water use at the mill averages 140,000 gallons per day, or about 160 acre-feet per year. Potable water for personnel consumption is supplied by two wells located at the mill site.

An administrative office, assay lab, and first aid station are housed in a building located in the vicinity of the milling facility. The office area provides space and facilities for the engineers, geologists, and management personnel required for the day-to-day operation of the mines and mill. A maintenance shop equipped to handle routine maintenance and most repair work on mine equipment is also located in the mill area.

Adequate fire protection measures and a fire protection plan have been established at the project site in order to protect the natural resources of the area, mine and mill facilities and personnel, and to maintain compliance with regulations imposed by the Mine Safety and Health Administration (MSHA) and by applicable

state and county building codes and regulations. IMV/Floridin has instituted a training program and has rehearsed a fire-fighting plan with all employees.

4.0 AFFECTED ENVIRONMENT

4.1 Land Use

Land use in the Amargosa Valley consists of limited agriculture, ranching, mining, real estate, and supporting businesses in the towns. Extensive irrigated agriculture was attempted in the area in the 1950's and early 1960's as a result of the Desert Land Entry Act but proved to be uneconomic. At present only 2,000 to 3,000 acres of land are irrigated and supporting crops, and the remaining patented land is either dormant or is subdivided for use in speculative real estate transactions.

The largest existing commercial operations in the Amargosa Desert are the American Borate Colemanite processing mill, and the IMV clay mining and processing operations. The American Borate mill operation, located about 4 miles southeast of IMV's mill, consists of crushing, drying, and calcining of the borax tailings. IMV's operations consist of a milling facility and three mining areas located within Nye County, Nevada, and one small mining operation located in Inyo County, California, about two miles from the California - Nevada border. The four separate mining areas each contain a different type of clay, which occur as discrete bodies of minable clay of various grade and mineralogy. Bentonite, saponite, and sepiolite clays are presently being mined at the Nevada mines, and hectorite is currently being mined in California.

4.2 Topography and Soil Resources

The Hectorite Mine area is located on the alluvial fans formed on the northeastern slopes on the Funeral Mountains. Dry wash channels that are part of the braided drainage network developed on the alluvial fans traverse the site from west to east. As a result, the site is slightly dissected and well drained. The fan

surface is generally flat and has an overall slope to the northeast, where it eventually merges with the Amargosa River flood plain. The mine area is underlain by granular alluvial fan materials with local concentrations of clay soils. These deposits are overlain by a volcanic and carbonate gravel veneer that originates in the Funeral Mountains to the southwest. The Recent flood plain and river channel sediments show extremes in grain size and lithology depending on the variable source areas contributing to river runoff and sediment loads. Underlying the alluvial sediments are deposits of bentonite and hectorite clay.

4.3 Vegetation

Most of the alluvial fan is occupied by the creosote bush community. This community is dominated by creosote bush (Laurea divaricata) and burr sage (Franseria dumosa). Associated species include desert holly (Atriplex hymenolytra) as well as numerous members of the cactus family. The lowest portions of the alluvial fans are dominated by shadscale (Atriplex confertifolia). This community also includes scattered communities of mesquite (Prosopis juliflora) and associated saltbushes (Atriplex lentiformis and Atriplex polycarpa) with an understory of saltgrass (Distichlis stricta).

4.4 Ground Water Elevation

Ground water encountered in the Amargosa Desert Basin area originates primarily in the highlands to the north and northeast. Two major regional ground water systems, the Pahute Mesa and the Ash Meadows systems, meet in the Basin and discharge water by evapotranspiration. Water is also discharged southward from the Basin as underflow beneath the Amargosa River and westward through and under the Funeral Range into Death Valley. Very small quantities of water reach the ground water reservoir from local

precipitation in the Amargosa Desert or in the immediately surrounding mountains.

Annual recharge to the Basin is estimated at about 45,000 acre feet. Discharge estimates based primarily on evapotranspiration rates fall in the order of 24,000 to 30,000 acres feet annually. The difference between the recharge and discharge by evapotranspiration, some 15,000 to 21,000 acres feet of water annually, may be discharged from the basin as outflow into Death Valley. Much of the water is believed to be in a deep carbonate aquifer that underlies the central part of the Basin. About 17,000 acre feet per year of water is discharged from the basin in springs that occur primarily in the southeastern part of the basin. Water also moves upward through the valley fill from the deep carbonate aquifer and reached the land surface or depths close enough to the land surface to discharge by evapotranspiration.

Ground water levels in the basin range from 330 to 365 feet deep in the vicinity of the town of Amargosa Valley, from 40 to 175 feet in T16S, R48E and R49E, and from 40 to 80 feet in T17S, R48E and R49E. This water has been exploited for agricultural development from approximately 175 wells in the area south of Amargosa Valley.

4.5 Surface Water Characteristics

There is no surface water in the mine area.

4.6 Climate

The project area is in the extreme southwestern portion of the Amargosa Desert, located within the arid Mojave Desert Region of southern California and the adjacent portion of Nevada. Climate in this region is classified as arid continental type, with mild, short winters and long, hot summers. Annual precipitation in the

lowlands averages 3 to 6 inches, far below the annual evaporation from free water surfaces, which ranges from 60 to 82 inches. Summer air temperatures are often in excess of 110 degrees F, whereas night temperatures in the winter are often below freezing. Winter daytime temperatures are typically in the range of 50 to 60 degrees F. The average annual evaporation in the Amargosa Desert is conservatively estimated at eight feet. Precipitation is more frequent in the winter and in the summer. In the winter, precipitation commonly originates in the west and is associated with regional low pressure systems. Summer storms are usually convective, are rather intense but local in extent, and originate in the south or southeast.

5.0 EMISSION-POLLUTION CONTROL AND MONITORING

5.1 Control of Fugitive Dust From Roads and Disturbed Surfaces

Roads and disturbed surfaces within the mining and processing areas are watered to control fugitive dust. The specific control used meets the specifications required by the regional air quality board.

5.2 Runoff and Sediment Control

As no major, year-round drainages exist within the project area, heavy sediment loads are not present. Because the hectorite mines are a considerable distance from any topographic highs from which runoff could drain, drainage diversion and sediment control are not typically a concern. If conditions warrant runoff and erosion control, temporary sediment traps will be installed as necessary.

5.3 Spill Prevention and Containment Plan

IMV/Floridin is developing a detailed spill prevention plan to alleviate the potential impact of fuel and chemical spills in the project area. Containments to prevent migration of spills and physical methods of neutralization and control are used in the event of a spill. Because no reagents are used in the mine site, this spill prevention plan pertains mainly to the plant area on patented ground. However, this plan also specifies the measures to be taken in the event of a fuel spill at the mine site during mining equipment refueling. Any soil contaminated by a fuel spill would be excavated to the extent practical, placed in drums, and disposed of in an appropriate landfill.

6.0 RECLAMATION

In keeping with past and present reclamation efforts, it is IMV/Floridin's intention to reclaim future mining-related disturbance where conditions and current reclamation technology permit and as required by the BLM, California state agencies, and Inyo County. This chapter discusses IMV/Floridin's reclamation practices for the IMV Hectorite Project.

General reclamation plans are discussed below as they pertain to construction operations, interim reclamation, and final reclamation of the open pits, overburden disposal areas, and haul roads. The reclamation measures in effect at the IMV Project are consistent with the BLM's long-term management objectives for the area and provide for the long-term safety and stabilization of the area.

6.1 Backfilling, Grading, and Slope Stabilization

In general, finished cuts and fills are graded to slopes appropriate to the soil type and generally flat terrain of the area, and consistent with construction economy and long-term stability. Slopes remaining on the overburden storage areas or in any pits which are not backfilled are designed to maximize stability and to minimize erosion. Hydrologic and visual compatibility are also important elements in the final landform design.

In pits which are not backfilled, portions of the highwall remain essentially vertical although modified as necessary to provide stability and ingress and egress. For those pits which are backfilled, the resulting surface is regraded to blend into the surrounding flat terrain. Final grading of cuts and fills in unconsolidated material creates undulating landforms with a maximum slope of 2.5H:1V, and an average slope of 3H:1V. Sharp edges are

rounded and straight lines softened to provide contours which are visually and functionally compatible with the surrounding terrain. The overall final grading of all areas provides for perpetual drainage and minimal erosion.

6.2 Stabilization and Reclamation of Project Components

6.2.1 Open Pit Reclamation

Most of the hectorite pits have been reclaimed in the past by backfilling. Backfilling of the pits is accomplished by placing overburden material from the currently mined pit into the adjacent mined-out pit. This backfilling sequence is illustrated in Plate 1. The resulting configuration is a relatively flat or slightly bowl-shaped area which is regraded to blend into the surrounding flat terrain. In this manner, the reclaimed pits differ little from the surrounding topography. Plate 1 shows the previously backfilled hectorite pit areas.

Future economic considerations may warrant leaving some of the pits open to facilitate future mining of additional reserves below the pit bottom. Pits which are not backfilled will be left in a stable condition with ramps providing access into and out of the pits. Non-backfilled pits will be a maximum of 30 to 40 feet deep. The slope of the pit walls will vary according to rock conditions, and in areas of competent rock (generally carbonate-rich zones) may approach vertical.

6.2.2 Overburden Storage Area Reclamation

Overburden not used as backfill material will remain in overburden storage areas which will be reclaimed to blend into the surrounding topography to the extent practical. Reclamation efforts for the overburden storage areas will consist of regrading to create

rounded, undulating mounds that blend in with the surrounding landscape as much as possible. It is anticipated that an overall slope gradient of 2.5H:1V or less can be achieved, and proper drainages will be maintained on either side of the area.

6.2.3 Road Reclamation

Most of the haul roads will not be closed and reclaimed upon completion of mining because many are preexisting roads which are used for public access throughout the area. However, some of the internal mine roads will be closed and reclaimed. After the internal mine roads are abandoned, grading will reestablish natural drainages. Any culverts will be removed and the crossing contoured back to a condition similar to the pre-existing drainage areas. Where necessary, the road will be "outsloped" to permit natural drainage. Borrow ditches will be filled in to permit outsloping and allow water drainage. Where practical, the compacted roadbed will be ripped to a depth of the wearing surface. Erosion control methods will be implemented as necessary during reclamation of any steeper portions of the roads.

6.2.4 Rehabilitation of Drainage and Erosion Control

As no major, year-round drainages exist within the project area, no drainages will be affected and heavy sediment loads are not present. Because the hectorite mines are a considerable distance from any topographic highs from which runoff could drain, drainage diversion and sediment control are not typically a concern. If conditions warrant runoff and erosion control, temporary sediment traps will be installed as necessary.

6.3 Removal/Disposal of Equipment, Structures, Refuse, Etc.

No permanent structures are located at the mine site, as all of the ancillary and support facilities required to mine the hectorite ore are located at the mill site. No electrical power or water supply is required at the mine site, and there are no fuels or reagents stored at the mine site. The mining equipment is transported to the mine site at the beginning of a mining campaign and is moved to another area when the campaign is finished. Equipment is refueled as needed by a mobile service truck which brings fuel from the mill area out to the mining equipment. Sanitary and solid waste disposal facilities are also located at the plant site.

6.4 Control of Contaminants

No contaminants are generated by the mining operation.

6.5 Resoiling and Revegetation

As is typical of most desert soils, the local soils are sands and clays that contain essentially no nutrients or organic matter. There is thus little or no topsoil in the project area. Furthermore, the uppermost two to six feet of soil contain moderate to high concentrations of soluble salts. This surface accumulation of salts is due to upward movement of ground waters containing dissolved salts, and evaporation of the water which leaves residual salt deposits.

The lack of topsoil or growth media precludes topsoil stripping and salvaging in the project area. Because of the shallow nature of the clay deposits, essentially all of the overburden is composed of the unconsolidated silts and gravels that comprise the soil in the area. The overburden material is stockpiled during mining and is then used to backfill the pit during reclamation, as described

in Section 6.2.1 above. This overburden stripping and backfilling operation mixes the poor quality soils that contain abundant salts with less saline subsoils. This mixture of soil and subsoil represents a slightly improved soil media.

Revegetation in the context of reseeding is not practical in the poor soils and the desert climate at the project site. With time, natural revegetation does occur as demonstrated by some of the older, partially revegetated areas at the IMV Project.

6.6 Future Uses

The ultimate physical condition of the site after reclamation will be essentially identical to the pre-mining configuration. The original topographic contours will be restored, all pits will be backfilled, and all overburden storage areas will be reclaimed. The original soil materials will be replaced and may be slightly improved, as described above.

Proposed future use(s) or potential uses of the reclaimed site are limited due to the arid environment, poor soil conditions, and lack of water in the area. The most likely future use of the site will be mining of additional clay reserves, if any remain after the current operation is closed. The reclamation methods described in this plan will have limited effects on future mining at the site. In each campaign, all of the clay ore is removed from each pit as it is mined, the pit is backfilled, and the operation continues in an adjacent area. Thus it is unlikely that future mining will require re-opening of the reclaimed pits.

Attachment C

APPENDIX A

LIST OF AFFECTED UNPATENTED MINING CLAIMS

Attachment C

Exhibit A

Unpatented Mining Claims located in

Inyo County, California

Claim Name	County Recordation Location Notice Date	Inst. No.	BLM (CA MC) Serial No.
White King	10/28/88	88 6274	215666
White King A	10/28/88	88 6275	215667
White King CD	10/28/88	88 6276	215668
White King EF	10/28/88	88 6277	215669
White King 1	10/28/88	88 6278	215670
White King 1 CD	10/28/88	88 6279	215671
White King 1 EF	10/28/88	88 6280	215672
White King 1 JK	10/28/88	88 6273	215665
White King 1 LM	10/28/88	88 6281	215673
White King 1 NP	10/28/88	88 6282	215674
White King 1 QR	10/28/88	88 6283	215675
White King 2	10/28/88	88 6284	215676
White King 2A	10/28/88	88 6285	215677
White King 2 CD	10/28/88	88 6286	215678
White King 2 EF	10/28/88	88 6287	215679
White King 2 GH	10/28/88	88 6288	215680
White King 2 L	10/28/88	88 6289	215681
White King 3	10/28/88	88 6290	215682
White King 3 CD	10/28/88	88 6291	215683
White King 3 EF	10/28/88	88 6292	215684
White King 3 GH	10/28/88	88 6293	215685
White King 3 JK	10/28/88	88 6294	215686
White King 3 LM	10/28/88	88 6295	215687
White King 3 QR	10/28/88	88 6297	215689
White King 3 NP	10/28/88	88 6296	215688
White King 4	10/28/88	88 6298	215690
White King 4 AB	10/28/88	88 6299	215691

Attachment C

County Recordation
Inyo County, California

Claim Name	Date	Inst. No.	BLM (CA MC) Serial No.
White King 4 CD	10/28/88	88 6300	215692
White King 4 F	10/28/88	88 6301	215693
White King 4 LM	10/28/88	88 6302	215694
White King 4 NP	10/28/88	88 6303	215695
White King 4 QR	10/28/88	88 6304	215696
White King 6	10/28/88	88 6305	215697
White King 6 AB	10/28/88	88 6306	215698
White King 6 CD	10/28/88	88 6307	215699
White King 6 EF	10/28/88	88 6308	215700
White King 6 GH	10/28/88	88 6309	215701
White King 6 LM	10/28/88	88 6310	215702
White King 6 N	10/28/88	88 6311	215703
White King 7	10/28/88	88 6312	215704
Floozy Duzy	10/28/88	88 6267	215659
Floozy Duzy CD	10/28/88	88 6268	215660
Floozy Duzy F	10/28/88	88 6269	215661
Floozy Duzy LM	10/28/88	88 6270	215662
Floozy Duzy NP	10/28/88	88 6271	215663
Floozy Duzy QR	10/28/88	88 6272	215664

Attachment C

COUNTY OF INYO

PLANNING COMMISSION
COUNTY SERVICES BUILDING
P.O. BOX 237
INDEPENDENCE, CALIFORNIA 93526

February 28, 1974

Mr. William Tilden
398 West Fourth St.
San Bernardino, Ca. 92401

Dear Mr. Tilden:

At the regular meeting of the Inyo County Planning Commission held on February 27, 1974, the following action was taken on the application of Industrial Mineral Ventures, Inc., for a Conditional Use Permit:

> "Moved by Commissioner Sorrells, seconded by Commissioner Wiltsie that we approve the Conditional Use Permit with the restrictions dated February 27, 1974, as discussed today and presented to the Commission by the District Attorney's Office and the Planning Department and amended by the Commission; and, that we accept the Environmental Impact Report with the added comment from the Planning Commission that we wish to disagree with those statements indicating that this project will have a minimal or beneficial impact upon the environment. We acknowledge in our statement that there most certainly is a large impact of unknown value upon the environment and we must consider this as an environmental trade-off. The use of this large deposit of mineral will definitely have an impact on the environment but that the need for this mineral for man's activities will, then, have to outweigh the environmental considerations in this particularly isolated geographical area." , Motion carried.

Enclosed you will find two signed Permits (the application) with the conditions attached. This Permit expires February 27, 2024.

Sincerely,

Kenney L. Scruggs

Miss Kenney L. Scruggs
Secretary

Enc.

Attachment C

CONDITIONS PLACED ON THE CONDITIONAL USE PERMIT FOR

INDUSTRIAL MINERAL VENTURES, INC.

February 27, 1974

1. That the Conditional Use Permit is granted for mineral development of and/or removal of mineral from the mining claims and will also cover the lands now covered by prospecting permit upon the issuance of a preferential lease by the State Lands Commission; all the aforementioned land is located in T. 26 N., R. 4 and 5 E., SBB&M, in Inyo County, and

2. That applicant conform to the County's Archeological Ordinance, and

3. The operator shall continuously maintain the premises to the extent reasonably practicable and desirable to prevent the creation of or remove potentially dangerous conditions, to control dust conditions, and present a generally neat and orderly appearance in keeping with the surrounding open desert area. The operator shall report to the Planning Department every two (2) years the maintenance procedures utilized during the preceding period. The Planning Commission shall, at the time of the report, review the procedures for sufficiency and approve, or approve with modification, their use for the ensuing period.

4. The operator shall within six (6) months of the depletion of any area, or cessation of extraction activities in any area, restore the excavated area in accordance with reasonable restoration procedures as hereinafter provided.

   It is acknowledged that the area covered by the Permit will not be capable of complete restoration to its prior condition because of the removal of the mineral substance, and unless otherwise required or permitted by the Planning Commission, restoration work shall leave no excavated areas with a slope exceeding one vertical to two horizontal and excessive slopes shall be graded in conformance with reasonable and accepted mining practices, and

5. That this permit shall be valid for a period not to exceed fifty (50) years and shall terminate at an earlier time if significant mineral development or removal ceases for any consecutive 24 month period or if any sale or transfer of this applicant's interest in the property or operation is made without the advance permission from the County for transfer of this permit to the new owner or operator, except that permission is hereby granted to applicant to sell or transfer to any entity owned or controlled by applicant, and such sale or transfer shall not affect the validity of this Permit and will not require further authorization. Upon the termination of this Permit, all fixtures, equipment and buildings shall be removed within six (6) months from the termination date.

EXHIBIT H. State of California - Resources Agency (Department of Fish and Game)

> "...We see no problem with either report and have no comments to make at this time."

As can be seen by the above statements, concern was expressed over subsurface drainage, vegetation, dust and fencing the mining areas.

The Planning Department discussed with the Department of Fish and Game the effects of the mining operation on the subsurface drainage and the pupfish. They felt that as long as there was no exaction and use of the water that the pupfish and the subsurface drainage would not be affected adversely.

After discussions with Dean Smith, Inyo County Farm Advisor, Dr. James Young, University of Reno, and Dr. Paul T. Tueller, University of Reno, re-vegetation of the Desert Holly and other such desert shrubs might be accomplished, but such projects were in the development stages and the economic feasibility could not be accurately estimated at this time.

Sloping and/or fencing of the open pits should be done for human and animal protection. Pit areas that reach the water table should be sloped to provide an access for the animals.

Roads in the area should be stabilized to prevent any further blowing of sand or dust.

Attachment F

RESOLUTION NO. 2025-06

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF INYO, STATE OF CALIFORNIA, RECOMMENDING THAT THE INYO COUNTY BOARD OF SUPERVISORS CERTIFY THE PROPOSED PROJECT IS EXEMPT FROM THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AND MAKE CERTAIN FINDINGS WITH RESPECT TO AND APPROVE GENERAL PLAN AMENDMENT NO. 2025-03/BYK USA INC.

WHEREAS, the Inyo County Board of Supervisors, by and through Inyo County Code (ICC) Section 15.12.040, has designated the Planning Commission to serve as the Environmental Review Board pursuant to Section 15022 of the California Environmental Quality Act Guidelines ("CEQA Guidelines"), and maintain responsibility for the environmental review of all County projects; and

WHEREAS, the Inyo County Planning Department determined that General Plan Amendment (GPA) No. 2025-03/BYK USA Inc., pertaining to properties near Death Valley Junction identified as Assessor Parcel Numbers 041-380-01, 041-380-02, and 043-030-04 (the "Project"), is exempt from environmental review pursuant to CEQA Guidelines §15061(b)(3), the common sense exemption, as the proposed land use map correction has no possibility of causing significant environmental effects and does not involve new or intensified development; and

WHEREAS, pursuant to Senate Bill 18 (SB18) and Government Code Section 65352.3, in October 2024 the County requested a list of applicable Native American contacts from the California Native American Heritage Commission (NAHC); and

WHEREAS, the NAHC transmitted a list of applicable Native American contacts to the County on June 19, 2025 for purposes of SB18 consultation; and

WHEREAS, on June 25, 2025, the County sent certified letters initiating Native American Consultation pursuant to the California Government Code Sections 65040.2, 65092, 65351, 65352.3, 65352.4, 65562.5, to the Big Pine Paiute Tribe of the Owens Valley, Big Sandy Rancheria of Western Mono Indians, Bishop Paiute Tribe, Death Valley Timbi-sha Shoshone Tribe, Fort Independence Indian Community of Paiutes, Kern Valley Indian Community, Lone Pine Paiute-Shoshone, North Fork Rancheria of Mono Indians, Tule River Indian tribe, Twenty-Nine Palm Band of Mission Indians, Utu Utu Gwaitu Tribe of the Benton Paiute Reservation, and Wuksachi Indian Tribe/Eshom Valley Band; and

WHEREAS, as specified by Senate Bill 18 and per Government Code Section 65352.3, the tribes have 90 days to initiate the consultation process after notification; and

WHEREAS, on October 12, 2025, 90 days after the last certified mail receipt from the notification letters was received by the County, no tribes had initiated consultation; and

WHEREAS, pursuant to sections 65854 and 65855 of the Government Code, the Inyo County Planning Commission is required to conduct a public hearing on proposed GPAs and ZRs, and to make a recommendation to the Board of Supervisors regarding each; and

WHEREAS, on August 14,2025, the County published notice in the Inyo Register and mailed notice to property owners within three-hundred (300) feet of the Projects' location, of a public hearing to take public comment on GPA No. 2025-03/BYK USA Inc to be held on September 24, 2025; and

WHEREAS, the Inyo County Planning Commission held a duly noticed public hearing on September 24, 2025, to review and consider the request for approval of GPA No. 2025-0/BYK USA Inc and considered the staff report for the project and all oral and written comments regarding the proposal; and

WHEREAS, ICC Section 18.03.020 states, in part, that it is necessary for the County's Zoning Ordinance to be consistent with the County's General Plan; and

WHEREAS, the proposed amended General Plan designation of Natural Resources (NR) replaces the existing designation of State and Federal Lands (SFL) in order to reflect current private ownership and ensure consistency with the site's long-standing use for mineral resource extraction; and

WHEREAS, GPA No. 2025-03/BYK USA Inc. is intended to correct the General Plan designation to reflect current private ownership and the site's continued use for mineral resource extraction, thereby aligning the land use map with both existing zoning and long-term planned use of the property; and

NOW, THEREFORE, BE IT HEREBY RESOLVED, that based on all of the written and oral comment and input received at the September 24, 2025, hearing, including the Planning Department Staff Report, the Inyo County Planning Commission makes the following findings regarding the Projects and hereby recommends that the Inyo County Board of Supervisors adopt the following findings for the proposed project:

The recitals above are incorporated herein as findings.

RECOMMENDED FINDINGS

1. **Based on substantial evidence in the record**, the Planning Commission recommends that the Board of Supervisors find that General Plan Amendment (GPA) No. 2025-03/BYK USA Inc. is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines §15061(b)(3), the "common sense exemption."The project proposes only a correction to the General Plan Land Use Map to reflect existing private ownership of parcels formerly designated as State and Federal Lands (SFL). The change to Natural Resources (NR) does not involve any new development or expansion of land uses and has no possibility of causing a significant effect on the environment.
2. **Based on substantial evidence in the record**, the Planning Commission recommends that the Board of Supervisors find that GPA No. 2025-03 is consistent with the Goals and

Policies of the Inyo County General Plan. The Natural Resources (NR) designation supports the continued use of the site for mineral resource extraction, consistent with General Plan Policy 08.4.4, which 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." The proposed GPA ensures consistency between the General Plan map and the site's long-standing permitted use and private ownership status.

3. **Based on substantial evidence in the record**, the Planning Commission recommends that the Board of Supervisors find that GPA No. 2025-03 is consistent with the Inyo County Zoning Ordinance, as required by Inyo County Code Section 18.03.020. The site is currently zoned Open Space (OS), which allows mineral extraction under a Conditional Use Permit. The proposed NR designation aligns with the existing zoning and approved land use, ensuring consistency between the General Plan and Zoning Map.
4. **Based on substantial evidence in the record**, the Planning Commission recommends that the Board of Supervisors find that the site is physically suitable for the land use designation of Natural Resources (NR), and that existing public services are adequate to support continued mineral extraction. The site has been in continuous use as a permitted mine since the 1970s. No new physical development is proposed, and no additional infrastructure or services are required to maintain the existing operations consistent with the NR designation.
5. **Based on substantial evidence in the record**, the Planning Commission recommends that the Board of Supervisors find that approval of GPA No. 2025-03 will not adversely affect public health, safety, or welfare. The GPA reflects a change in map designation only and does not alter the scope, intensity, or method of operations previously permitted. The site will continue to operate under existing regulatory oversight, with no new land disturbance authorized by this action.

BE IT FURTHER RESOLVED that the Planning Commission recommends that the Board of Supervisors take the following actions:

RECOMMENDED ACTIONS

1. Certify that GPA No. 2025- 03/BYK USA Inc. is exempt from CEQA under General Rule 15061(b)(3).
2. Make certain findings with respect to and approve GPA No. 2025-03/BYK USA Inc. based on all the information in the public record and on the recommendation of the Planning Commission.

PASSED AND ADOPTED this 24TH day of September, by the following vote of the Inyo County Planning Commission:

AYES:
NOES:
ABSTAIN:
ABSENT:

Todd Vogel, Chair
Inyo County Planning Commission

ATTEST:

Cathreen Richards, Planning Director

By _____
Sally Faircloth,
Secretary of the Commission

RESOLUTION NO. 2025-XX

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF INYO, STATE OF CALIFORNIA, CERTIFYING THAT THE PROVISIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT HAVE BEEN MET AND MAKING CERTAIN FINDINGS WITH RESPECT TO AND APPROVING GENERAL PLAN AMENDMENT NO. 2025-03/BYK USA INC.

WHEREAS, the Inyo County Board of Supervisors, by and through Section 15.12.040 of the Inyo County Code (ICC), has designated the Planning Commission as the Environmental Review Board pursuant to Section 15002 of the California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines); and

WHEREAS, pursuant to Section 15025 of the CEQA Guidelines as implemented by ICC 15.12.040, the Planning Commission is responsible for environmental review of all qualifying County projects; and

WHEREAS, pursuant to Government Code sections 65353 and 65354, the Planning Commission shall review and recommend action on proposed general plan amendments; and

WHEREAS, ICC Section 18.03.020 states, in part, that it is necessary for the County's Zoning Ordinance to be consistent with the County's General Plan; and

WHEREAS, the Inyo County Planning Department has determined that the proposed General Plan Amendment (GPA) No. 2025-03/BYK USA Inc., pertaining to properties near Death Valley Junction identified as Assessor Parcel Numbers 041-380-01, 041-380-02, and 043-030-04 (the "Project"), which will change the current designation of State and Federal Lands (SFL) to a new designation of Natural Resources (NR), is necessary to reflect current private ownership of the parcels and the site's continued use for mineral resource extraction, thereby aligning the land use map with both existing zoning and long-term planned use of the property; and

WHEREAS, the Inyo County Planning Department has determined that General Plan Amendment (GPA) No. 2025-03/BYK USA Inc. is exempt from environmental review pursuant to CEQA Guidelines §15061(b)(3), the common sense exemption, as the proposed land use map correction has no possibility of causing significant environmental effects and does not involve new or intensified development; and

WHEREAS, pursuant to Senate Bill 18 (SB18) and Government Code Section 65352.3, on June 19, 2025, the County requested a list of applicable Native American contacts from the California Native American Heritage Commission (NAHC); and

WHEREAS, the NAHC transmitted a list of applicable Native American contacts to the County on June 19, 2025; and

WHEREAS, on June 25, 2025, the County sent certified letters initiating consultation pursuant to Government Code Sections 65040.2, 65092, 65351, 65352.3, 65352.4, and 65562.5 to all applicable tribes; and

WHEREAS, in accordance with SB18 and Government Code Section 65352.3, the tribes had 90 days to initiate consultation, and as of [October 12, 2025 – 90 days after last receipt], no tribes initiated consultation; and

WHEREAS, pursuant to Government Code Sections 65353 and 65354, the Inyo County Planning Commission conducted a duly noticed public hearing on October 22,2025 , to consider GPA No. 2025-03/BYK USA Inc. and at that time recommended approval to the Board of Supervisors; and

WHEREAS, the Board of Supervisors held a duly noticed public hearing on TBD, and considered all written and oral testimony presented concerning GPA 2025-03/BYK USA Inc.

NOW, THEREFORE, BE IT HEREBY RESOLVED that, based on all written and oral comment and information presented, including but not limited to the Planning Department staff report, the Board of Supervisors makes the following findings for the proposed project:

1. The above recitals are incorporated herein as findings.

2. CEQA Exemption: General Plan Amendment No. 2025-03/BYK USA Inc. ("GPA") is exempt from environmental review under CEQA Guidelines Section 15061(b)(3), the "common sense exemption" on the basis that the project proposes only a correction to the General Plan Land Use Map to reflect existing private ownership of parcels formerly designated as State and Federal Lands (SFL). The change to Natural Resources (NR) does not involve any new development or expansion of land uses and has no possibility of causing a significant effect on the environment.

3. General Plan Consistency: The GPA is consistent with the Inyo County General Plan, specifically Policy 08.4.4, which supports continued mineral resource extraction with environmental safeguards.

4. Zoning Consistency: The GPA aligns with Inyo County Code Section 18.03.020 and the site's current Open Space (OS) zoning, which allows mining with a Conditional Use Permit.

5. Site Suitability: The site has operated as a mine since the 1970s and requires no new services or infrastructure to support the Natural Resources designation.

6. Public Health, Safety, Welfare: The GPA reflects a map correction only. No new disturbance is proposed. Continued regulatory oversight remains in place.

BE IT FURTHER RESOLVED that the Board of Supervisors of the County of Inyo, State of California, hereby approves General Plan Amendment No. 2025-03/BYK USA Inc., changing the General Plan land use designation from State and Federal Lands (SFL) to Natural Resources (NR) for Assessor Parcel Numbers 041-380-01, 041-380-02, and 043-030-04.

BE IT FURTHER RESOLVED, as a condition of approval, the applicant shall defend, indemnify, and hold harmless the County of Inyo, its agents, officers, and employees from any claim, action, or proceeding against the County, its agents, officers, or employees, to attack, set aside, void, or annul the approval of General Plan Amendment No. 2025-03/BYK USA Inc. The County reserves the right to prepare its own defense.

BE IT FURTHER RESOLVED that this resolution shall take effect thirty (30) days after the date of its adoption.

PASSED AND ADOPTED THIS TBD

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

Scott Marcellin, Chairperson

Inyo County Board of Supervisors

ATTEST:

Nate Greenberg
Clerk of the Board

By _____

Darcy Israel, Assistant