

***2016 Surface Mining Inspection Report
Robertson's Ready Mix
Banning Quarry
CA Mine ID# 91-33-0012***

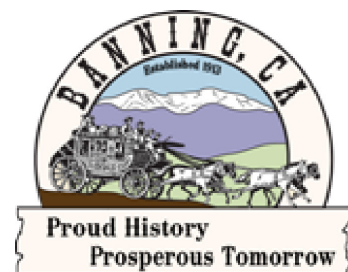
December, 2016



Prepared by:



Lead Agency:





ARAGÓN GEOTECHNICAL, INC.
Consultants in the Earth & Material Sciences

December 29, 2016
Project No. 4373-MI

City of Banning

99 East Ramsey Street
Banning, California 92220

Attention: Mr. Brian Guillot, Community Development Director

Subject: 2016 Surface Mining Inspection Report
Robertson's Ready Mix "Banning Quarry"
CA Mine ID# 91-33-0012
City of Banning, Riverside County, California.

Dear Mr. Guillot:

As agreed under the terms of City professional services contract C00116, Aragón Geotechnical Inc. (AGI) has completed the annual mandatory surface mine inspection for the above-referenced site. The 1975 Surface Mining and Reclamation Act (SMARA) requires that each surface mine in the State undergo a physical inspection at least once per calendar year (PRC §2774(b)). The inspection is geared to verifying compliance with lead agency-approved mining and reclamation plans, and adopted City ordinances. The overarching goal of SMARA is returning mined lands to safe, useful conditions. This report should accompany Robertson's 2016 Mining Operation Annual Report, to be filed after the end of calendar-year 2016 but before June 30, 2017.

AGI has now performed inspections in the Banning Quarry for 5 years. Our 2016 report simplifies and reduces many details of past AGI findings and recommendations that can be referenced in reports from 2012-2015. Past efforts were focused on filling in missing information from incomplete City and State mine files, and aiding the operator and lead agency in correcting violations from approved use permits and reclamation plans. Interested readers may wish to review the older documents for historical background and to gauge the progression of corrective actions.

The 2016 field inspection of the active mine was performed by a qualified Certified Engineering Geologist on December 12, 2016. Cool, partly cloudy and windy weather conditions were present. A relatively new (vested) mining pit had been enlarged in both area and depth from last year. Parts of the rock plant affected by mining had been dismantled and were in temporary on-site storage. Nearby, active construction observed in the South Pit was reported to be in preparation for rock plant relocation. Features

included excavations, structural concrete foundations, and above-grade formed concrete columns. It was later disclosed to AGI that the construction lacked required City plan reviews and building permits. The geologist performed a partial perimeter reconnaissance of the 186-acre mine site, checked the adequacy of off-site erosion and stormwater control measures, and performed limited visual assessments for environmental contaminants.

Previous annual inspections had disclosed that the mine was operating with "substantial variation" from the approved use permits and mining plans. Since then, the mine operator has made partial progress toward rectifying SMARA violations listed in the 2012-2015 AGI inspection reports. A new and substantially upgraded site-wide Mining and Reclamation Plan was almost complete by early 2015. Processing of the new Plan was halted when supporting environmental reviews were suspended. Agreements to reinstate environmental reviews and settle several litigation actions have been enacted via a Memorandum of Understanding between the City and mine operator. The MOU includes remedies for past mining outside of permitted areas. It presents a roadmap for approving new entitlements to mine and to build concrete batching facilities on 5 undeveloped parcels south of existing mine pits. The Mining and Reclamation Plan is incomplete with respect to the MOU entitlements, though, and will need significant revisions.

Until the EIR process is completed and the upgraded Mining and Reclamation Plan is accepted by City Council action, the old approved plans remain the governing documents. This inspection report recognizes that the operation continues to slowly move through a regulatory transition period.

We appreciate your trust in AGI's performance of this vital service to the community. Please contact our Riverside office if you have any questions.

Very truly yours,

Aragón Geotechnical, Inc.



Mark G. Doerschlag, CEG 1752
Engineering Geologist



C. Fernando Aragón, P.E., M.S.
President, G.E. No. 2994

MGD/CFA:mmm

Distribution: (4) Addressee

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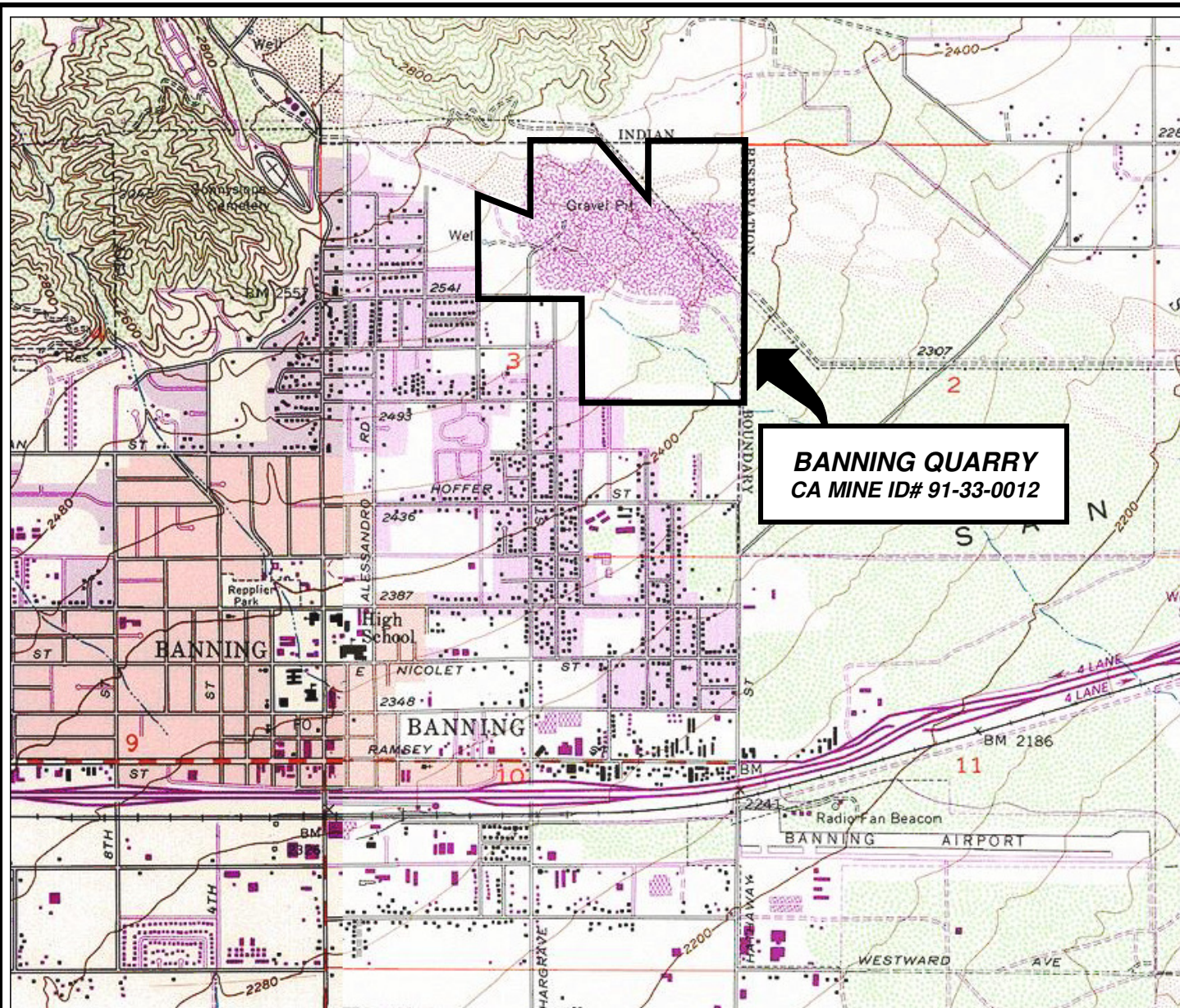
**2016 SURFACE MINING INSPECTION REPORT
ROBERTSON'S READY MIX "BANNING QUARRY"
CA MINE ID# 91-33-0012
CITY OF BANNING, CALIFORNIA**

1.0 INTRODUCTION

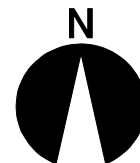
This report presents data, interpretations, opinions and recommendations by Aragón Geotechnical, Inc. (AGI) concerning site inspections of the referenced sand and gravel mining operation. Following public notices and an open bid process, AGI executed a professional services contract prepared by the City of Banning (Lead Agency) to perform the inspections in accordance with bid package instructions, the general requirements of the 1975 Surface Mining and Reclamation Act (SMARA), and City of Banning Ordinance No. 1237. The approximately 186-acre mine area comprises 20 contiguous land parcels. Site coordinates at the gated mine entrance (N. Hathaway Street) are 33.9382°N x 116.8593°W, with all mining occurring in Section 3, Township 3 South, Range 1 East (San Bernardino Baseline and Meridian). The accompanying Site Location Map (Figure No. 1) depicts the general location of the Banning Quarry with respect to local roads and surrounding land uses on a 1:24,000-scale topographic base map.

Headquartered in Corona, California, the operator Robertson's Ready Mix is the largest supplier of construction aggregate and transit-mixed concrete to the Southern California market. The Banning Quarry produces high-quality graded sand, gravel, and crushed-rock products from natural alluvial deposits. The quarry is within a State-designated Area of Regional Significance for construction aggregate, whereby lead agencies are tasked with helping to protect and develop mineral resources through the land planning process.

Primary objectives of our inspection were to (1) Determine the operator's degree of compliance with City use permits, and the (older) approved mining and reclamation plans; (2) Review and update where needed AGI's previous year's findings concerning stability of mine slopes, considering the mine's proximity to residences and public streets; and (3) Check on progress towards meeting recommendations and corrective actions for violations reported in 2012 through 2015. Topics covered by the inspection and the format of this report were based in large measure on the State publication *Surface Mine Inspection Guideline* (Department of Conservation, 2002; revised April 10, 2014), and authoritative inspection reports prepared by the State Mining and Geology Board in their capacity as lead agency for other surface mine sites. This report strives for brevity by omitting many full-length accounts of the mine's history and recent efforts to achieve SMARA compliance. The 2012-2015 inspection reports by AGI may be referenced for these data.



0 2000 4000 FT.



Reference: U.S. Geological Survey 7½-Minute Series Topographic Maps, Beaumont & Cabazon Quadrangles (1996).



SITE LOCATION MAP

ROBERTSON'S READY MIX BANNING QUARRY, BANNING, CALIF.

PROJECT NO. 4373-MI

DATE: 12/29/16

FIGURE 1

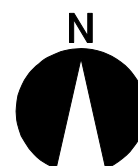
The field inspection was conducted on December 12, 2016 by AGI's senior Engineering Geologist. Representing the Lead Agency at the site meet was Mr. Arthur Chacón with the Code Enforcement Division, City of Banning Police Department, along with sworn peace officer Mr. Rob Fisher. The City's environmental quality consultant Mr. Tom Nieves joined the group from the Colton office of CASC Engineering and Consulting. Mr. Philip Sousa, Area Manager for Robertson's Ready Mix, was present to conduct a brief safety meeting, discuss planned future activities, and chauffeur the geologist to selected stops. Mr. Sousa introduced the new quarry manager, Mr. Terry Adank. Returning to the site was Mr. Warren Coalson with Robertson's technical consulting firm EnviroMINE Inc.

Mining and rock plant operations were idle on the inspection date. Truck traffic was absent, even though the inspection date was a regular business day. It was reported that mining and processing were only being done on a periodic, "as-needed" basis. It was stated and observed that the quarry's main front-end shovel had been removed from the site, and a substitute machine was in pieces and awaiting re-assembly just south of the mine-site entrance.

Inspection tour stops were made at AGI-specified sites to include (1) An overlook of the western and central portions of the "West Pit"; (2) Next to transmission line towers owned by Southern California Edison adjacent to the "East Pit"; (3) The floor of the "South Pit"; and finally (4) adjacent to the 1½-year-old, informally named "West Pit extension" where the bulk of recent extraction activity has centered (see Figure No. 2 for an aerial index image). The geologist subsequently examined by vehicle and walked the southern and western segments of the mine site perimeter. Reconnaissance was made of the San Geronio River area in the northwestern corner of the mine site plus upstream reaches previously impacted by bottom erosion up to 2,200 feet northwest of Robertson's property. A photographic record was made (126 images). Many pictures were taken from roughly the same spots as photos taken in 2012-2015. Selected pictures have been annotated, captioned, and reproduced in Appendix C.



0 500 1000 FT.



Reference: Google Earth Pro vertical image, access date 12/26/16.
Image date July 14, 2016.
Note: Small portions of mine property located north of San Gorgonio River channel have been cropped from the aerial image base.



AERIAL INDEX MAP

ROBERTSON'S READY MIX BANNING QUARRY, BANNING, CALIF.

PROJECT NO. 4373-MI

DATE: 12/29/16

FIGURE 2

2.0 MINE DESCRIPTION

The Banning Quarry is located on formerly gently sloped ground in the northeastern corner of the incorporated City limits. The site is bounded to the north and east by the Morongo Indian Reservation. The west side borders a mix of vacant parcels and older residential areas, while the irregular northwestern re-entrant is contiguous with floodplain areas managed by the Riverside County Flood Control and Water Conservation District. The southern side is close to homes and a collection of 5 industrial-zoned properties. The latter, historically used for truck and equipment storage, were noted to be completely vacant on the inspection date. All nearby residences are separated from mine property by City of Banning streets (Figure No. 2). The quarry mailing address is 1990 N. Hargrave Street, although this historical entrance is permanently closed and all traffic now enters the site from North Hathaway Street.

The San Gorgonio River crosses the northern third of the site in a roughly west-to-east flow direction. Watershed area upstream of the mine encompasses over 22 square miles of mostly mountainous terrain. Despite the significant drainage area, the river is normally dry or nearly so. It is believed to have had zero surface flows inside of Robertson's property in both 2015 and 2016. Dampness was noted upstream of a known tectonic fault line, however. The river is the source of the voluminous sand and gravel deposits exploited by the quarry, and has filled-in multiple generations of in-stream pits previously located in the active channel. Episodic floods move most sediment loads. The Riverside County Flood Control District calculates peak 100-year flood flows at approximately 12,000 cfs at the site. A historical maximum flow of about 17,000 cfs is reported for the 1969 floods.

Today's principal topographic features in the site are the 4 major open-pit excavations labeled on Figure No. 2. Pit highwalls range up to approximately 160 vertical feet in height, top to toe. The East Pit is the oldest open excavation, and is inactive. Aggregate production in 2015 utilized the South Pit (limited extraction), and the "West Pit extension". Future production was not discussed during the site meet, but is presently expected to include resources located (a) Beneath the current rock plant (to be relocated); (b) Along the north side of South Pit after a negotiated abandonment of City-owned right-of-way for Replier Road; and (c) in a future, permitted expansion of South Pit to the south.

Mining has been localized to the South Pit and West Pit for the last 15+ years. Records indicated the first SMARA annual mine inspection of the Banning Quarry was performed by Department of Conservation OMR geologists on February 20, 2002. No further inspections followed until changes in State laws concerning construction materials suppliers to State-funded projects prompted resumption of inspections in 2009. The Lead Agency contracted with the Riverside County Department of Building and Safety to perform inspection services in 2009, 2010, and 2011. Robertson's Ready Mix is the listed mine operator on the County inspection reports. As already noted, AGI has completed annual mine inspections from 2012 to the current calendar year.

3.0 RECLAMATION PLAN SUMMARIES

Parts of the 186-acre site have been used for sand and gravel mining dating back more than 90 years. A previous mine operator submitted a mining and reclamation plan on January 29, 1989 for twelve vested mine parcels located north of Repplier Road and east of Hargrave Street (ref. Figure No. 2). The City of Banning Planning Department approved the vested mining operation pursuant to SMARA, AB 747, and Ordinance No. 895 in late June, 1990. Approval was contingent upon implementation of flood control and erosion protection features specified by the Riverside County Flood Control District and a river hydrology report. The vested-area reclamation plan was approved by the Banning City Council on or about June 29, 1990.

At nearly the same time as the vested-lands reclamation plan submittal, the operator requested information regarding the conditions of approval needed to mine 60 acres of virgin ground located south of Repplier Road and north of Theodore Street. Economic conditions slowed the demand for aggregate products, however, and the formal application and fees for a use permit to mine what would become the South Pit were not filed with the City until April 8, 1993. Environmental studies addressing the issues of traffic, noise mitigation, air quality, light and glare, and operating hours were prepared in conjunction with the processing of the unclassified use permit. A second mining and reclamation plan was prepared. Although seriously deficient with respect to both the narrative descriptions of the mine site and SMARA requirements, the reclamation plan was approved by the lead agency. Unclassified Use Permit 1994-01 was granted to the operator in February, 1996.

Vested Mine Parcels, 1965 Use Permit. Mining and reclamation plans divided the vested mine area into two zones, “A” and “B”. Zone A encompassed the channel area of the San Gorgonio River and the East Pit. These sites were expected to receive periodic alluvial replenishment. The 70-acre zone would remain open to disturbance and renewed mining of the replenished deposits indefinitely into the future. Side slopes surrounding excavated areas or above flood stages would conform to 1:1 slope ratios. Fill placement or revegetation was not proposed. If mining ceased, it was expected that the river would eventually re-establish a slope gradient roughly equivalent to the original gradient from west to east. The inferred but unstated end use would be floodplain or open-space preserves.

Zone B consisted of approximately 42 acres of elevated alluvial fan south of Zone A. Most of the zone was used for an older-generation processing plant, stockpiles, and maintenance areas. A dike or levee with a crest width of approximately 50 feet and a freeboard height of 2 feet above flood stage was proposed to separate Zones A and B. Partial mining of the zone was contemplated, followed by backfilling of the depleted area with compacted inert rubble fill (concrete, asphalt, bricks, blocks, or soil) capped with a layer of select soil or sand. With a proposed extraction depth of up to 150 feet (pit floor elevation of 2340 feet) and a proposed reclamation surface of “approximately twenty-five to forty feet below original ground elevations”, most of Zone B would have well in excess of 100 feet of rubble backfill. Remaining cut slopes at 1:1 inclinations would be planted with grass or other unspecified ground cover. It was the operator’s intent to relocate all of the processing plant and operations facilities onto the embankment fill so that the remainder of Zone “B” could be mined. Adequate surface slope was to be provided so that runoff could drain to the nearby river channel and exit the site at the eastern property limits. Not mentioned in the vested-parcels reclamation plan: Equipment removal; expected final end use; bottom reclamation; water quality protections; resoiling; revegetation success.

South Pit, UUP 1994-01. Mining would begin near the eastern side of the 60-acre block. Noise and glare mitigation for neighboring residential areas included construction of an 8-foot-high landscaped berm near certain property lines. Stripping would proceed from east to west in lifts of about 20 feet each over incremental areas of 4 to 5 acres. Planned

mining limits were determined in part by designated setbacks from street centerlines where the pit would approach R-1 zoned lots. Setbacks were clearly labeled on the reclamation plan exhibit. A 70-foot-wide top-of-slope setback would be maintained from the centerline of Hathaway Street along the eastern side of the pit. All descending quarry side slopes would be cut to 1½:1 to an elevation of 2375 feet, and thereafter at ¾:1 ratios to the final bottom elevation of 2300 feet. A thick septum of alluvium with a crest width of 130 feet would be retained between vested Zone B and the South Pit (i.e., along projection of Repplier Road), per a condition of Riverside County Flood Control District. The upper 1½:1 slopes were to be restored “expeditiously” with a recommended hydroseed mix. The depleted mine pit would receive 75 feet of compacted inert rubble and soil fill (including waste concrete and broken asphalt) to bring the bottom elevation back to 2375 feet. Plant facilities would be relocated atop the embankment fill. Omitted discussions in the UUP 1994-01 reclamation plan: Equipment removal; expected final end use; bottom preparations for reclamation; water quality protections; resoiling; revegetation success.

4.0 SEPTEMBER 19, 2016 MEMORANDUM OF UNDERSTANDING

The City of Banning, the City of Banning City Council, and Robertson’s Ready Mix have entered into promises and mutual agreements to rescind or stay several legal actions pertaining to past mining ordinance violations, damages to City property, and the imposition of a per-ton aggregate mining tax enacted by voters in the November 4, 2014 general election. The MOU presents the conditions for a Development Agreement between the parties that will increase the mine’s size and alter prospective end uses for the depleted pits. As consideration for the operator’s agreement to pay into various City revenue accounts and freeze one court challenge to the City defendants, the MOU outlines the City’s obligation to process and approve an amended Mining and Reclamation Plan and new conditional use permits. This latest plan is expected to feature proposed extraction of an additional 6 to 8 million yards of aggregate resources. The Repplier Road septum and other “paper streets” would be vacated by the City and subsequently mined out. A South Pit extension would extend partway into a collection of 5 former industrial properties totaling 23 acres in area. A concrete batching plant would be allowed. At the completion of mining, a set-aside proportion of the usable mine area would be retained for public use.

In 2013-2015, the San Diego firm EnviroMINE proceeded to assemble an amended Mining and Reclamation Plan for Robertson's in response to AGI and Lead Agency findings of multiple violations of the City's mining ordinance. The narrative report, plan exhibits, and various technical appendices were reviewed several times and commented on by AGI. Geotechnical and geologic requirements were ultimately suitably documented, in AGI's professional opinion. However, the amended plan's progress was halted by challenges to the scope of environmental reviews required pursuant to CEQA and a legal filing. The plan was not approved by City departments, not released to the California Department of Mine Reclamation for statutory review, and not accepted by City Council vote.

It is expected that the existing amended Plan will be further modified to encompass the goals of the MOU. Many key elements are expected to remain unchanged, however. EnviroMINE and the operator have confirmed the new Plan will delete the Zone "B" and South Pit inert fills. Relocated plant facilities would be sited on native materials in the South Pit bottom. Lateral setbacks from R-1 zoned properties will be adjusted. Stabilization fills and drains will be employed to create stable mine slopes in parts of the East and West Pits. The amended Plan and Development Agreement are expected to cure most or all past SMARA violations.

The MOU contains some ambiguous language [§10(c)] that could be construed as allowing the parties to override any other applicable document, law, regulation, policy, or the like, for items set forth in the MOU, with the MOU controlling unless declared invalid. AGI is not a law firm, but we deduce that implementing any parts of the amended Plan "early" before the State has vetted the proposed regulation is itself a violation of SMARA. AGI strictly and solely relied on the old vested-mine and UUP 1994-01 reclamation plans as the in-force regulatory basis for SMARA compliance.

5.0 SITE GEOTECHNICAL CONDITIONS

5.1 2016 Surface Observations

East Pit. The oldest open excavation is irregularly shaped and currently estimated to be about 65 to 100 feet deep. The East Pit has been the receiving "sump" for wash-water waste fines for at least the last 14 years. The decanted wash water

collects in the southern end of the excavation where it infiltrates into the pit sidewalls, and/or is lost to evaporation. The pit floor hosts fairly lush volunteer growths of shrubby willow and tamarisk, which are progressively being buried under the rising waste fines. On the inspection date, the pit was not receiving slurry from the clarifier. Most of the pit bottom was only moist, and the wash-water pond was small.

The southwestern sidewall slope is oriented parallel to four overhead Southern California Edison 220kV transmission circuits (Devers-Vista #1 and #2; Devers-San Bernardino; Devers-El Casco). One steel tower for Devers-Vista #1 and #2 was previously measured to be only 17 feet from the slope brow at the northernmost leg (AGI, 2013). No changes to this distance were observed in the current inspection year. The nearby 100-foot-high cuts are rough, fluted, steep (locally $\sim 3/4:1$), and lack non-erosive facings. Loose soil berms appeared to be the only protection from over-the-brow storm runoff. The transmission tower is supported by typical cast-in-drill-hole pile foundations at each corner, with unknown depths of embedment.

SCE was apprised of potential slope instability threats to their tower in March, 2014. City representatives presented a request for a letter of finding from the utility that either the risk was acceptable, or that hazard abatement would be required. A letter was never provided. No work to protect to tower footing or modify the slope has occurred. AGI surmised that SCE decided that the system risk is very low.

Ongoing SCE capital improvements will completely abate stability risks by relocating all circuits to one or two larger towers located farther from the East Pit. The California Public Utilities Commission released the final EIR for SCE's "West of Devers Upgrade Project" on December 11, 2015. The EIR was certified and the \$86 million project approved by the CPUC on August 18, 2016. Environmental monitoring plans now are being drafted. The upgraded circuits should be only months from starting construction, and be energized by 2020.

South Pit. This rectangular excavation is about 1,780 feet long by 1,150 feet wide, with average pit bottom elevations of around 110 to 130 feet below original grades.

Two wide haul roads descend into the pit from the northwestern and southeastern corners. Small floor depressions visible in aerial images are relict exploratory excavations to check on deeper materials quality. Based on 2014 topographic plans, the largest exploratory excavation and a few surrounding acres in the southeastern corner are slightly lower than the permitted minimum elevation of 2,300 feet AMSL.

Aggregate production in 2016 is believed to have included very limited extraction from the South Pit near the northwestern haul road. No signs of further pit deepening were seen during the visit. The pit floor was dry. No significant changes were noted from year-2015 observations concerning native volunteer vegetation, exploration pit backfills, main pit slopes, or top-of-pit slope outlines.

The inspection visit did find the operator actively engaged in construction of relocated rock plant facilities in the northwestern quadrant of the pit. Concrete footings were already emplaced in what appeared to be native bouldery alluvium. Rebar cages for concrete columns, completed columns, and some structural steel had already been erected. Ready-mixed concrete was delivered while the mine inspection was in progress. Excavation to depths of more than 15 feet was underway for reported machine footings or mat slabs. Permitting status for the work was unknown to the City's field representatives. AGI received confirmation the following day that construction permits and fees *were* required, however. On December 14 it was reported to us that a stop-work order was issued to Robertson's.

West Pit. Completed to current horizontal dimensions in 2012, the West Pit features benched cut slopes created by a bulldozer and slopeboard. The overall slope ratio is about 1¼:1, with 45-degree bench face angles between successive 12-foot-wide benches spaced roughly every 40 vertical feet. The rectangular hole is about 1,500 feet long and 980 feet wide. The western highwall ranges up to around 160 feet high.

In 2014, AGI observed groundwater inflows from the toes of cut banks close to the projected Hargrave Street alignment. The eastern half of the West Pit has remained wet or submerged under puddles and a larger pond since 2014. Surface water has

remained absent for more than a year from a previously documented spring discharge area in the northwestern corner, although the area continued to support dense growths of verdant sapling-sized tamarisk. Mining has not occurred in the West Pit in the last year.

Past AGI qualitative slope stability assessments and the current inspection indicated adequate static performance has been experienced. However, surface deflation from wind and rain appear to be ongoing. Detached sand, gravel, and pebble-size particles have collected as loose talus on benches and at the slope toes. Some benches have almost disappeared from view. Larger clasts stand out in relief from formerly smooth surfaces before losing support and rolling to the haul road or pit floor. Rockfall has become an actual rather than a theoretical hazard for people or things close to the slopes. Rilling has remained very subdued. Fill prisms in mining lift re-entrants had not appreciably changed. Surface deflation and crest recession bear watchful monitoring.

AGI (2012) documented that the as-built limits of the West Pit were at variance with approved reclamation plan limits, and City zoning. Territory west of the projected extension of Hargrave Street was only partly owned by the 1989 reclamation plan proponent when the plan was approved by the City, and was never part of vested mine lands. The un-permitted 17-acre mine area included a City-owned vacant lot. Damages for the City property have reportedly already been cured under the 2016 MOU. Specifications for reclamation and proposed end use will be included in the future site-wide unified Reclamation Plan authored by EnviroMINE.

"West Pit Extension". Between December 2015 and December 2016, the irregularly shaped excavation grew to an average diameter of around 475 feet with an estimated depth of 110-120 feet. It was not being actively mined on December 12, 2016. The excavation remained within permitted vested property. The temporary benched pit slopes and bottom were dry. As first noted a year ago, former shallow excavations were outlined in some sidewall exposures as the excavation had intercepted old backfills. After relocating the rock processing plant, the extension is expected to be subsumed into a single, greatly enlarged West Pit. The means and methods to

create the final approved West Pit configuration were not directly addressed in the 1986 mining and reclamation plan, so the extension pit is not judged a substantial variation to the plan.

San Gorgonio River Area. Today, an estimated 42 acres of the Robertson's Ready Mix property comprises river wash and perimeter slope areas north of the plant and pit sites. Upstream from the mine property the riverbed features a deep, vertical-walled gully cut into layered sedimentary rocks. The right bank of the channel consists of a sinuous protective dike featuring a crest width usually between 30 and 35 feet. The current dike dates from 2002 or 2003. Soils in the dike embankment consist of native alluvium and man-made fill, with the latter more prominent in the eastern half. About 840 linear feet of dike includes a grouted rip-rap facing for erosion protection; the remaining embankment slopes lack any erosion protection features. Most of the embankment appears to be in unchanged condition from original construction, although a river meander has caused significant bank erosion into the dike north of the West Pit (pre-2012).

An environmental consultant to the mine operator declared the river area "restored" in 2011. AGI independently arrived at a similar conclusion in 2012, at least with respect to vegetation density and richness. At the time of AGI's 2016 inspection, northern boundary slopes remained free of erosion-related rills or brow notches from uncontrolled off-site flows. Work is progressing to certify the area as reclaimed under the terms of the 2016 MOU and amended Reclamation Plan.

Topsoil Retention & Reuse. None of the past or present mine operators has made attempts to strip and reserve topsoil materials at the Banning Quarry. From a geological perspective, pedogenic "topsoils" at the site are limited to the upper one to two feet and are very weakly developed. This finding is consistent with young alluvial ages and the very rocky nature of the sediments. At the present time, there is effectively no original ground surface left in the current 186-acre mine site.

Revegetation. Robertson's has not started reclamation-related hydroseeding, plantings of nursery stock, or other revegetation in depleted pits. No timetable to start revegetation was included in the old reclamation plans. The operator also maintains existing permit-required screening landscaping around parts of the property perimeter. The latest inspection visit found irrigation distribution pipes had remained functional for the screening vegetation. Gaps have developed in some privet and pyracantha hedges, however, where drought, old age, vandalism, and animal damage to drip emitters has caused some shrubs to die off. Pepper trees atop earthen berms were alive if not fully thriving.

Structures & Equipment. Grizzlies, rock crushers, screen decks, the washing plant, belt conveyors, bin loaders, and two truck scales are concentrated near the center of the quarry site. A concrete settling tank and process water clarifiers are north of the main processing area. The mine office has been relegated to a former shipping container. Large concrete footings and elevated columns are associated with the plant improvements.

The inspection visit found parts of the rock plant had already been dismantled for relocation to the South Pit. Equipment was being stored on open ground just east of the West Pit Extension. A small boneyard for mining trucks had not materially changed in the last year. Pollution control BMPs for the latter were in place. Relocated drums of lubricants, oil, and other common chemical products were situated just off the main entrance road. Drums stood in plastic carrier trays and were not in contact with the ground. An above-ground fuel tank installation between the West and South pits had intact and undamaged cast-in-place concrete containment walls. The adjacent haul roads were free of unintended product releases to local ground surfaces. As in past inspections, Robertson's plant areas presented a relatively tidy and organized appearance.

Erosion Control. Information indicates the mine operates under a Storm Water Pollution Prevention Plan (not reviewed) approved by the controlling Regional Water Quality Control Board. With the exception of the San Gorgonio River active channel, the Banning Quarry property neither receives nor discharges significant storm flows.

Virtually all precipitation is captured internally within the gravel pits. Minor runoff from the eastern parts of the plant entrance area exists the mine site via the paved Hathaway Street right-of-way. Unpaved entrance areas are mostly covered with compacted layers of crushed rock (C-mix) that appear to be effective in limiting erosion. To the west, city streets intercept sheetflow runoff from surrounding neighborhoods and drain water away from the mine. Off-site soil loss problems were not observed during our inspection.

A narrow strip of Robertson's property, generally defined by a dirt service road between the security fence and landscape berm along the west and south sides of South Pit, was observed to have been re-graded. The strip drains to the undeveloped Theodore Street alignment west of Hathaway Street. In 2014, erosion control best management practices were not in place to control sediment loss to the street alignment. Straw wattles and bales were subsequently added to the area to trap sediment on-site. The BMPs were present during the 2016 site inspection and deemed functional.

5.2 Slope Performance

Like most southern California alluvial gravel pits, the Banning Quarry exhibits remarkable wall stability for nominally non-cohesive deposits. Temporary near-vertical faces of 30 feet or more will stand indefinitely, subject only to slow deflation or raveling from the effects of wind and rainfall. Strong rock particles and ordered grain packing (interlocked and imbricated) result in high "effective cohesion" and high internal friction angles in these strongly dilative soils.

Signs of gross slope instability or actual failures remained absent at the time of the 2016 inspection visit. We judged the current threat potential from highwall failures to surrounding off-site properties to be extremely low.

5.3 Flooding Risks

The lack of surface flows in the San Geronio River resulted in zero chances for soil loss along the right bank levee bordering the East and West Pits. Flooding risks have not changed since the 2015 inspection.

The majority of the mine property is situated within a 100-year flood zone per the governing FEMA flood insurance rate map (FIRM; see exhibit in AGI's 2015 annual inspection report). The FIRM clearly relies on data predating the establishment of Banning Quarry pits and has essentially zero relationship to present site elevations. Nonetheless, the map remains in force per Banning municipal codes and ordinances unless the zone is modified. The flood zone is a significant regulatory constraint that will interfere with any future mine-site end use involving infill development or occupancy buildings. AGI urges the Lead Agency to compel landowner conformance with FEMA rules for removing the hazard designation if these uses are included in a Development Agreement. Additionally, the Repplier Road septum between the West Pit and South Pit was a condition of Riverside County Flood Control and Water Conservation District approval to mine South Pit. We would advise the Lead Agency to have future Reclamation Plans reviewed by County Flood for their opinion that flood hazards downstream of the South Pit have been mitigated.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Reclamation Objectives

It is a general requirement of reclamation plans to provide a description of the proposed use or potential uses of mined lands after reclamation [PRC 2772(c)(7)]. Only with this statement can reasonable judgments of the operator's compliance in meeting goals of SMARA be addressed. Surface mining and reclamation regulatory policy under the Act is intended to assure that:

- (a) Adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative land uses.
- (b) The production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment.
- (c) Residual hazard to the public health and safety are eliminated [PRC §2712].

The Banning Quarry continues to slowly advance through negotiated settlements concerning rights to mine, extraction taxes, and a future development agreement. The old approved plans and texts are poor. Establishing compliance with the in-force mining plans is difficult due to plan omissions, indistinct drawings, undefined end uses, and a lack of quality inspection records predating 2012.

Year-2016 inspection highlights are featured in the following subsections. Restatements of past recommendations, optional corrective actions, and SMARA violations from AGI (2012, 2013, 2014, 2015) are quoted when they are relevant. Updated commentary is presented. Any dimensions or areas differing in this report from past presented values shall supercede the earlier numbers.

6.2 Reclaimed Area

The approximately 42 acres north of the San Gorgonio River dike has been brought into substantial conformance with the vested-area reclamation plan goals, and certain restoration specifications prepared in 2001 to satisfy State and Federal agency demands (not a formal plan amendment). The riverbed is predicted by hydraulic analyses to have little to no aggradation potential close to the eastern property line, but will aggrade and establish a steeper gradient in the upstream direction. The latter phenomenon will bury some existing vegetation but should also promote native-plant succession. The channel is now protected under State and Federal rules.

Robertson's 2016 Form MRRC-2 reported zero acreage as reclaimed during the 2015 reporting period. We infer this applies to the approximately 144 acres south of the river channel. Recently reclaimed areas were not noted during the 2016 site inspection visit.

2016 Recommendation (unchanged): Robertson's reclamation plan consultants intend to petition the Lead Agency to certify 42 acres as "reclaimed" as a part of the consideration for a future Development Agreement. Basis for reclaimed status would be the in-force and City-accepted 1989 plan. Neither the old plan nor a later Federally-approved restoration plan had quantified environmental performance

targets. Qualitative judgment indicates successful revegetation. AGI's opinion has been that the request is reasonable and has previously recommended that the Lead Agency proceed with a certification letter. The reclaimed area should be identified on the final Reclamation Plan topographic contour map. The map should illustrate or label as-built slopes, area limits, and the total reclaimed acreage.

6.3 Disturbed Area

Robertson's has reported an unvarying 81 acres of disturbed area in their 2011-2015 Mining Operation Annual Reports. We estimate disturbed area at about 144 acres (186 total mine-site acres minus 42 acres restored). AGI has previously recommended that the operator provide the corrected value in each new reporting year. "Disturbed area" officially includes all plant areas, haul roads, pits, slopes, stockpiles, and the river berm.

2016 Recommendation (unchanged): The mine operator should revise the disturbed acreage total, based (for example) on tabulated per-parcel acreage included in the new Mining and Reclamation Plan, and adjust the classified areas in the next reporting period (2016). We are not aware of any rules that demand amendments to an erroneous but already-filed Form MRRC-2.

6.4 Structural Foundations & Building Code Criteria

The existing reclamation plan applicable to UUP 1994-01 describes a process of placing inert soils and/or concrete demolition waste from a bottom elevation 2,300 feet AMSL to a proposed fill surface elevation of 2,375 feet. The materials would be watered and compacted with heavy equipment, but without geotechnical engineering observations or tests, "to approximately 90 percent relative density [*sic*]". The existing processing plant would then be relocated to the partially filled South Pit.

2016 Recommendations: According to current versions of the amended Reclamation Plan, pit backfills for purposes of plant relocations will not be implemented. Machinery and improvements would be sited directly on the very dense native soils of the South Pit floor. This construction was in fact already observed to have started

before the inspection date of December 12, 2016. The construction is not in conformance with the in-force reclamation plan, i.e., it is technically a SMARA violation, nor is the current work authorized according to *approved* amended plans even if the intent of the 2016 MOU is to ultimately allow said work. We are unsure of the proper cure for this violation. One avenue to gain (temporary) compliance may mean processing a “minor” amendment to the in-force plan approving deletion of rubble fill placement. (*N.B.* Plant relocation was allowed by the reclamation plan approved for UUP 1994-01). Mine plan changes that are not substantial deviations can be processed administratively without public hearings or council votes. The Lead Agency makes this determination. We think that this minor amendment approach passes qualification tests presented in the California Code of Regulations. A proper drawing illustrating the affected area should accompany a letter petition by Robertson’s. An approved minor amendment should be sent to the State Department of Conservation for the State’s mine file. The permanent compliance solution lies with completion of all terms of the MOU. The milestone date for the execution of all elements of the MOU is September 1, 2018.

AGI has in the past pointed out that commercial, industrial, or residential end use development should require that all fills in pit bottoms intended to support buildings, roads, and utilities be classified as “engineered grading” per City building ordinances. SMARA is unambiguous about placement of compacted fill wherever settlement-sensitive end uses are planned. The Lead Agency already possesses contour maps highlighting bottom irregularities in the South Pit. Some of these features have been partly buried by undocumented fills over the last few years. Information about these fills should be reviewed as part of the vetting process for an amended Mining and Reclamation Plan. The plans will also be critical for future reference if or when geotechnical studies for structures would be submitted to the City. The fills may be perfectly acceptable for an open-space end use. However, mitigation of these fills and related transitions must be made a precondition of development entitlements if buildings or other improvements will cross them, in our professional opinion.

6.5 Slope Stability

The existing quarry reclamation plans lack geotechnical analyses verifying adequate factors of safety at the design slope inclinations. All permanent slopes must be flatter than the critical gradient, i.e., the maximum stable inclination of an unsupported slope under the most adverse conditions that it will likely experience, as determined by current engineering technology (PRC §3501, 3502(b)(3)). In practical engineering terms, permanent Banning Quarry slopes must have a calculated factor of safety F.S. >1.0 for earthquake loads.

2016 Update: The new site-wide Mining and Reclamation Plan will include quantified slope stability analyses applicable to all pit slopes. *Ex parte* communications with the geotechnical consultants who performed the amended plan analyses have indicated they are aware of the mine expansion and associated new slopes that will be part of the Development Agreement. Revisions to analyses and the technical reports is expected and should be required by the Lead Agency. For the remainder of the as-built site, mitigation has been designed where analyses indicate instability. AGI has already reviewed and recommended acceptance of geotechnical reports that will accompany the final new plan. Other than permanent fixes for the SCE transmission tower, year-2012-2015 inspection report recommendations have been met.

6.6 Financial Assurance Review

The mine operator has a financial assurance cost estimate on file with the Lead Agency dated January, 2016, in the amount of \$652,695. The calculations were performed by a licensed Civil Engineer. The total includes plant removal costs net of verified salvage values per Department of Mine Reclamation policy (salvage value in fact greatly exceeds removal costs). The 2016 FACE superseded a previous cost estimate prepared by the same engineer with an issue date of May 2, 2014.

AGI prepared a review letter dated April 4, 2016 for Robertson's 2016 FACE calculations. The letter fulfilled a recommended component of a Lead Agency's annual mine inspection as required under PRC §2774(b). It was considered an addendum to AGI's *2015 Surface Mining Inspection Report* dated December 31,

2015. The operator was unable to supply the requested FACE before the end of the 2015 calendar year and AGI's 2015 report.

2016 Recommendation: AGI's opinion was the reviewed FACE conformed with the overarching goals of PRC §2774, the City of Banning Mining Ordinance, and industry practices. It was recommended that the Lead Agency receive proof of an in-force financial assurance instrument (surety), with the State Department of Conservation listed as a co-insured. The in-force instrument should of course meet or exceed the reclamation cost estimate. We further recommended that the City follow State Business and Professions Code practices, whereby the preparing professional engineer needs to provide signature or seal, *date* of signing/sealing, and license number on the FACE or a suitable cover letter accompanying the submission.

6.7 City Ordinance No. 1237 Violations

In 2012, the Lead Agency was informed of quarry encroachment into three properties located north of Repplier Street and west of a northward projection of Hargrave Street. Mining to a depth of ~160 feet had occurred on the three parcels (APN 534-100-003, 534-084-001, 534-084-002). Zoning on the parcels was R-1. There were no records of a petition for a zone change, Site Approval to mine, or reclamation plan amendments pertaining to the mine expansion as required by the City's Development Code and the listed ordinance (AGI, 2012).

Mined slopes and benches were also discovered in 2012 to have encroached into designated bench + setback zones 225 feet wide next to R-1 zoned parcels on Blanchard Street and Theodore Street (South Pit). The setback zone was depicted as "Industrial - Mineral Resources" on the City General Plan map. Nevertheless, AGI was unable to locate a record of approved changes to UUP 1994-01 or amendments to reclamation plans that rescinded the original setback requirements.

In 2014, AGI documented further encroachments into R-1 setback areas along the south and west sides of the South Pit. New slopes were graded to smooth and grossly stable conditions. Potentially hazardous vertical bench faces had been

beneficially eliminated (ref. AGI, 2012). Nevertheless, the as-built tops, toes, and all intervening slope faces were technically in violation of old plans *or the proposed contours shown on preliminary new Reclamation Plans*. These slopes remained unchanged in 2015 and 2016.

2016 Updates & Recommendations: The 2016 MOU seeks to ameliorate the West Pit non-conforming uses. The MOU also indirectly confirms that the City will accept as-built slope encroachments as long as all technical goals such as stability are met. Zone changes and adoption of a single new Mining and Reclamation Plan encompassing all mine property [CCR 3502(6)(d)] are expected. The City has reportedly already been deeded a substitute land parcel as compensation for the loss of the City's vacant lot. AGI recommends that new civil drawings explicitly reflect both the as-built slope conditions and any City restoration decision for the South Pit setback zones. We would advise the Lead Agency to require an up-to-date topographic base map for the South Pit before accepting new plans. The new mining and reclamation plan must meet all current SMARA environmental and performance standards [Ord. No. 1237 §22B-3].

6.8 Inspection Limitations

This report and attached Form MRRC-1 have been prepared in general accordance with Department of Conservation guidelines. AGI's work involved no subsurface sampling, testing, or analyses of soil, water, or air at the site. Site descriptions are considered representative of conditions only on the date of the field inspection visit.

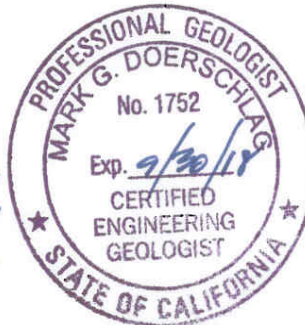
Environmental quality mitigations (AQMD permitting, dust, glare, operating hours, traffic, etc.) were outside of AGI's inspection scope as these subjects require different professional experience and qualifications. Lead Agency staff have the capability and are encouraged to report separately on these issues if the mine operator's performance appears to be at odds with approved use permits. Lastly, AGI does not practice safety engineering, and explicitly excludes any finding, representation, or opinion that the mine operator is or is not in compliance with Cal-OSHA or Federal mine safety protocols.

7.0 CLOSURE

AGI's surface mine inspection report was prepared solely for the named mine, and solely for the use of the City of Banning as Lead Agency. The Lead Agency shall distribute copies of this report in accordance with State regulations.

We take pride in assisting with this required regulatory oversight as a matter of public safety and benefit. If you should have any questions, please contact the undersigned at our Riverside office at (951) 776-0345.

Respectfully submitted,
Aragón Geotechnical, Inc.



Mark G. Doerschlag, CEG 1752
Engineering Geologist



C. Fernando Aragón, P.E., M.S.
Geotechnical Engineer, G.E. No. 2994

MGD/CFA:mmma

Attachments: Appendix A, 2016 Form MRRC-1 Surface Mining Inspection Report
Appendix B, 2015 Form MRRC-2 Mining Operation Annual Report
Appendix C, Captioned Photographs dated December 12, 2016.

Distribution: (4) Addressee

REFERENCES

- Aragón Geotechnical, Inc, 2012, *2012 Surface Mining Inspection Report, Robertson's Ready Mix Banning Quarry, CA Mine ID# 91-33-0012*: private consultant's report prepared for the City of Banning and dated September 6, 2012 (Project No. 275.059), 37 p. and appendices.
- Aragón Geotechnical, Inc, 2013, *2013 Surface Mining Inspection Report, Robertson's Ready Mix Banning Quarry, CA Mine ID# 91-33-0012*: private consultant's report prepared for the City of Banning and dated December 30, 2013 (Project No. 4212-MI), 40 p. and appendices.
- Aragón Geotechnical, Inc, 2014, *2014 Surface Mining Inspection Report, Robertson's Ready Mix Banning Quarry, CA Mine ID# 91-33-0012*: private consultant's report prepared for the City of Banning and dated December 29, 2014 (Project No. 4263-MI), 35 p. and appendices.
- Aragón Geotechnical, Inc, 2015, *2015 Surface Mining Inspection Report, Robertson's Ready Mix Banning Quarry, CA Mine ID# 91-33-0012*: private consultant's report prepared for the City of Banning and dated December 31, 2015 (Project No. 4331-MI), 44 p. and appendices.
- Aragón Geotechnical, Inc, 2016, *FACE Review, Robertson's Ready Mix "Banning Quarry", CA Mine ID# 91-33-0012, City of Banning, California*: private consultant's report prepared for the City of Banning and dated April 4, 2016 (Project No. 4331-MI), 2 p.
- California Department of Conservation, State Mining and Geology Board, 2002, *Surface Mine Inspection Guideline [Rev. April 10, 2014]*: online version accessed 12/9/16 at http://www.conservation.ca.gov/smgb/guidelines/Documents/inspection_guidelns.pdf
- California Department of Conservation, State Mining and Geology Board, 2004, *Surface Mining and Reclamation Act Financial Assurance Guidelines*: online version accessed 12/9/16 at <http://www.conservation.ca.gov/smbg/guidelines/fincl%20assurances/Documents/04aguidelines.pdf>
- California Department of Conservation, State Mining and Geology Board, 2007, *Report on SMARA Lead Agency Performance Regarding Mine Reclamation*: Information Report No. 2007-01, 15 p.

EnviroMINE, 2013, *Reclamation Plan for the Banning Quarry, CA Mine ID # 91-33-0012*: private consultant's report dated September 2013, 30 p. and appendices. Inclusive of AGI review response letters dated July 21, 2014; September 18, 2014; December 4, 2014.

AERIAL PHOTOGRAPHS

Riverside County Flood Control & Water Conservation District Archive

Date Flown	Flight Number	Scale	Frame Numbers
1-28-62	1962 County	1:24,000	Line 1, Nos. 79-80
5-24-74	1974 County	1:24,000	Nos. 449-450
4-10-80	1980 County	1:24,000	Nos. 441-442
1-25-84	1984 County	1:19,200	Nos. 1101-1102
1-9-90	1990 County	1:19,200	Line 9, Nos. 27-28
1-30-95	1995 County	1:19,200	Line 9, Nos. 23-24
3-18-00	2000 County	1:19,200	Line 9, Nos. 24-25
4-13-05	2005 County	1:19,200	Line 9, Nos. 25-26

Google Earth Pro application, Banning Quarry photo image library as of 12/29/16

6/3/96	12/30/03	10/26/06	3/9/11
5/27/02	10/27/04	12/19/06	6/23/11
10/7/03	12/30/05	6/5/09	9/16/11
11/8/03	1/30/06	11/15/09	6/7/12
			3/22/13
			11/12/13
			4/27/14
			3/25/15
			2/5/16
			7/14/16

APPENDIX A

DEPARTMENT OF CONSERVATION

OFFICE OF MINE RECLAMATION

MRRC-1 (4/97) Page 1 of 5 (Rev. 07/13)

SURFACE MINING INSPECTION REPORT

(See reverse side of each form page for completion instructions)

I. Mine Name (As Shown on Approved Reclamation Plan) Banning Quarry	Inspection Date: 12/12/2016	CA MINE ID# 91- 33-0012
---	---------------------------------------	-----------------------------------

II. Mine Operator Robertson's Ready Mix		Telephone (951) 760-5450
Onsite Contact Person Terry Adank		Telephone (951) 760-4294 cell
Mailing Address 1990 N. Hargrave Street		
City Banning	State CA	ZIP Code 92220
E-mail Address (optional)		

III. Designated Agent Phil Sousa		Telephone (951) 760-5490
Mailing Address P.O. Box 3600		
City Corona	State CA	ZIP Code 92878-3600
E-mail Address (optional)		

IV. SMARA Lead Agency Name (City, County, BCDC, or SMGB) City of Banning		
Inspector Mark G. Doerschlag, CEG 1752		Telephone (951) 776-0345
Title Engineering Geologist	Organization Aragon Geotechnical, Inc.	
Mailing Address 16801 Van Buren Blvd., Bldg. B		
City Riverside	State CA	ZIP Code 92504
E-mail Address (optional)		

V. Does the operation have:	P	NR	No	Yes
A Permit to Mine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Permit # - Start and Expiration Dates Unnamed 1965 permit; UUP 1994-01 No expiry.
Vested Right to Mine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Year of Lead Agency determination Applicable to portion of mine site under 1965 permit
A Reclamation Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	RP# n/a Date Approved 6/1990 & 2/1996
Reclamation Plan Amendment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	RP Amendment # (as applies) Date Approved or Status of Amendment Suspended pending CEQA reviews
Has the Operator filed a Mining Operation Annual Report (Form MRRC-2) this Year? Check One:				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Year of Most Recent Filed Annual Report:

VI. Is this Operation on Federal Land? Check One: If "Yes," Provide One or Both of the Federal Mine Land Identification Numbers Below:		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
California Mining Claim Number (CAMC#):	Latitude/Longitude at Mine Entrance (Decimal Degrees): 33.9382 x 116.8593	
U.S. Forest Service or BLM Identification Number (Plan of Operations #):	Status of Plan of Operations (Current/Expired/In Process):	

SURFACE MINING INSPECTION REPORT

VII. Financial Assurance		Inspection Date: 12/12/2016	CA MINE ID#: 91-33-0012
Type of Financial Assurance Mechanism(s) Surety Bond	Financial Assurance Mechanism Number(s) 6641040	Amount of Mechanism \$520,000 Proof of revised surety to meet current FACE not supplied to reviewer	Date of Expiration 6/11/15 with continuation until canceled. Date of Lead Agency Approval of Mechanism Renewal not reviewed
Total Amount of Mechanism(s)			
<input type="checkbox"/> Financial Assurance Mechanism Pending Review by Lead Agency? If yes, provide date submitted/explanation and amount of pending mechanism:			
Has there been a change of operator since last inspection? If yes provide the date of notice. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date of Change:	If yes, has the new operator posted a Financial Assurance Mechanism? <input type="checkbox"/> Yes <input type="checkbox"/> No If not, describe status of new operators Financial Assurance Mechanism:	Does new operator's Notice of Change include a statement of responsibility for reclamation? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Date and Amount of Most Recent Approved Financial Assurance Cost Estimate:	Date: January 2016	Amount: \$652,695
<input type="checkbox"/> Financial Assurance Cost Estimate Pending Review with Lead Agency?	Date Submitted/Explanation/Amount of pending estimate:	
<input type="checkbox"/> Financial Assurance Cost Estimate Appealed by Operator?	Date Submitted to State Mining and Geology Board or Lead Agency for Appeal/Explanation:	
<input checked="" type="checkbox"/> Other?	Expected FACE recalculation for calendar year 2017, potentially coincident with restart of CEQA reviews and re-submission of amended Mining and Reclamation Plan per MOU. FACE reviewed and accepted per AGI letter dated April 4, 2016.	

SURFACE MINING INSPECTION REPORT

VIII. Non-SMARA facility operations conditions solely of local concern (e.g. hours of operation) do not need to be noted here. See Instructions for Block VIII on reverse side of page. [Use separate sheet(s) where necessary. Refer to item numbers below]		CA MINE ID # 91- 33-0012	
Potential Reclamation Plan Requirements:	List Reclamation Plan Requirements (Recommended to be filled out prior to field inspection)	Note Site Conditions and Compliance Issues (Note additional comments on Page 5 as necessary)	VN?
1) General Information	1a. Sand and gravel products	End uses are to be defined in accordance with MOU (9/19/16) between City and operator, and as specified in a new site-wide Mining & Reclamation Plan. Vested mine lands include in-stream mining rights rescinded due to Federal permitting requirements (Sec. 404).	0
a) Permitted Mineral Product(s)	1b-e. No specific requirement or limit.		
b) Approved Production Amount (Annual/Gross)			
c) End Date of Operations Per RP			
d) Permit end date			
e) End Use			
2) Boundaries	Permit boundaries and setbacks per OMR map exhibits on file and conditions of UUP 1994-01. See accompanying AGI narrative report and file copy of 2012 surface mine inspection report.	Mine pit and slope encroachments into property beyond RP and not permitted for mining (see 2012-2015 inspection reports). Finding of substantial variation made for 2(a) through 2(d). It is presently expected that violations will be cured under 9/9/16 MOU and amended RP.	4
a) Property Boundary			
b) Permit Boundary			
c) Rec. Plan Boundary (RPB)			
d) Setbacks			
3) Slopes – Grading	1:1 max cut slope in CUP 1965.	Permanent slopes in West Pit and South Pit are in conformance with planned inclinations. East Pit contains relict lift face slopes >45 degrees with calculated F.S. <1.0 for seismic condition. Amended R.P will include quantified slope analyses already reviewed and accepted by AGI, with mitigation for non-conforming East Pit slopes.	1
a) Fill Slopes – Note Condition of:	1.5:1 final working and reclaimed cut slopes in UUP 1994-01.		
i) Slopes – Working (max/current)			
ii) Slopes – Reclaimed			
iii) Compaction	No planned fill slopes.		
b) Cut Slopes – Note Condition of:			
i) Slopes – Working (max./current)			
ii) Slopes – Reclaimed			
4) Erosion Control	N/A	Straw wattles and bales emplaced after 2015 inspection [East Pit perimeter] were present and appeared functional.	0
a) BMPs			
b) Grading			
c) Vegetation			
5) Ponds	N/A	Lined process water pond was noted as fenced and gated in 2014. Groundwater pond in West Pit is unprotected from surface contaminants, although area is not open to public and is not in active mining.	0
a) Design – Function			
b) Capacity (area/depth/volume)			
c) Maintenance			
6) Stream & Wetland Protection	N/A	Vested parcels included permitted in-stream mining, halted by Federal edict. San Geronio River floodplain and north slopes (42 acres) is expected to be petitioned for "reclaimed" status. No performance specifications in either RP or Army Corps-demanded restoration plans prepared outside of SMARA review.	0
a) Buffers (distance to channel)			
b) Berms (distance/length/height)			
c) Best Management Practices			
d) Drainage			
e) Grading & Slopes			
f) Stockpiles			
g) Stream Diversions			
7) Sensitive Wildlife & Plant Protection	N/A	N/A. Site is effectively 100% disturbed beyond proposed reclaimed territory detailed in (6) above.	0
a) List Species			
b) Protection Measures			

SURFACE MINING INSPECTION REPORT

VIII. Non-SMARA facility operations conditions solely of local concern (e.g. hours of operation) do not need to be noted here. See Instructions for Block VIII on reverse side of page. [Use separate sheet(s) where necessary. Refer to item numbers below]		CA MINE ID # 91- 33-0012	
Potential Reclamation Plan Requirements:	List Reclamation Plan Requirements (Recommended to be filled out prior to field inspection)	Note Site Conditions and Compliance Issues (Note additional comments on Page 5 as necessary)	VN?
8) Soil/Overburden Stockpile Management	N/A	Mine site is 100% disturbed. Resoiling not addressed in approved RPs.	0
a) Topsoil			
i) Location			
ii) Slope Stability			
iii) BMPs			
b) Overburden			
i) Location			
ii) Slope Stability			
iii) BMPs			
c) Topsoil Application			
i) Amendments			
ii) Depth			
iii) Moisture			
iv) Application Methods			
9) Revegetation	N/A	There are no performance specifications in either of the two governing RPs for this mine. No further restoration work is expected in the 42-acre San Geronio river area (USA waters), and the area has been previously judged by AGI to meet qualitative goals for vegetation density/diversity in support of a "reclaimed" petition to the Lead Agency.	0
a) Test Plots			
b) Species Mix			
c) Density			
d) Percent Cover			
e) Species Richness			
f) Protection			
g) Success Monitoring			
h) Invasive Species Control			
10) Structures	To be removed at conclusion of mining.	In use -- active mine. Partial dismantling and start of unpermitted construction for rock plant relocation observed. See report.	1
11) Equipment	To be removed at conclusion of mining.	In use -- active mine.	0
12) Closure of Adits	N/A	None on site.	0
13) Other Reclamation Plan Requirements	Site SWPPP and RWQCB requirements include control of fuel, oil, or grease releases from heavy equipment maintenance.	No problems noted.	0

SURFACE MINING INSPECTION REPORT

IX. List comments/description/sketches to support observations of mine site conditions, including violations. Where any violations are noted, list in numerical order, along with suggested corresponding corrective actions. Also describe preventative measures recommended by the inspector to avoid or remedy potential violations. Indicate if you have attached photos, sketches, and/or notice(s) of violation(s) or other documents to this form.

(Add additional sheets as necessary)

The City of Banning and the mine operator have executed a Memorandum of Understanding (9/19/2016) outlining milestones and expected considerations from each party in order to enact a development agreement. A previous version of a significantly amended Mining and Reclamation Plan will be updated and re-submitted for geotechnical/geologic review sometime in 2017. The amended RP had met technical content recommendations of AGI. Environmental reviews pursuant to CEQA were suspended in 2016, but will be re-started under specific conditions of the MOU.

Quality of the in-force reclamation plans is poor. Discriminating violations is difficult without a basis.

The new plan will include performance specifications as set out by PRC 2772 and 3502(b)(1-6). Revisions to the existing document are expected to include new slope and pit extensions (non-vested) south of existing mined areas, and identified end uses.

Current violations are same as listed in 2012-2015 reports. An additional violation is recorded for building code violation pursuant to relocation of rock plant into South Pit. The RP associated with this pit should be amended to reflect the plant's as-built location and revised depth. It is believed this can be cured by administrative determinations that the work is not a substantial variation from the in-force plan (meets tests of SMARA regulations). "Minor" revisions to the existing RP can be approved without public comment or council approvals.

Potential hazard to electrical transmission lines from nearby steep slopes remains, but the utility owner SCE does not appear concerned about risks. Situation is expected to be completed resolved by circuit relocations under the "West of Devers" upgrade project. Project should start construction in 2017 for eventual completion in 2020 per CPUC.

CA MINE ID #

91- **33-0012**

Inspection Date:

12/12/2016

Weather Code(s):

CL, WD

Duration of Inspection: 3.75 hrs.

Start Time: **0900**

End Time: **1245 w/ off-site checks**

Status of Mine Code(s):

OP

Status of Reclamation Code(s):

RN

Approximate Acreage Under Reclamation:

42 (future petition)

Approximate Acreage the lead agency has determined reclaimed in accordance with the approved reclamation plan: 0

Approximate Total Disturbed Acreage:

186

Approximate Pre-SMARA Disturbed Acreage:

~70 ac. estimated (Beckham pits)

Disturbed Acreage Identified in Most Recent Financial Assurance Cost Estimate:

81

Previous Inspection Date (and Number of Violations then Noted):

12/8/15 VN=4

Violations Corrected? (explain in block to left)

In process per MOU

Inspection Attendees and Affiliations:

Art Chacon, City of Banning
 Sgt. Rob Fisher, City of Banning
 Phil Sousa, Robertson's
 Terry Adank, Robertson's
 Tom Nieves, CASC Engineering
 Warren Coalson, EnviroMINE
 Mark Doerschlag, AGI

Additional sheets/documents attached: ☒ Yes ☐ No

X. Number of Current Violations:

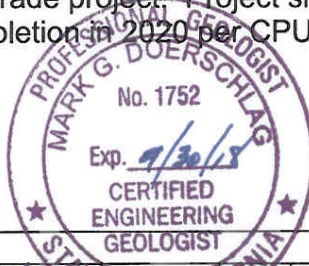
5

Inspector's Signature:

Date Signed:

If inspector is a contractor for the lead agency give license type and number:

CEG 1752



APPENDIX B



CA MINE ID#

91-33-0012

MINE NAME

Banning Quarry

SMARA Lead Agency

City of Banning

☒ City ☐ County ☐ Other

1. Company Operating	Mailing Address/P.O. Box No.	Telephone
Robertson's Ready Mix	1990 N. Hargrave	951-760-5200 Ext.
Site Contact Person	City/State/ZIP Code	Email Address
Marty Kaminski	Banning, CA 92220/Riverside County	N/A

2. Designated Agent's Name (individual must reside in CA)	Mailing Address	P.O. Box 3600	
Phil Sousa	Email Address	psousa@irmca.com	
City	Zip Code	Telephone	Ext.
Corona, CA	92878-3600	951-760-5490	

SOME ITEMS BELOW ARE PRECEDED BY A BOX LABELED "N.C." THIS BOX MAY BE CHECKED IF THERE ARE NO CHANGES IN THE INFORMATION FROM THE LAST REPORTING YEAR.

(NOTE: IF THIS IS THE FIRST TIME YOU HAVE FILED A REPORT, ALL SECTIONS MUST BE COMPLETED.)

<input checked="" type="checkbox"/> N.C.	3. Owner of Mining Operation	Telephone	
		Ext.	
	Mailing Address	Email Address	
	City	State/ZIP Code	Country (If other than U.S.A.)
	Was this operation purchased by you during the 2015 reporting year?		Was this operation sold by you during the 2015 reporting year?
	<input type="checkbox"/> Yes. Date of purchase: _____ <input type="checkbox"/> No.		<input type="checkbox"/> Yes. Date of sale: _____ <input type="checkbox"/> No.

<input checked="" type="checkbox"/> N.C.	4. Landowner	Assessor's Parcel No.(s)
	Mailing Address	Telephone
		Ext.
	City/State/ZIP Code	Country (If other than U.S.A.)

5. Status of Mining Operation DURING THE 2015 REPORTING YEAR (See form instructions for definitions) **CHECK 1 ONLY**

- ☐ Newly permitted; date permitted: _____
- ☒ Active.
- ☐ Idle; date operation became idle: _____
- If idle, complete the following:
- ☐ Copy of approved Interim Management Plan is attached.
- ☐ Interim Management Plan is pending with the Lead Agency; date submitted: _____
- ☐ Closed with no intent to resume; date mining ceased: _____
- ☐ Closed - reclamation certified complete by the Lead Agency; date of certification: _____

6. Status of Reclamation Activities DURING THE 2015 REPORTING YEAR **CHECK 1 ONLY**

- ☒ Reclamation not started.
- ☐ Reclamation in progress.
- ☐ Reclamation certified complete by the Lead Agency.
- Date reclamation was certified complete: _____
- Date financial assurances were released: _____

THIS REPORT MUST BE SENT TO:

Department of Conservation (original)

Lead Agency (copy)

7. Was an inspection completed by the Lead Agency during the 2015 reporting year?

- ☒ Yes. Date of Inspection: 12/8/15
☐ No. Explain on page 4.

8(a). Does this site have an approved reclamation plan?

- IF THIS IS THE FIRST ANNUAL REPORT FILED FOR THIS OPERATION, ATTACH APPROVED RECLAMATION PLAN.

Number of acres subject to the reclamation plan: 185.84

- ☒ Yes: Approval date of the reclamation plan: 1994
☐ No: Please explain by checking one of the two boxes below, as applies. Otherwise, explain on page 4.
☒ Approval pending. Date submitted to the Lead Agency: 2/2013 -Revised Plan Submitted
☐ Lead Agency action on initial or amended reclamation plan on appeal with the State Mining and Geology Board.
 Date appeal submitted: _____

8(b). Were there any amendments to reclamation plan during the 2015 reporting year?

- IF ANY AMENDMENTS TO THE RECLAMATION PLAN WERE APPROVED DURING THE 2015 REPORTING YEAR, ATTACH A COPY.

- ☐ Yes: Amendment(s) to the reclamation plan were approved during the reporting 2015 year. Date approved: _____
☒ No.

9(a). Was a financial assurance cost estimate approved by the Lead Agency during the 2015 reporting year?

- ☒ Yes. Date of approval: 4/4/2016
☐ No. Approval of financial assurance cost estimate pending with the Lead Agency. Date submitted: _____
☐ No. Explain on page 4.

9(b). Was a new or updated financial assurance mechanism(s) approved by the Lead Agency and the Department of Conservation during the 2015 reporting year?

- ☒ Yes. Date of approval: 4/4/2016
☐ No. Approval pending financial assurance mechanism(s). Date submitted to the Lead Agency: _____
☐ No. Lead Agency action on financial assurance mechanism(s) is on appeal with the State Mining and Geology Board.
 Date appeal submitted: _____
☐ No. Other, explain on page 4.

9(c). Complete information below for financial assurance mechanism(s):

Type (Bond, CD, etc.)	Amount	Date Posted	Date of Annual Review by the Lead Agency	Expiration Date or Renewal Date (if applicable)
Bond	652,695	6/7/2016		



N.C.

10. ATTACH NAMED U.S. GEOLOGICAL SURVEY MAP—7.5' OR 15' QUAD—SHOWING BOUNDARIES OF MINING OPERATION.

Latitude (Decimal Degree) Longitude (Decimal Degree) Section—Township—Range—Base Meridian Quad Name County



N.C.

11. Code type(s) of mining operation: _____

SEE EXHIBIT A FOR CODE TYPE(S)

12. DISTURBED ACREAGE

COMPLETE ENTIRE SECTION

1. 81 Approximate disturbed acreage on January 1, 2015. (This figure should match the figure from item 12, line 5 on your 2014 annual report. If it does not match, explain on page 4.)
2. 0 Approximate acreage disturbed **during** 2015.
3. 81 (ADD LINE 1 TO LINE 2)
4. 0 Approximate disturbed acreage **reclaimed** during 2015.
5. 81 (SUBTRACT LINE 4 FROM LINE 3) Approximate disturbed acreage **remaining** on December 31, 2015.



N.C.

13. **CHECK ALL THAT APPLY**

- ☐ Acres permitted: _____
- ☐ Acres vested (acres disturbed prior to January 1, 1976): _____
- ☐ Acres on federal lands: _____



N.C.

14. Current total assessed value of mining operation as established by County Assessor's Office: \$ _____

15. COMMODITIES AND PRODUCTION*

SEE EXHIBIT B

*PRODUCTION INFORMATION IS PROPRIETARY AND
WILL BE KEPT CONFIDENTIAL PURSUANT TO
PUBLIC RESOURCE CODE SECTION 2207(g)

List All Commodities (from Exhibit B)	Category Number (from Exhibit B)	Amount of Production	TOTAL PRODUCTION		
			CHECK ONE		
PRODUCED MINERALS			Short Tons	Troy Ounces	Pounds
A. <u>PRIMARY COMMODITY</u>					
SAND AND GRAVEL	1	629,604	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. <u>ALL OTHER COMMODITIES</u> (include gold and silver produced if not primary commodity)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. FEE SCHEDULE

SEE EXHIBIT C

USING **BOTH** YOUR CATEGORY NUMBER AND TOTAL PRODUCTION FROM 15(A) ABOVE, REFER TO EXHIBIT C TO FIND YOUR CORRESPONDING PRODUCTION RANGE. ENTER YOUR CORRESPONDING PRODUCTION CODE IN 16(A) AND FEE IN 16(B) BELOW.

A. PRODUCTION CODE 1B. REPORTING FEE \$ 5,194.00**GOLD AND SILVER FEE:**

IF GOLD OR SILVER PRODUCTION IS REPORTED IN SECTION 15(A) OR 15(B), CONTINUE ON TO COMPLETE 16(C) AND (D), BELOW.

C. GOLD FEE (_____ Ounce(s) of gold) X (\$5.00 per ounce) = _____

D. SILVER FEE (_____ Ounce(s) of silver) X (\$0.10 per ounce) = _____

TOTAL FEES DUE; SUM OF 16(B), (C) AND (D) = \$ 5,194.00 (Attach one check for total)

CA MINE ID# 91-33-0012

17. SUBMITTED BY

Name (Please print): Mike Orozco

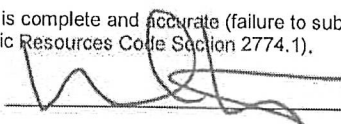
Mailing Address: P.O. Box 3600

City/State/ZIP Code: Corona, CA 92878-3600

Telephone Number: 951-493-6500

I certify that the information submitted herein is complete and accurate (failure to submit complete and accurate requisite information may result in an administrative penalty as provided for in Public Resources Code Section 2774.1).

SIGNATURE OF SUBMITTER



DATE 6/10/16

TITLE OF SUBMITTER Chief Engineer

EMAIL ADDRESS mikeo@rrmca.com

Please mail annual report, reporting fee, gold and silver fee and required attachments to:

ATTN: Reporting Unit
Office of Mine Reclamation
Department of Conservation
801 K Street, MS 09-06
Sacramento, CA 95814-3529

Please use the space provided to complete any questions that required further explanation. Additional sheets may be attached if more space is needed.

ROBERTSON'SPO BOX 3600
CORONA, CA 92878-3600
(951) 493-6500CHECK NO. 449791
VENDOR 80100

DATE 06/02/16

449791

INVOICE NO.	INVOICE DATE	INVOICE DESCRIPTION	GROSS AMOUNT	DISCOUNTS RETENTIONS PAYMENT TO DATE	NET AMOUNT THIS CHECK
91330012	06/02/16	<i>burning</i>	5194.00		5194.00
TOTALS			5194.00	.00	5194.00

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF
THE ITEMS DESCRIBED ABOVE.

ORIGINAL CHECK IS PRINTED ON CHEMICAL REACTIVE PAPER WHICH CONTAINS A WATERMARK

ROBERTSON'SPO BOX 3600
CORONA, CA 92878-3600
(951) 493-6500BANK OF AMERICA
COMMUNITY DEVELOPMENT BANK
1500 NEWELL AVENUE, SUITE 200
WALNUT CREEK, CA 94596

90-4182/1211

449791

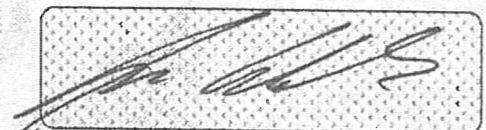
CHECK DATE
06/02/16CHECK NO.
449791

PAY

FIVE THOUSAND ONE HUNDRED NINETY-FOUR AND NO/100 DOLLARS

PAY EXACTLY

\$ *****5,194.00

TO THE
ORDER
OFDEPARTMNT OF CONSERVATION
OFFICE OF MINE RECLAMATION
801 K STREET MS 09-06
SACRAMENTO CA 95814-3529

VOID AFTER 90 DAYS

SECURE FEATURES INCLUDE INVISIBLE FIBERS • VOID FEATURE PANTOGRAPH • ENDORSEMENT BACKER • BLEACH REACTIVE

⑈449791⑈ ⑆121141822⑆ 73133⑈01008⑈

APPENDIX C



Photo 1: West Pit north-facing overview from the southeastern haul road. Rising-water conditions have remained essentially unchanged in last year. Most flows daylight near the left edge of image and collect in the pond at the eastern edge of the pit floor. Some added volunteer vegetation is apparent along small channels. View area is within permitted vested area. Scale can be judged by stockpiled boulders, most of which are 5-7+ feet in diameter. No mining or reclamation activity was started or observed in the West Pit. Haul road vehicle access is currently blocked by low soil berms.



Photo 2: West Pit cut slope and partially buried bench (arrows), view southwest. Incipient rills and general wind/water deflation of the surface are beginning to become more visible. Coarse gravel and cobble clasts stand out in relief. Talus aprons cover parts of the bench and the slope toe along the descending pit haul road. Buckwheat and other perennial scrub species are also becoming established as volunteer vegetation. Height of slope in this view is ~60 feet.



Photo 3: East Pit view to southeast, with wash-water pond and sediment-filled excavation. Except for some rise in the sediment levels, no major changes have occurred in the East Pit. SCE easement passes parallel to the right-side highwall and abandoned haul road. Some slope flattening was reportedly done in 2015 by the operator near the left side of the image. The slope is primarily loose talus. Other, near-vertical brow slopes (out of view) first reported in 2013-2014 were observed to be unchanged but remain for future reclamation tasks.



PHOTOGRAPHIC EXHIBITS

ROBERTSON'S READY MIX BANNING QUARRY, BANNING, CALIF.

PROJECT NO. 4373-MI

DATE: 12/29/16

FIGURE C-1



Photo 3: South Pit construction activity, view toward southwestern corner. Foundations and column erections were apparent in three locations, while excavation work for future processing machinery was proceeding in foreground. The construction was reported to be in preparation for relocation of the main rock plant. Some parts of the latter had already been dismantled and were in storage next to the “West Pit extension” pit. Information from the City of Banning indicated the pictured construction was halted by a stop-work order two days after the image date of 12-12-16. Rock plant relocation is an element of the September 19, 2016 MOU between the City and mine operator; however, the amended Mining and Reclamation Plan is incomplete and not yet an approved document. The as-built plant improvements are located in a slightly different part of the pit versus early versions of the amended Plan.



Photo 4: Closer view of under-construction rock plant relocation site, view southwest. Yellowish tones to the excavated alluvial sediments indicate greater geologic age and higher fines contents than most mined sediments. Transit mix truck arrived during the inspection visit.



Photo 6: “West Pit extension” view to northeast, with SCE circuits shown in background. These 220kV circuits will be upgraded and relocated, with a projected completion date of 2020 per the CPUC. The pictured pit was idle. Further mining was judged improbable until interfering plant facilities and/or the circuits can be relocated. Aggregate resources identified in the 2016 MOU include the Repplier Road septum between this pit and South Pit (foreground materials) in addition to alluvium currently under the existing plant (out-of-view to the left). All slopes shown would be considered temporary.



PHOTOGRAPHIC EXHIBITS

ROBERTSON'S READY MIX BANNING QUARRY, BANNING, CALIF.

PROJECT NO. 4373-MI

DATE: 12/29/16

FIGURE C-2