



# Interoffice Memo

**DATE:** October 15, 2014

**PHONE:** (909) 387-4105

**FROM: GEORGE KENLINE**  
Mining/Engineering Geologist  
Land Use Services Department, Mining Section

**TO: HONORABLE PLANNING COMMISSION**

<b>SUBJECT</b>	<b>SIGMA CLAY - REQUEST FOR ITEM POSTPONEMENT</b>
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Comments received from the Town of Apple Valley require further clarification before the Conditions of Approval can be finalized.

Additional time is required for the Town to finalize road improvement recommendations along the access route.

The Planning Division and the Applicant request postponement of this item to November 06, 2014.



# LAND USE SERVICES DEPARTMENT PLANNING DIVISION PLANNING COMMISSION STAFF REPORT

**HEARING DATE: October 23, 2014**

**AGENDA ITEM 3**

## Project Description

**APN:** 0464-022-54-0000  
**APPLICANT:** Webber – Pyley, Inc  
**COMMUNITY:** Apple Valley/1st Supervisorial District  
**LOCATION:** EMERALD ROAD, NORTH SIDE; MERIDIAN ROAD BOTH SIDES  
**PROJECT NO.:** AP20120001/RMC (SIGMA CLAY MINE)  
**CONTRACT STAFF:** REUBEN J. ARCEO  
**REP(S):** WEBBER & WEBER MINING CONSULTANTS  
**PROPOSAL:** REVISION TO AN APPROVED MINING CONDITIONAL USE PERMIT AND RECLAMATION PLAN TO EXTEND THE LIFE OF THE MINE TO 2052, ALLOW CONTINUED EXCAVATION UP TO 40 FEET IN DEPTH, AND PROVIDE EROSION CONTROL FOR A 40.8-ACRE CLAY MINE.



**Report Prepared By:** Reuben J. Arceo  
**P.C. Field Inspection Date:** October 15, 2014

## SITE INFORMATION:

**Parcel Size:** 40.8 Acres  
**Terrain:** Consists of a flat, playa lake bed with minimum topographic relief  
**Vegetation:** Saltbush scrub, Russian thistle, London rocket and red brome vegetation.

## SURROUNDING LAND DESCRIPTION:

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
SITE	Existing Clay Mining Pit	AV/FW (Apple Valley Community Plan/Floodway)
North	Vacant Undeveloped Land	AV/RL-20/FW (Apple Valley Community Plan/Rural Living-20 Acres/Floodway)
South	Vacant Undeveloped Land	AV/RL-20/FW (Apple Valley Community Plan/Rural Living-20 acres/Floodway)
East	Vacant Undeveloped Hillside	AV/FW (Apple Valley Community Plan)
West	Vacant Undeveloped Land	AV//RL-20/FW (Apple Valley Community Plan/Rural Living -20 Ares/Floodway)

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**AGENCY**

City Sphere of Influence:

Water Service:

Sewer Service:

**COMMENT**

Town of Apple Valley

Bottled Water

Portable Toilets

Supports

N/A

N/A

**STAFF RECOMMENDATION:** That the Planning Commission **ADOPT** a Mitigated Negative Declaration, **ADOPT** the proposed Findings, **APPROVE** the Revised Mining and Reclamation Plan 92M-04 subject to the attached Conditions of Approval and incorporated Mitigation Measures, and **FILE** the Notice of Determination.

NOTE: In accordance with Section 86.08.010 of the Development Code, the action taken by the Planning Commission may be appealed to the Board of Supervisors within ten (10) calendar days after the Planning Commission hearing.

## **SUMMARY/BACKGROUND**

On January 13, 2012, Webber & Webber Mining Consultants, on behalf of Webber-Plyley (Applicant), Inc., located at 101 East Redlands, Blvd., Suite 240 in the City of Redlands, filed an application to revise the existing Mining Conditional Use Permit and Reclamation Plan (collectively “the Project”) to permit continued quarrying within a previously disturbed 31.5-acre area located within a 40.8 acre parcel as shown in the Mining Site Plan in Figure 4 and the extension of the mine’s operating period for forty (40) years. The Sigma Clay Mine is located in Fairview Valley in the desert region of Central San Bernardino County approximately eight miles northeast of Highway 18 and the Town of Apple Valley and approximately 8.5 miles southeast of Interstate 15 as noted on Figure 1. The parcels surrounding the mine are privately owned lands and are moderately disturbed by off-road recreational use. Undeveloped government and privately owned desert lands lie to the north, east and west and have exhibit similar disturbances by off-road vehicles. The nearest occupied residential sites are located approximately one-half mile northeast/east/southeast from the project site. Staff received comment letters from property owners whose parcels reside within 300 feet of the project site, attached as Exhibit G.

The mine is accessed by means of an existing 1.7-mile Bureau of Land Management (BLM) Right-of-Way as noted in Figure 2. from Johnson Road, then southerly along an unnamed public access dirt road. The dirt road leads to the Sigma Clay Mine entrance at the northwestern portion of the site via a ramp that will cross over a three foot high crushed rock/Gunnite perimeter berm and earthen swale system.

The Applicant initially obtained Planning Commission approval on July 7, 1992 to commence clay mining operations within a previously undisturbed dry-lake bed, identified as Reed Dry Lake (now Fairview Dry Lake). The lake bed material is relatively uniform common clay with the first ten feet composed of very fine clay that can be utilized as an ingredient in the manufacture of brick and roof tile. Since topsoil does not exist on the site, all the material can be utilized as product. The dry lake bed is classified as a Mineral Resource Zone (MRZ-2) for clay mineral resources. MRZ-2 zones are areas designated by the State Geologist and the State Mining & Geology Board as lands containing mineral deposits of regional or statewide significance. The 1992 mining approval permitted the excavation of approximately 700,000 tons of clay material to a depth of ten feet for a period of 25 years (or until June 18, 2022), amounting to an average annual production rate of 28,000 tons. The mine would revert to open space after reclamation of the mine site and function as a watershed basin.

On January 13, 2011, the Applicant submitted an Interim Management Plan (IMP) in accordance with Public Resources Code, Section 2770(h)(1) as the mine’s production had dropped by more than 90 percent of the operation’s maximum annually approved mineral production rate since 2008 as demand for the product decreased. The primary purposes of an IMP are to ensure that:

- The financial assurances required for reclamation remain in effect during the period that the surface mining operation is idle;
  - The IMP is considered a minor amendment to the surface mining operation’s approved reclamation plan;
  - The approved IMP incorporates measures that ensure the operator will implement and maintain the site in accordance with SMARA, Section 2770;
  - If the surface mining operation remains idle after the expiration of its IMP, the operator shall commence reclamation in accordance with its approved reclamation plan; or
  - May be renewed for an additional five year extension.
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The County approved the Applicant's IMP, attached as Exhibit F. As shown in the photographs in Figures 5, the site has been revegetated with primarily Saltbush scrub, Russian thistle and similar plant species to the extent that much of the original mining features have disappeared since the cessation of mining in 2008. The IMP expires in January 2016.

In accordance with the State Mining and Geology Board Regulations (California Code of Regulations, Section 3502(h)(1)), where a surface mining operation has an approved Reclamation Plan and financial assurances covering the entire surface mining operation, and the mining operator proposes to disturb new lands that are not included in the approved Reclamation Plan, the operator may amend the existing Reclamation Plan to encompass the new area designated for use together with any other changes necessary to amend the Reclamation Plan to conform to current SMARA standards. The Applicant's Reclamation Plan has been reviewed by County staff as well as the California Department of Conservation, Office of Mining Reclamation (OMR), and found to be in general conformance with Public Resources Code (PRC) Section 2770 of the Surface Mining and Reclamation Act of 1975 ("SMARA"). Attached as Exhibit E is OMR's September 25, 2014 response letter to the County letter dated September 10, 2014, attached as Exhibit F, stating that most of the issues responded in the County's letter have been addressed. Staff has reviewed and considered the items that remain outstanding and determined the items can be addressed through the project's conditions of approval.

**Figure 1**  
 Regional Location Map  
 Sigma Clay Mine





On September 23, 2014, in accordance with the PRC Section 2774(d)(2), the County provided OMR thirty (30) days advance notice of its intent to recommend approval of the Applicant's revised Mining & Reclamation Plan to the Planning Commission at the October 23, 2014 public hearing.

**Figure 2**  
 Sigma Clay Mine Haul Truck Route



## **PROJECT PROPOSAL**

The Applicant proposes the expansion of the existing pit area by increasing the quarry pit depth from ten (10) feet to forty (40) below ground surface (BGS) and disturbed up to 36.4 acres as noted in Figure 3 and the extension of mine operations for forty years. The mine will generally continue to excavate clay materials in the same manner as past operations within the previously disturbed 31.5 acres located entirely within the dry lake bed. As the entire material is utilized for product, there will be no overburden left on site. Mining equipment is mobilized to the project site as the market dictates. The Applicant estimates that active quarrying may occur between 50-200 days per year and will generate up to approximately 40-60 daily truck trips during active excavations. The mine may then be dormant for 30-90 days at a time, until the next purchase order is acquired. Operations will be conducted up to six (6) days per week during daylight hours utilizing a Caterpillar Track Loader of medium size. No blasting will occur. The loader will rip the clay and the product will be loaded directly onto 25-ton bottom dump trucks. A 4,000 gallon water truck will be utilized on site during clay loading operations for dust suppression. Drinking water will be imported since no on-site water production wells exist. Visual impacts are expected to be negligible since mine activity will be occurring at depths ranging between 10 and 40 feet bgs and the natural hills and mountains

screen the site from residents of the Town Apple Valley and travelers along Interstate 15 and Highway 18.

The route the mine haulers will be using as noted in Exhibit 2 is primarily along Johnson Road. The portion of Johnson Road west of Joshua Street and a portion of Stoddard Wells Road are located within the Town of Apple Valley's jurisdiction. Approximately 3 miles of Johnson Road and 1.8 miles of Stoddard Wells Road lie roughly within the Town of Apple Valley. Apple Valley's General Plan Truck Route Map indicates that Johnson Road is cited as a Through Truck Route and Stoddard Wells Road as a Local Truck Route. The Apple Valley General Plan Circulation Element lists Johnson Road east of Stoddard Wells Road as providing a Roadway Capacity of 40,500 daily trips and operating at Acceptable limits. Stoddard Wells Road east of the I-15 is "Approaching Capacity". The Apple Valley Planning Department was informed of the posting and circulation of the project's initial study for review and comment. Staff has reviewed and considered the comments provided by the Town of Apple Valley in their letter dated September 30, 2014 and believes the Conditions of Approval address the Town of Apple Valley concerns as much as possible. The request by the Town for paving of Johnson Road within the Town is not directly and proportionately attributable to the traffic generated by this project, to warrant that requirement as a condition of approval.

The Project Site vicinity to the north has historically supported mining operations. There are three active mining operations, which include the White Mountain, Black Mountain and Alvic and Alumina quarries, which support CEMEX's concrete plant and rail facilities.

The following is a breakdown of the mine's operation.

- The site will be mined to a depth of 40 feet bgs within a 40.8-acre site.
- The Project will operate six (6) days per week during daylight periods between the hours of 6:00 a.m. and 5:00 p.m.
- Quarrying will occur between 50 to 200 days per years
- The quarry will be dormant between 30 to 90 days.
- The extraction site is anticipated to yield 20,000 to 100,000 tons of clay material annually.
- Approximately 40-60 trucks trips per day are anticipated.

Shown below in Table 1 is a comparison of the existing and proposed Project modifications.

**Table 1: Project Comparison**

	<b>1992 Approval</b>	<b>Proposed</b>
Acreage	31.5 Acres	36.4 Acres
Production Rate	28,000 tons annually	20,000 – 100,000 tons annually
No. of Employees	4	6
Days of Operation	6 Days/Daylight	6-Days/Daylight.
Truck Trips	4-6 trips	40-60 trips
Operational Mining Period	June 2022	December 2052

Upon the cessation of mining activities in the year 2052, equipment not required for further reclamation will be removed from the site. It is not anticipated that any equipment will remain onsite at the project's end. Reclamation will occur concurrently with mining operations to the extent practical as portions of the project site are graded or excavated to final approved elevations with graded slopes not steeper than 4:1 as shown in the project's Reclamation Plan in Figure 4. Table 2 indicates the project's reclamation timetable.

**Table 2: Reclamation**

<b>RECLAMATION SCHEDULE</b>			
<b>Phase</b>	<b>Date Begin</b>	<b>Date Complete</b>	<b>Activity</b>
1	Ongoing	2032	Continue intermittent excavations and collection of available seeds from the project site. Establish revegetation test plots no later than 2032
2	2032	2052	Monitor revegetation test plots and make adjustments if necessary.
3	2032	2052	Rip & recontour finished project areas that will not be disturbed by further mining activities. Revegetated based on results of the revegetation test plot activities.
4	2052	2052	Mining excavations cease. All excavating equipment is removed from the site. Final grading of disturbed project areas, continue revegetation activities.
5	2052	2052	A qualified individual will determine the success rate for revegetation activities, and may recommend additional monitoring.
6	2052	2057	If recommended by qualified individual continue revegetation to ensure success
7	2057	2057	Reclamation expires

The final site configuration after mining ceases will be a depression that will retain a significant amount of stormwater to augment the storage capacity of Fairview Dry Lake. The final use of the reclaimed site will be privately-owned, revegetated vacant open space land. The objective will be attained under the direction of a qualified botanist who will oversee the seed gathering process and provide guidelines for successful seed germination and transplanting of species if required. Complete reclamation of the site will include mitigation of any potential erosion hazards and revegetated with indigenous species. During all proposed mine and reclamation activities, public safety measures will be undertaken to the extent practical. The quarry site will comply with all Federal and California OSHA mine safety regulations and throughout project operations the Applicant will be responsible for carrying out the Maintenance and Monitoring Program based on the San Bernardino County approved Reclamation Plan and Conditions of Approval and submitting their annual mining operation reports to OMR and the County.

In compliance with PRC Sections 2770 and 2773.1, the Applicant currently maintains two financial bonding mechanisms with the County to assure successful reclamation in the unlikely event the Applicant cannot fulfill their reclamation responsibilities in accordance with the existing approved Reclamation Plan. SMARA requires that Financial assurances be annually reviewed and adjusted commensurate to current and proposed disturbances.







**Figures 5**  
Sigma Clay Site



South View Orientation





Project Site



Project Site



## **ANALYSIS:**

**Land Use Compatibility.** The site is located within the "Apple Valley/Floodway" land use zoning district, which allows a limited number of uses, including mining operations, subject to County approval of a CUP. The properties surrounding the site are similarly zoned Flood Waters/Rural Living-20. The proposed Project would not physically divide an established community, and is consistent with all applicable land use policies and regulations of the County's General Plan and Development Code.

The Project area is located in Fairview Valley northeast of Apple Valley. Compliance with the Mitigation Measures for biological resources contained within the Initial Study ensures that the Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan or any other approved local, regional or state habitat conservation plan.

**Initial Study.** In compliance with the California Environmental Quality Act (CEQA), an Initial Study, attached as Exhibit A, was completed and routed to the State Clearinghouse for circulation (SCH# 2014081068). The 30-day comment period concluded on September 26, 2014. Comments were received from the State of California Department of Fish and Wildlife (CDFW); Mojave Desert Air Quality Management District, Department and California Department of Transportation. Staff has reviewed the comments and determined that concerns raised in the comment letters have been adequately addressed in the Initial Study (Ref. Section IV Biological Resources and Section V Cultural Resources and Section XVI Transportation and Traffic). Please refer to Exhibit H for copies of the comment letters.

The comments did not trigger the need for substantial revisions or re-circulation of the environmental document due to the reasons discussed in the following paragraph following the summary of mitigated environmental factors.

**Mitigated Environmental Factors.** Of the environmental factors potentially affected, mitigation measures are being recommended for Biological Resources and Cultural Resources.

1. **Biological Resources:** In accordance with CEQA, a Biological Resources Assessment and Focused Survey for Desert Tortoise (Survey) were conducted at the Sigma Clay Site on June 2 and July 1, 2010. The project site is within the West Mojave Plan (WMP) planning area but not within a specific conservation area. The surveys were intended primarily to evaluate the potential occurrence of special status wildlife, and including focus surveys for the desert tortoise and burrowing owl. The Survey revealed that no listed threatened or endangered plants are known or reported from the general area and none were observed during the surveys. With regard to special status wildlife, the site is not within a critical habitat for the desert tortoise. No burrowing owls were observed or expected to nest on the project site at the present time, and both the Mohave Ground Squirrel and American Badger were determined to have a low probability to occur on the project site due to the lack of vegetation cover and the degraded nature of the habitat. In that the Initial Study determined with mitigation, the Project would have no impacts, the mine operator shall implement the following mitigation measures to avoid potential impacts to the desert tortoise. These measures include: the operator informing all personnel regarding the desert tortoise and how to deal with tortoises if they are encountered; implementing a litter control program; requiring inspection for tortoises under vehicles to avoid accidental harm; allowing only authorized biologists to handle

tortoises; and ceasing all work in an area upon discovery of a desert tortoise until the tortoise is relocated. With regard to the burrowing owl, prior to 30 days to initiating mining activities, a pre-construction survey must be conducted for the desert tortoise by a qualified biologist. To mitigate riparian habitat/wetlands impacts, the Applicant shall prepare a Jurisdictional Delineation by a qualified biologist. Impacts to jurisdictional areas that are regulated by the CDFW and RWQCB shall be mitigated at a 2:1 ratio through an off-site mitigation bank or the contribution of in-lieu fee program acceptable to the County and CDFW and RWQCNB. To mitigate impacts to nesting birds, vegetation and habitat grading and removal shall not be scheduled during the bird nesting season (generally February 15 through August 1).

2. Cultural Resources: A Mitigation measure has been incorporated requiring that if at any time evidence of human remains are found, all work is to cease and a certified archaeologist and a culturally affiliated Native American with knowledge in cultural resources should be contacted. With regard to evidence of archaeological or historic discovery, all work shall cease and the County shall consult with qualified experts prior to allowing permitted operations to commence.
3. Traffic: As the project anticipates generating approximately 40 to 60 daily truck trips, and is a continuation of operations that occurred when the project was active prior to September 2008, traffic is expected to increase as a result of this project. The following is the expected daily trip generation when the mining facility is operating at maximum capacity:
  - Six employees travelling to and from the site = 12 daily passenger car equivalents (PCE).
  - Sixty (60) haul trucks travelling to and from the site = 120 haul truck trips x 3 (each haul truck is the equivalent of 3 passenger car trips) = 360 PCE daily trips.
  - At peak operations the mining facility is expected to generate 372 PCE trips per day.
  - Access to the project is provided by Johnson Road which connects to Interstate 15 via Stoddard Wells Road. This access route is used by existing operations and will not change. The Apple Valley Circulation classifies the three (3) mile portion of Johnson Road within their town limits as a "Through Truck Route" operating at acceptable limits and Stoddard Wells Road as a Local Truck Route which is approaching capacity. Staff has considered the comments received from the Town of Apple Valley in their letter dated September 30, 2014 and based on the project's conditions the potential impacts associated with traffic have been mitigated.

Concerning Hydrology and Flooding, the Applicant will abide by the drainage control measures in accordance with the Hydrology Study and Flood Analysis Report prepared by Jay Gunther in October 2010 a copy of which is attached as Exhibit I. The lake bed will function as a pond that will retain a significant amount of water to augment the storage capacity of Fairview Dry Lake. The basin will provide a capacity of approximately 7,879 acre-feet, and fills to a natural spillway water surface elevation of approximately 3196' prior to discharging to the south. Consequently 100 percent of the total 100-year, 24-hour runoff volume of 3,795 acre-feet and 100 percent of the total 100-year, 5-day runoff volume of 6,740 acre-feet is contained within the basin. The proposed mine site will not adversely alter the drainage aspects of the lake bed, and will increase the storage capacity of the watershed.

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In conclusion, the Initial Study and corresponding studies determined that the proposed use, with the implementation of mitigation measures, will not have a significant effect on the environment, and a Mitigated Negative Declaration is recommended. This proposed determination represents the independent judgment of the County. All mitigation measures are included in the Conditions of Approval and are implemented through the post approval review.

**RECOMMENDATION:** That the Planning Commission:

- 1) **ADOPT** the Mitigated Negative Declaration based on a finding that the Initial Study was completed in compliance with CEQA, that it has been reviewed and considered prior to approval of the Project, and that the Initial Study/Mitigated Negative Declaration and supporting documents reflects the independent judgment of the County of San Bernardino;
- 2) **ADOPT** the Findings as attached with this Staff Report (Exhibit B);
- 3) **APPROVE** Reclamation Plan 92M-04 for the proposed 36.4 acre mining expansion within the 40.8 acre property site subject to the Conditions of Approval, attached as Exhibit C.
- 4) **FILE** a Notice of Determination.

**FIGURES:**

1. Regional Location Map
2. Sigma Clay Haul Truck Route
3. Sigma Clay Mine Plan Area
4. Sigma Clay Mine Reclamation Plan Area
5. Sigma Clay Mine Site Photographs

**ATTACHMENTS:**

- Exhibit A: Initial Study
- Exhibit B: Findings
- Exhibit C: Conditions of Approval
- Exhibit D: OMR September 25, 2014 Response Letter
- Exhibit E: County Response Letter dated September 10, 2014
- Exhibit F: Interim Management Plan
- Exhibit G: Property Owner Comments
- Exhibit H: Agency Responses
- Exhibit I: Hydrology Study & Flood Analysis Report