

**State of California
California Regional Water Quality Control Board
Santa Ana Region
February 10, 2012
Staff Report**

ITEM: 9

SUBJECT: Order No. R8-2012-0010 Affirming Administrative Civil Liability
Complaint No. R8-2011-0008, Pacific Clay Products, Inc.,
Riverside County

INTRODUCTION

The matter before the California Regional Water Quality Control Board, Santa Ana Region (Regional Board), is whether to affirm, reject or modify the proposed Order imposing an assessment of \$40,000 against Pacific Clay Products, Inc. (Pacific Clay).

BACKGROUND

On September 23, 2011, the Division Chief issued Administrative Civil Liability Complaint (ALC or the Complaint) No. R8-2011-0008 (copy attached) to Pacific Clay for alleged violations of the State's General Permit for Storm Water Discharges Associated with Industrial Activities (General Permit), Order No. 97-03-DWQ. In the ALC, the Division Chief proposed an assessment of \$40,000 for the alleged violations.

ALC No. R8-2010-0008 was issued to Pacific Clay for the discharge of sediment laden storm water to waters of the United States in violation of the General Permit.

DISCUSSION

The General Permit regulates the discharge of storm water from industrial facilities as required under Section 402(p) of the Federal Clean Water Act. Coverage under the permit is obtained by filing a Notice of Intent (NOI), site map, and a fee with the State Water Resources Control Board. Pacific Clay owns and operates a mining and manufacturing facility at 14741 Lake Street, in Lake Elsinore, California. The total acreage is approximately 1,400 acres. The discharge of storm water from the Pacific Clay site is regulated under the State's General Permit.

The Complaint includes details of a number of prior violations and the enforcement actions taken by Regional Board staff, including a number of Notices of Violation.

WATER CODE VIOLATIONS/PENALTIES

California Water Code Section 13385 allows the Regional Board to administratively assess civil liability for any discharge of wastes in violation of the General Permit. Regional Board staff documented the discharge of sediment laden storm water from the Pacific Clay site during four days. By discharging sediment laden storm water to waters of the United States., Pacific Clay violated provisions of the General Permit. The proposed civil liability of \$40,000 is the maximum penalty allowed under the California Water Code (CWC).

CWC Section 13385 subdivision (e) specifies factors that the Regional Board shall consider in establishing the amount of civil liability. The Water Quality Enforcement Policy (the Policy) adopted by the State Water Resources Control Board on November 19, 2009, establishes a methodology for assessing administrative civil liability pursuant to this statute. Use of the methodology addresses the factors in CWC section 13385(e).

The Complaint and the proposed Order discuss the use of the Policy and the Water Code in determining the penalty.

CONSISTENCY WITH THE STATEWIDE ENFORCEMENT POLICY

As stated above, on November 19, 2009, the State Water Resources Control Board adopted a State Water Quality Enforcement Policy to ensure that enforcement actions throughout the State are consistent, predictable, and fair. The above-described ACL Complaint and the proposed Order are in accordance with the Statewide Enforcement Policy.

RECOMMENDATION

Board staff recommends that the Board adopt Order No. R8-2012-0010 affirming the assessment of \$40,000.

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION**

In the matter of:)	Order No. R8-2012-0010
)	for
Mr. Chad Warren)	Administrative Civil Liability
Pacific Clay Products, Inc.)	
14741 Lake Street)	
Lake Elsinore, CA 92530)	

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), held a hearing on February 10, 2012 to receive testimony and take evidence on the allegations contained in Complaint No. R8-2011-0008, dated September 23, 2011 and on the recommendation for the imposition of penalties pursuant to Water Code Section 13385 in the amount of \$40,000. The Regional Board finds as follows:

1. On April 17, 1997, the State Water Resources Control Board (State Board) adopted Waste Discharge Requirements, Order No. 97-03-DWQ (NPDES No. CAS000001), General Permit for Discharges of Storm Water Associated with Industrial Activity (General Permit). The General Permit requires dischargers of storm water from industrial sites not cause or threaten to cause pollution. Pacific Clay Products, Inc. (Pacific Clay) owns approximately 1,400 acres located at 14741 Lake Street in the City of Lake Elsinore, California (the site). It mines clay and aggregates and has a brick manufacturing facility within the site. Storm water runoff from the site is regulated under the General Permit.
2. On September 23, 2011, the Division Chief issued Administrative Civil Liability Complaint (ALC or the Complaint) No. R8-2011-0008 to Pacific Clay for the discharge of sediment laden storm water in violation of the General Permit. A copy of the Complaint is attached. The Complaint proposed to impose an administrative civil liability of \$40,000 for the violations.
3. Pacific Clay agreed to settle the Complaint by paying the assessed civil liability and waiving its right to a hearing. The Complaint and proposed settlement were noticed for public comments. During the 30-day comment period, four comments were received from interested parties and/or persons. Some of the commenters requested a public hearing regarding the Complaint.
4. The Complaint alleges Pacific Clay violated the General Permit on four days by causing and/or permitting sediment laden storm water discharges from its facility. Regional Board staff or other agencies witnessed the unauthorized discharges. These discharge incidents took place on: (1) September 7, 2006; (2) November 30,

2007; (3) December 22, 2010; and (4) December 24, 2010. The details of these discharges and other related enforcement actions are discussed in the Complaint.

5. California Water Code (CWC) section 13385(c)(1) provides that civil liability may be imposed administratively on a per day basis at \$10,000 for each day in which a violation occurs, and section 13385(c)(2) provides that an additional civil liability may be imposed on a per gallon basis. At the Pacific Clay site, due to the presence of a number of detention/retention basins, low intensity storm events do not always produce a runoff that results in a discharge to waters of the state. There were at least 35 storm events with a rainfall intensity of 0.25 inches or higher during the last five years. It is possible that there were storm water discharges from the site during one or more of these storm events. However, Regional Board staff was only able to verify unauthorized storm water discharges during four storm events where it or another agency was present at the site. The maximum liability on a per day basis for the four days of violations is \$40,000 (4 daysX\$10,000/day). Pacific Clay constructed a number of detention and retention basins to control the discharge of storm water from the site. During each of the four documented discharge events, Regional Board staff observed sediment laden discharges but could not determine the discharge volumes from the site because of a number of changes to the capacity and number of retention and detention basins. As such, no additional civil liability is proposed on a per gallon basis.
6. CWC Section 13385(e) specifies factors that the Regional Board shall consider in establishing the amount of civil liability. The Water Quality Enforcement Policy (the Policy) adopted by the State Water Resources Control Board on November 19, 2009, establishes a methodology for assessing administrative civil liability pursuant to this statute. Use of the methodology addresses the factors in CWC Section 13385(e). The policy can be found at:
http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf
7. Using the methodology in the Policy, a civil liability is assessed on a per day basis for the discharge violations cited above. In this case, using a "potential harm" of 6 (Factor 1: harm to beneficial use =3 [moderate] + Factor 2: characteristics of the discharge=2 [discharged material poses a moderate risk or threat to potential receptors] + Factor 3: susceptibility to cleanup = 1 [less than 50% of the discharge is susceptible to cleanup]) and considering it as a "major" deviation from requirement, the per day factor from Table 2 (Page 15 of the Policy) is 0.22. Using this per day factor, the assessed amount is \$40,000X0.22=\$8,800.
8. The Policy also requires consideration of the violator's conduct factors such as culpability (range 0.5 to 1.5), cleanup and cooperation (0.75 to 1.5) and history of violations (1 and above). The Discharger was repeatedly asked to implement appropriate control measures to reduce pollutant discharges from the site. The Discharger had approximately 19 years to implement a comprehensive program with effective control measures. The Discharger did not take proactive steps to

implement proper control measures and the BMPs that were implemented were completed on a piece-meal basis only after notices of violation were issued. The Discharger does not appear to have an ongoing program to recognize problems and implement timely corrective actions on its own. As such, the culpability was set at 1.3, the clean-up and cooperation at 1.3 and the history of violations at 1.2. The total base liability after consideration of these factors is $\$8,800 \times 1.3 \times 1.3 \times 1.2 = \$17,846.40$.

1. The Policy also requires consideration of the Discharger's ability to pay and ability to continue in business, economic benefit or savings resulting from the violations and other factors as justice may require. Each of these factors is discussed below:
 - A. The Discharger owns over 1,400 acres at the site. The assessed value of the parcel at 14741 Lake Street is \$15,726,191 according to County records. The parent company of Pacific Clay also owns other land across Lake Street and in other parts of the country. Current estimates show this company has annual revenue of \$20 to \$50 million. Accordingly, no adjustment to the proposed civil liability is recommended based on ability to pay or continue in business.
 - B. The Discharger realized at least \$232,500 in cost savings by failing to implement proper erosion and sediment control measures (from 2006 to 2011). This amount represents the lowest of the costs that staff estimated for construction and maintenance of onsite retention basins using Pacific Clay's own equipment and personnel and the two estimates that staff obtained from other vendors for sediment and/or flow control measures that could have controlled pollutant discharges from the site. The Policy requires that the liability amount shall be at least 10 percent higher than the economic benefit.
 - C. The costs of investigation and enforcement are considered as one of the "other factors as justice may require," and should be added to the final liability. Investigation costs have been estimated to be \$13,500 (90 hours at \$150 per hour = \$13,500).
9. If staff costs are added to the amount calculated as per the Policy, the total assessed amount as per the Policy is \$31,346.40 ($\$17,846.40 + \$13,500$).
10. After consideration of these factors, the Division Chief proposes that civil liability be imposed on Pacific Clay in the amount of forty thousand dollars (**\$40,000**) for the violations cited above. This amount is the maximum amount allowed per the Water Code for the four days of discharge violations from June 1, 2006 to June 1, 2011. The maximum amount is proposed in this case instead of the amount calculated using the Policy as the economic benefit was higher than both the calculated and the maximum allowable civil liability. Furthermore, no penalty was assessed based on a per gallon basis or for all the potential discharges from the site.

11. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 2100 et seq.) in accordance with Section 15321, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED that, pursuant to California Water Code Section 13385(c), a civil liability of \$40,000 shall be imposed on Pacific Clay Products, Inc., as proposed in Complaint No. R8-2011-0008 for the violations cited, payable as set forth below.

1. Pacific Clay Products, Inc. is liable for the assessed amount and shall pay \$40,000 to the State Water Pollution Cleanup and Abatement Account by March 12, 2012.

The Executive Officer is hereby authorized to refer this matter to the Attorney General for further enforcement in the event it is required.

Pursuant to Water Code Section 13320, you may petition the State Water Resources Control Board for review of this order. If you choose to do so, you must submit the petition to the State Board within 30 days of the Regional Board's adoption of this Order.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on February 10, 2012.

Date

Kurt V. Berchtold
Executive Officer



California Regional Water Quality Control Board

Santa Ana Region



Matthew Rodriguez
Secretary for
Environmental Protection

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 • FAX (951) 781-6288
www.waterboards.ca.gov/santaana

Edmund G. Brown Jr.
Governor

September 23, 2011

Mr. Chad Warren
Pacific Clay Products, Inc.
14741 Lake St.
Lake Elsinore, CA 92530

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

ADMINISTRATIVE CIVIL LIABILITY (ACL) COMPLAINT NO. R8-2011-0008 FOR PACIFIC CLAY PRODUCTS, INC. (PACIFIC CLAY)

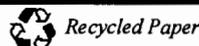
Dear Mr. Warren:

On July 20, 2011, a draft ACL Complaint, No. R9-2011-0008, was mailed to you. In your August 19, 2011 response to the draft Complaint, you provided additional information regarding the discharge events discussed in the draft Complaint. Subsequently we discussed a possible settlement of the Complaint based on the additional information that was provided to us. In your September 16, 2011 email to us you agreed to settle the Complaint without a public hearing.

Based on the additional information that was provided to us in your August 19, 2011 letter, we have revised the Complaint. A certified copy of the Complaint is enclosed. You have already signed the Waiver Form and agreed to waive your right to a hearing before the Regional Board.

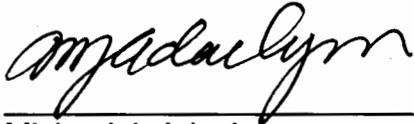
The enclosed Complaint recognizes the Regional Board's proposed settlement with Pacific Clay. This will be publicly noticed for 30 days on our website at: www.waterboards.ca.gov/santaana/public_notices/enforcement_actions.shtml. If we do not receive any significant public comments within the 30 day comment period, the Complaint will be considered as final. You will be required to pay the assessed amount within 30 days of finalizing the Complaint.

California Environmental Protection Agency



If you have any questions regarding this correspondence contact Milasol C. Gaslan at 951-782-4419 (mgaslan@waterboards.ca.gov) or Michael Roth at 951-320-2027 (mroth@waterboards.ca.gov).

Sincerely,



Michael J. Adackapara
Division Chief
Regional Board Prosecution Team

Enclosure: Draft Complaint No. R8-2011-0008

Cc with a copy of the complaint (by electronic mail only):

State Water Resources Control Board, Office of Enforcement – Reed Sato
(Regional Board Prosecution Team Attorney)
Riverside County Executive Office – Michael Shetler
City of Lake Elsinore – Rita Thompson

State of California
California Regional Water Quality Control Board
Santa Ana Region

IN THE MATTER OF:

Pacific Clay Products, Inc.)	Complaint No. R8-2011-0008
14741 Lake Street)	for
Lake Elsinore, CA 92530)	Administrative Civil Liability
Attn: Mr. Chad Warren)	
_____)	

YOU ARE HEREBY GIVEN NOTICE THAT:

1. On July 20, 2011, a draft copy of this complaint was mailed to Pacific Clay Products, Inc., (hereinafter Pacific Clay or Discharger). In a letter dated August 19, 2011, Pacific Clay provided additional information regarding the violations alleged in the draft Complaint. Some of that information was used in the formulation of this Complaint. Subsequently Pacific Clay and the Regional Board staff reached a settlement for the proposed liability. Pacific Clay has waived its right to a hearing and this document memorializes the settlement of this matter.
2. Pacific Clay is alleged to have violated provisions of law for which the California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), may impose administrative civil liability, pursuant to California Water Code (CWC) Section 13385.
3. Pacific Clay has waived its right to a hearing. However, if a hearing is deemed necessary, it will be scheduled within 90 days of the date of issuance of this Complaint. If a hearing is held, Pacific Clay, or its representative, will have the opportunity to appear and be heard and to contest the allegations in this Complaint and the imposition of civil liability by the Regional Board.
4. If a hearing is held on this matter, the Regional Board will consider whether to affirm, reject, or modify the proposed administrative civil liability or whether to refer the matter to the Attorney General for recovery of judicial civil liability. If this matter proceeds to hearing, the Prosecution Team reserves the right to seek an increase in the civil liability amount to cover the costs of enforcement incurred subsequent to the issuance of this Complaint through hearing.

THE COMPLAINT IS BASED ON THE FOLLOWING FACTORS:

5. Pacific Clay owns approximately 1,400 acres of land at the commonly known address of 14741 Lake Street in the City of Lake Elsinore (in the Alberhill area), California. The facility is currently regulated under the State's General Permit for Storm Water Discharges Associated with Industrial Activities, Water Quality Order No. 97-03-DWQ, NPDES No. CAS000001 (General Permit). The facility's Waste Discharge Identification (WDID) Number is 8 331006218, issued on April 22, 1992.
6. Mining on the site has occurred in one form or another since approximately 1883 with different companies operating on the site. Pacific Clay has been the sole owner of the 1,400 acre property since 1979 when approximately 320 acres of the property were acquired from Gladding McBean and Company. The site has vested mining rights since mining was occurring on the site prior to January 1, 1976. Initial reclamation plan approvals from the County of Riverside date back to 1978 and 1979. Pacific Clay mines clay and aggregates and has a brick manufacturing facility within the site. Pacific Clay is a leading manufacturer of quality clay products including face brick, thin brick, clay bullnose, clay pavers and wall caps.
7. There are a number of creeks and channels flowing through the 1,400 acre site and Temescal Creek traverses through the northern portions of the site. Some of the mine excavations within the site are currently used as retention ponds. In addition, there are a number of detention/retention ponds constructed on the site to control storm water discharges from the site.
8. Regional Board records show that this site has a long history of non-compliance with the General Permit, including the discharge of sediment laden storm water to waters of the U.S. During an inspection by Regional Board staff in 1997, Pacific Clay acknowledged its problems with high concentrations of total suspended solids (TSS) in the storm water discharges from the site.
9. The most current revision of the site's SWPPP shows seven discharge locations from where storm water is discharged from the site. On September 26, 2000, Regional Board staff issued a Notice of Violation (NOV) to Pacific Clay for lack of adequate best management practices (BMPs) at the discharge point near the entrance to the site on Temescal Canyon Road. The NOV also noted that the runoff had a TSS concentration of 10,700 mg/l (milligrams per liter or ppm). The U.S. EPA benchmark for TSS is 100 mg/l. High concentrations of TSS can cause pollution, contamination, or nuisance and adversely impact the beneficial uses in the receiving waters. The discharge of storm water containing high concentrations of TSS is a violation of Provision A.2 of the General Permit.

10. During an October 7, 2004 inspection, staff discussed the high TSS discharges from the facility with Pacific Clay representatives. Staff also requested Pacific Clay to improve its BMPs to control the discharge of sediment from the site.
11. On September 7, 2006, Regional Board staff was notified by the Riverside County Health Department that there was an unauthorized discharge of sediment laden water from the site. The discharge of sediment laden water could cause or threaten to cause pollution, contamination, or nuisance, which is a violation of Provision A.2 of the General Permit. During the September 7, 2006 site visit, In addition to discussing the non-storm water discharge, Regional Board staff also discussed the need for either advanced treatment system to remove the fine sediment in storm water runoff from the site or other control measures to eliminate or minimize the flows from the site. The October 11, 2006 NOV noted the September 7, 2006 discharge and other potential violations of the General Permit including the lack of an up-to-date Storm Water Pollution Prevention Plan (SWPPP).
12. On November 30, 2007, Regional Board staff noted a discharge of muddy water at the entrance to the site from Temescal Canyon Road. This is a violation of Provision A.2 of the General Permit. Pacific Clay was notified and it agreed to address the problem. This discharge was from the same location that Pacific Clay had been issued a NOV on September 26, 2000 for muddy water discharges (see Paragraph 9, above).
13. A number of problems were noted during an inspection on March 27, 2009, including a potential discharge of untreated sewage (septic system wastes) to ground and/or surface waters and the disposal of waste materials to streams within the facility boundaries. These problems were noted in the June 4, 2009, NOV. In a July 6, 2009 response to the NOV, Pacific Clay refuted the violations cited in the NOV. However, it also noted that most of the problems cited in the NOV were addressed, including problems with the malfunctioning septic system.
14. A subsequent inspection on October 4, 2010, indicated that the septic system was backing up as the line leading to the leach field was severed as noted in the October 6, 2010 NOV. The NOV also noted problems with the small sediment basin next to the brick factory. Pacific Clay agreed to address the problems with the sediment basin by pumping water from this sediment basin into the larger retention ponds thereby eliminating any discharge from this pond. It was agreed that this work would be completed in four weeks from October 4, 2010.
15. To address sediment discharge concerns, Pacific Clay plugged the drain pipe from the small basin next to the brick factory and began partially re-routing flows to the basin to other areas/basins.
16. Regional Board staff inspected the site on December 22 and 24, 2010. December 22, 2010 was the last day of a long series of storms. When Regional

Board staff arrived at the small basin at the corner of the brick factory (on December 22, 2010), the basin was overflowing, but it was not being pumped down as Pacific Clay had agreed during the October 4, 2010 inspection. There was a pump and a few hoses; but the hoses were not connected to the pump. The sediment laden water that was overflowing from the basin was flowing off the site and directly into Temescal Creek. This is a violation of Provision A.2 of the General Permit. Staff could not collect a sample on December 22, 2010 due to inclement weather conditions. A sample of the discharge collected two days after the storm event (December 24, 2010) from this basin had a turbidity of 814 NTU and TSS concentration of 167 mg/l.

17. During the December 24, 2010 inspection, Regional Board staff also observed several mining stockpiles on the property's south side near the Lake Street entrances. These stockpiles were exposed and were eroding. Sediment laden flows from this area split into two discharge points: (1) some of the sediment laden discharge flowed through a swale with check dams between Lake Street and the mining stockpiles. The check dams were overwhelmed by sediment and the sediment laden discharge entered the creek next to Lake Street; and (2) another part of the flow entered a storm drain that flows into a flood control/sediment basin. According to Alberhill Ranch, Pacific Clay's sister company, who currently maintains this basin, it had to spend a significant amount of resources to remove the sediment from this basin.
18. Regional Board staff also noted that numerous loads of faulty bricks had been dumped into a stream channel that runs through the northern portion of the site. Pacific Clay has questioned the appropriateness of designating this stream channel as a water of the U.S. and has indicated that this area would be addressed through the approved site restoration plan for which the City of Lake Elsinore is the lead agency. However, Regional Board staff is not aware of any regulatory provisions that would allow disposal of wastes into stream channels. Additionally, runoff from certain areas of Pacific Clay site leaves the site through this discharge point without adequate desiltation and appears to have caused heavy channel erosion. Furthermore, all discharges of storm water associated with industrial activities from the site are regulated under the General Permit.
19. The Lake Street realignment project took place during the period from January 2009 to April 2009. Alberhill Ranch, the contractor for the realignment project, obtained coverage under the State's General Construction Activities Storm Water Permit and was issued WDID number 833C333722. Castle & Cooke Company is the parent company of Pacific Clay and Alberhill Ranch. Alberhill Ranch development is located immediately adjacent to Pacific Clay and on the east side of Lake Street. Pacific Clay was responsible for most of the areas adjacent to the road realignment project. The adjacent area was where the mining stockpiles mentioned in paragraph 17 were located. Staff observed unprotected slopes, over slope erosion, and channel erosion in the mining stockpile area. The check dams in the channel were made of 3 inch rocks and were filled with sediment that

caused sediment to bypass the check dams, indicating a general lack of maintenance. Most of the disturbed areas within the Pacific Clay site had poor erosion control measures or erosion control measures that lacked adequate maintenance. On November 4, 2010, Regional Board staff requested Pacific Clay by e-mail to implement erosion control measures such as spraying the slopes. In its November 8, 2010 email response, Pacific Clay provided photographs that had been taken in February when the area had been hydroseeded. However, by November 2010, it was clear that there was no effective vegetation established from the hydroseeding. On December 24, 2010, Pacific Clay collected a sample of the discharge from the area that drains Pacific Clay's land adjacent to the realignment project. It had a total suspended solids (TSS) level of 17,300 mg/l. None of the additional erosion control measures that were requested were implemented.

20 Regional Board staff inspected the areas within the Pacific Clay site adjacent to the realignment project on February 25, 2011. Staff noted a lot of evidence of sediment discharges, including a sediment basin that failed, the areas that had been hydromulched/seeded in February 2010 that had germinated less than 25% and check dams in the channel that were still not maintained. Some of the flow from the swale drained to a flood control/sediment basin and some bypassed it and flowed directly to a creek which is tributary to the creek discussed in paragraph 16, above. Some of the slopes that drained to the swale were not stabilized and had undergone significant erosion. There were indications that the sediment laden discharges that bypassed the swale had entered the creek.

21. The TSS levels in the storm water discharges from the Pacific Clay site have been consistently high. The following table summarizes TSS levels in mg/l in discharges from the site as reported by Pacific Clay in the annual reports from 1993-94 to 2009-2010. Every reported TSS analysis for each of the 6 discharge points (SWR) is listed in the table. TSS, like the other constituents tested under the General Permit, does not have a numeric effluent limit. The USEPA benchmark for TSS is 100 mg/l. Exceedance of this benchmark usually indicates that the BMPs at the site do not meet the required BAT/BCT standard for the General Permit and need to be improved. As can be seen in the table below, the site has a history of high TSS discharges. In 2005, Pacific Clay became a member of the Building Materials Industry Monitoring Group. Therefore, sampling did not have to be done every year as per the Group Monitoring Program requirements of the General Permit. The annual report for 2009-10 stated that there was no runoff from the site except on one occasion and no samples were taken on that day due to the need to concentrate on making emergency repairs caused by the 6 or 7 inches of rain received over two days. There is no exception in the General Permit for not collecting samples because of having to focus on emergency repairs. There is an exception for not collecting samples if it is dangerous to do so, but the annual report did not indicate such a situation. Therefore, not taking a required sample is a violation of Section B.5 of the General Permit.

Year	SWR 1	SWR 2	SWR 3	SWR 4	SWR 5	SWR 6
1993-94	3000	3100				
1994-95	4100	160	190	7820		
1995-96	4700	13000				
1996-97						
1997-98	180	9200		130	41000	
1997-98		10000				
1998-99		8680				
1998-99	100	240	990			
1999-00		10700				
2000-01	320	5120	7380	7660		
2001-02						
2002-03	220					8200
2003-04						
2004-05	730	14000	6700	13000	22000	1100
2004-05		20			580	
2005-06	3240					
2006-07						
2007-08	505	1390				
2008-09						
2009-10						

22. The discharge of high levels of TSS (sediment) to waters of the U.S. could cause or threaten to cause pollution, contamination, or nuisance and it could adversely impact the beneficial uses of the receiving waters. Pacific Clay did not implement BMPs that achieve BAT/BCT as required under Provisions B.3 and C.3 of the Permit. These are violations of Provisions A.2, B.3 and C.2 of the General Permit.
23. In accordance with Section 13385(a)(2) of the CWC, civil liability may be administratively imposed by the Regional Board for any violation of waste discharge requirements.
24. CWC Section 13385(c)(1) states that civil liability may be imposed administratively on a per day basis at \$10,000 for each day in which the violation occurs and Section 13385(c)(2) states that additional penalty may be imposed on a per gallon basis. It is reasonable to assume that there were discharges of sediment laden storm water from the site during most of the storm events during the last five years for which penalty is being proposed in this Complaint. Generally a rainfall intensity of 0.1 inches or higher produces storm water runoff. At the Pacific Clay site, due to the presence of a number of detention/retention basins, low intensity storm events do not always produce a runoff. There were at least 35 storm events with a rainfall intensity of 0.25 inches or higher during the last five years. However, staff visited the site only during five events during which sediment laden discharges were

observed or evident and were documented. These inspections were conducted on September 7, 2006, November 30, 2007, December 22 and 24, 2010, and February 25, 2011. Even though there was evidence of potential discharges from the site during the February 25, 2011 inspection, Pacific Clay has indicated that the precipitation event on February 25, 2011 could not have produced a runoff from the site. The maximum liability on a per day basis for the four days of violations is \$40,000 (4 days X \$10,000/day). During each of the four documented discharge events, Regional Board staff observed large volumes of sediment laden discharges or evidence of sediment discharges, from the site but could not determine the discharge volumes from the site because of a number of changes to the capacity and number of retention and detention basins. As such, no penalty has been assessed on a per gallon basis.

25. CWC Section 13385(e) specifies factors that the Regional Board shall consider in establishing the amount of civil liability. The Water Quality Enforcement Policy (the Policy) adopted by the State Water Resources Control Board on November 19, 2009, establishes a methodology for assessing administrative civil liability pursuant to this statute. Use of the methodology addresses the factors in CWC section 13385(e). The policy can be found at:

http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf

26. Using the methodology in the Policy, a penalty is assessed on a per day basis for the discharge violations cited above. In this case, using a "potential harm" of 6 (Factor 1: harm to beneficial use = 3 [moderate] + Factor 2: characteristics of the discharge = 2 [discharged material poses a moderate risk or threat to potential receptors] + Factor 3: susceptibility to cleanup = 1 [less than 50% of the discharge is susceptible to cleanup]) and considering it as a "major" deviation from requirement, the per day factor from Table 2 (Page 15 of the Policy) is 0.22. Using this per day factor, the assessed amount is $\$40,000 \times 0.22 = \$8,800$.

27. The Policy also requires consideration of the violator's conduct factors such as culpability (range 0.5 to 1.5), cleanup and cooperation (0.75 to 1.5) and history of violations (1 and above). The Discharger was repeatedly asked to implement BMPs to reduce pollutant discharges from the site. The Discharger had approximately 19 years to implement a comprehensive program with effective BMPs. The Discharger did not take proactive steps to implement proper control measures and the BMPs that were implemented were completed on a piece-meal basis only after notices of violation were issued. The Discharger does not appear to have an ongoing program to recognize problems and implement timely corrective actions on its own. As such, the culpability was set at 1.3, the clean-up and cooperation at 1.3 and the history of violations at 1.2. The total base liability after consideration of these factors is $\$8,800 \times 1.3 \times 1.3 \times 1.2 = \$17,846.40$.

28. The Policy also requires consideration of the Discharger's ability to pay and ability to continue in business, economic benefit or savings resulting from the violations and other factors as justice may require. Each of these factors is discussed below:

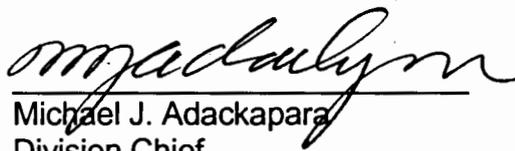
- A. The Discharger owns over 1,400 acres at the site. The assessed value of the parcel at 14741 Lake Street is \$15,726,191 according to County records. The parent company of Pacific Clay also owns other land across Lake Street and in other parts of the country. Current estimates show this company has annual revenue of \$20 to 50 million.
- B. The Discharger realized at least \$232,500 in cost savings by failing to implement proper erosion and sediment control measures (from 2006 to 2011). This amount represents the lowest of the costs that staff estimated for construction and maintenance of onsite retention basins using Pacific Clay's own equipment and personnel and the two estimates that staff obtained from other vendors for sediment and/or flow control measures that could have controlled pollutant discharges from the site. The Policy requires that the liability amount shall be at least 10 percent higher than the economic benefit.
- C. The costs of investigation and enforcement are considered as one of the "other factors as justice may require," and should be added to the final liability. Investigation costs have been estimated to be \$13,500 (90 hours at \$150 per hour = \$13,500).
- D. If staff costs are added to the amount calculated as per the Policy, the total assessed amount as per the Policy is \$31,346.40 (\$17,846.40+\$13,500).

29. After consideration of these factors, the Division Chief proposes that civil liability be imposed on Pacific Clay in the amount of forty thousand dollars (**\$40,000**) for the violations cited above. This amount is the maximum amount allowed per the Water Code for the four days of discharge violations from June 1, 2006 to June 1, 2011. The maximum amount is proposed in this case instead of the amount calculated using the Policy as the economic benefit was higher than both the calculated and the maximum allowable penalties. Furthermore, no penalty was assessed based on a per gallon basis or for all the potential discharges from the site.

This Complaint will be posted on the Regional Board's website for 30-days for public comments. If no significant comments are received, this matter will be considered as settled at the end of the 30-day comment period upon payment of the assessed amount by Pacific Clay. If there are unresolved significant comments, this matter will be scheduled for a public hearing at a regularly scheduled Board meeting at a later date. If a public hearing is to be held, all interested parties will be notified of the public hearing.

If you have any questions, please contact Milasol G. Gaslan at (951) 782-4419.

9-23-2011
Date


Michael J. Adackapara
Division Chief
Regional Board Prosecution Team

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MR. CHAD WARREN
PACIFIC CLAY PRODUCTS, INC
14741 LAKE ST.
LAKE ELSINORE, CA 92530

Michael Roth - Pacific Clay Products, Inc. - Administrative Civil Liability - R8-2011-0008

From: "J. Jones" <jones065@yahoo.com>
To: mroth@waterboards.ca.gov; jones065@yahoo.com
Date: 9/26/2011 7:47 PM
Subject: Pacific Clay Products, Inc. - Administrative Civil Liability - R8-2011-0008

Mr. Michael Roth,

I am happy to see Pacific Clay is being reprimanded for some of the polluting it has caused the surrounding areas and residents in the vicinity of their mining operations. It seems they are more interested in making money than the health and well being of the people they brought in to live here under their parent company Castle & Cooke. They sold us our home and told us the clay mining operation would be shut down and become a part of the planned community, but it seems they have stepped up mining operations, opened a couple new mines and abandoned the "planned community" idea along with all of the people they sold homes to.

I have a 10 month old son and 3 year old toddler that I am concerned about due to the fugitive silica dust, which is known to cause asthma, emphysema and lung cancer. And now to hear they are contaminating the water is extremely disturbing. Over 100 doctors in the area signed a petition claiming the quarries are harmful to the health of the people living around them, but that doesn't seem to be of any concern to the local politicians since they are making revenue off these operations. If there is a way for me to become certified to take water samples for the board, then I will dilligently do so as Pacific Clay can be fined for more than the \$40,000.00, which is obviously cheaper for them than doing the right thing. Will there ever come a time when the State of California will step in and shut them down for this pollution?

Regards,

Jeff Jones
(949) 374-4497
4104 Ballantree Street,
Lake Elsinore, CA 92530

From: <JMB1LAB@aol.com>
To: <mroth@waterboards.ca.gov>
Date: 10/18/2011 11:23 AM
Subject: Arrogant activity of Pacific Clay in L.E.

To Mr. Michael Roth, of the Regional Water Control Board,

Why in the world do you Board members allow this to go unchecked for decades, as the article states? Inspections alone do NOT cut it, as you well know from experience. What's wrong with imposing fines that will make a difference to Pacific Clay's bottom line? \$40,000 is pocket change to these large mining operations. If this still does not get them to comply to agreed regulations, then shut them down for as long as it takes them to come into compliance - you know they can do it; they're just flaunting you and the local residents, daring you to take effective action! How shameful! Where's your backbone?

In the meantime the local area waterways & residents pay the high price of Pacific Clay's arrogant, reckless contaminations. I think you have the picture. If it really matters to you governing folks, you will take effective measures. We'll wait & see. The ball's in your court.

Respectfully,
JMB

Michael Roth - Pacific Clay Products, Inc. - Administrative Civil Liability - R8-2011-0008

From: MICHAEL AND PAULIE <greatfull@msn.com>
To: mroth@waterboards.ca.gov
Date: 10/21/2011 9:31 AM
Subject: Pacific Clay Products, Inc. - Administrative Civil Liability - R8-2011-0008

Dear Mr. Roth:

This correspondence is in regards to the water pollution by Pacific Clay Products, Inc. We have noticed what we have considered water pollution from Castl & Cooke's mining operations here in Lake Elsinore for many years. The worse that we have noticed is at their Pacific Aggregates Mining operation on Nichols Canyon Road, as well as behind their clay and aggregate mining operations operating on Lake Street and Temescal Canyon Road . We have noticed flooding at these locations and have mentioned them to the City but nothing was ever done about this problem. We have videos and pictures of the flooding. The flooding we have noticed was grimey and sometimes greasy and constantly happening in one area, and in another area it looked deep and was standing for a week or longer. Sometimes there was large equipment sitting in the flooded water.

We have spoken with people who have lived in the area for years, they have taken walks behind the Pacific Aggregates mining site and seen dark green ponds which were unlined, when they had been back their a few years ago, the pond they said were full of dark green water. We did not see this with our own eyes, this is just what we have been told. We can introduce you to these people if you want to talk to them.

The flooding we believed was serious and we are happy that you are finally doing something about this problem. We feel you should hold a hearing so people can voice their opinions and we believe a \$40,000.00 fine is not enough in this case, we would like to see them issued a higher fine. We believe the water pollution has been going on for quite sometime, which we can't prove this is just our feeling.

Thank you for taking the time to read our comments and we do hope to see you at a hearing regarding this serious situation.

Regards,

Sharon Gallina and Paulie Tehrani
4044 and 4036 Ash Street
Lake Elsinore, CA 92530

bc:

Michael Roth - Pacific Clay Products, Inc. - Administrative Civil Liability - R8-2011-0008

From: MICHAEL AND PAULIE <greatfull@msn.com>
To: mroth@waterboards.ca.gov
Date: 9/27/2011 5:36 AM
Subject: Pacific Clay Products, Inc. - Administrative Civil Liability - R8-2011-0008

Subject: Pacific Clay Products, Inc. - Administrative Civil Liability - R8-2011-0008

Dear Mr. Roth,

I am happy to see Pacific Clay is being reprimanded for some of the polluting it has caused the surrounding areas and residents in the vicinity of their mining operations. It seems they are more interested in making money than the health and well being of the people they brought in to live here under their parent company Castle & Cooke. They sold us our home and told us the clay mining operation would be shut down and become a part of the planned community, but it seems they have stepped up mining operations, opened a couple new mines and abandoned the "planned community" idea along with all of the people they sold homes to.

I have been concerned for my families health due to the fugitive silica dust, which is known to cause asthma, emphysema and lung cancer. **And now to hear they are contaminating the water is extremely disturbing.** Over 100 doctors in the area signed a petition claiming the quarries are harmful to the health of the people living around them, but that doesn't seem to be of any concern to the local politicians since they are making revenue off these operations. There is frequent flooding at Pacific Clays mining sites during the winter months and I believe Pacific Clay should be fined far more than the \$40,000.00, which is obviously cheaper for them than doing the right thing.

I would also like to know what you are doing about the residential neighborhoods surrounding the mines which are on well water three (3) days a week.

Will there ever come a time when the State of California will step in and shut them down for this pollution?

Regards,

Paulie Tehrani
4036 Ash Street
Lake Elsinore, CA 92530



Inland Empire Waterkeeper

Advocacy • Education • Restoration • Enforcement

6876 Indiana Avenue, Suite D
Riverside, CA 92506
Phone (951) 530-8823
Fax (951) 530-8824
Website www.iewaterkeeper.org

October 24, 2011

Sent via Electronic Mail: madackapara@waterboards.ca.gov

Michael J. Adackapara
Division Chief – Regional Board Prosecution Team
Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

RE: Comments on Proposed Settlement of Administrative Civil Liability –R8-2011-0008

Dear Division Chief Adackapara,

Inland Empire Waterkeeper (Waterkeeper) is an environmental non-profit organization dedicated to advocacy, education, restoration, and enforcement in the Santa Ana River watershed. On September 23rd, 2011, the Regional Water Quality Control Board, Santa Ana Region (Regional Board), issued Administrative Civil Liability Complaint Number R8-2011-0008 (ACL) to Pacific Clay Products, Inc. (Pacific Clay), alleging numerous violations of the State's General Permit for Storm Water Discharges Associated with Industrial Activities, Water Quality Order No. 97-03-DWQ, NPDES CAS000001 (General Permit) at their Lake Elsinore area mine.

Waterkeeper commends Regional Board staff on a well drafted proposed ACL and the significant amount of effort exerted during the investigative and enforcement phases of this action. However, Waterkeeper is concerned the proposed ACL is inadequate to remedy the underlying problem that caused the violations and we strongly encourage the Regional Board to evaluate whether the liability proposed is sufficient to encourage necessary work by the discharger to address pollution related problems.

The State Water Resources Control Board's Water Quality Enforcement Policy dictates assessments of ACLs should, amongst other goals, "[f]ully eliminate any economic advantage obtained from noncompliance," "[d]eter the specific person(s) identified in the ACL from committing further violations", and "[d]eter similarly situated person(s) in the regulated community from committing the same or similar violations."¹ Regional Board staff appropriately recognized Pacific Clay realized at least "\$232,500 in cost savings by failing to implement proper erosion and sediment control measures (from 2006 to 2011)."² Had Regional Board staff been able to calculate the financial benefit of nearly 20 years of non-compliance the amount would likely have been significantly higher. Violations alleged in the ACL resulted in a civil liability assessment against Pacific Clay equal to \$40,000. At a minimum, the assessment results in a five-year noncompliance originated financial benefit to Pacific Clay of \$192,500. In order to appropriately deter future noncompliance by Pacific Clay or similarly situated corporations and fully eliminate the economic advantage

¹ State Water Resources Control Board, *Water Quality Enforcement Policy*, 10 (Cal. Env'tl. Protection Agency Effective May 20, 2010).

² Cal. Reg'l. Water Quality Control Bd. Santa Ana Region Complaint No. R-8-2011-0008, at 8 (September 23, 2011) (available at http://www.swrcb.ca.gov/santaana/public_notices/docs/TR8_11_008.pdf).

obtained from noncompliance Regional Board staff should modify the proposed ACL to more accurately reflect the guidance contained in the Water Quality Enforcement Policy.

The Regional Board Should Modify the Administrative Civil Liability Action with a Time Schedule Order Demanding Compliance with the General Permit

Waterkeeper recommends the issuance of a California Water Code (CWC) Section 13308 Time Schedule Order prescribing a civil penalty if the detailed time schedule requirements are not achieved by Pacific Clay. Persistently high Total Suspended Solid (TSS) levels and Pacific Clay's practice of deliberately avoiding compliance with water quality regulations and orders threaten the integrity of the Regional Board's regulatory program and necessitates the Regional Board's issuance of Time Schedule Order. For a period of at least 19 years, Pacific Clay has discharged stormwater laden with high levels of TSS to the detriment of the beneficial uses of waters downstream of the Pacific Clay site.³ During their tenure as the operators of the mine, Pacific Clay has not shown a willingness to comply with the regulatory demands placed upon it by the Regional Board. This can be remedied only by the Regional Board requiring Pacific Clay to submit a detailed time schedule that sets forth the actions the discharger will take to address actual or threatened discharges of waste in violation of requirements and financial penalty based on an amount reasonably necessary to achieve compliance.

According to paragraph 21's table summarizing TSS levels from the Pacific Clay annual report records from 1993-94 through 2009-10, of Pacific Clay's 35 sample results 33 exceed the 100 mg/L USEPA benchmark. The lowest exceedance during that period being 1.3 times benchmark (130 mg/L) and the highest being 410 times benchmark (41,000 mg/L). Paragraph 22 of the proposed ACL recognizes that during this period, "Pacific Clay did not implement BMPs that achieve BAT/BCT" as required under the General Permit.

Similarly, while Pacific Clay was a responsible party during the 2009 Lake Street realignment project, Regional Board staff "observed unprotected slopes, over slope erosion, and channel erosion in the mining stockpile area" and check dams that were "filled with sediment that caused sediment to bypass the check dams, indicating a general lack of maintenance."⁴ These poorly maintained erosion control measures could lead to high levels of TSS discharged into waters of the U.S.. In November 2010, Regional Board staff directed Pacific Clay to implement erosion control measures and according to the proposed ACL, "[N]one of the additional erosion control measures that were requested were implemented."⁵

Pacific Clay has demonstrated to the Regional Board and Waterkeeper difficulty in properly maintaining effective erosion control measures designed to reduce the concentration of TSS discharged into waters of the U.S., including Temescal Creek. Regional Board staff suspects as much as 35 separate events with a rainfall intensity sufficient to cause the discharge of sediment laden storm water from the Pacific Clay site during the last five years.⁶ However, Regional Board staff limited their assessment in the proposed ACL to only those events where staff directly observed and documented discharges. Even so, according to the administrative record, TSS exceedances appear routine at Pacific Clay and a \$40,000 penalty is unlikely to result in a significant compliance redirection without accompanying increases in responsibilities elsewhere. As such, in order to resolve the underlying problem that caused the violations, the Regional Board should adopt a Time Schedule Order with a reasonable civil penalty attached for noncompliance.

³ *Id.* at 4

⁴ *Id.* at 4

⁵ *Id.*

⁶ *Id.* at 6-7

The Regional Board Should Issue a Cleanup and Abatement Order Demanding the Removal of Bricks and the Restoration of Waters of the United States Degraded by Pacific Clay

The Regional Board should issue a Cleanup and Abatement Order (CAO) pursuant to CWC section 13304 to remedy Pacific Clay's dumping of bricks into waters of the State. According to paragraph 7 of the proposed ACL, numerous creeks and channels flow through the 1,400 acre Pacific Clay site, including portions of Temescal Creek through the northern portions of the site. In paragraph 18, Regional Board staff "noted that numerous loads of faulty bricks had been dumped into a stream channel that runs through the northern portion of the site." Regional Board staff asserted the presence of the bricks in the creek has "caused heavy channel erosion."⁷ The discharge of bricks into waters of the state constitutes the discharge of waste creating a condition of pollution or nuisance requiring remediation.

The Regional Board should reject Pacific Clay's claims that site restoration, including creek restoration, is addressed in approved plans before the City of Lake Elsinore. The City of Lake Elsinore is currently under review by the California State Mining and Geology Board (SMGB) regarding the potential revocation of their lead agency status due to concerns over regulatory oversight. Additionally, on April 11, 2011, the Office of Mine Reclamation issued an Order to Comply to Pacific Clay pertaining to violations of the Surface Mining and Reclamation Act (SMARA, Public Resources Code Section 2710 *et seq.*). The Order to Comply originated from Pacific Clay's alleged failure to operate within the boundaries of its approved reclamation plan and the "encroach[ment] into two areas not covered by an approved reclamation plan."⁸ Without additional information as to the specific location of the dumped bricks and corresponding reclamation plans, Waterkeeper cannot accept Pacific Clay's claims the abandoned bricks will be remedied in accordance with approved reclamation plans with any degree of confidence.

Therefore, Waterkeeper recommends the issuance of a CAO against Pacific Clay for causing a condition of pollution or nuisance by filling an onsite creek with "faulty bricks" resulting in increased erosion and downstream loading of elevated TSS. The continued presence of defective or faulty bricks as fill in a channel on Pacific Clay's property must be remedied by a modified ACL by the Regional Board so as to comply with the General Permit. Assertions by Pacific Clay as to the appropriateness the channel as waters of the United States should not result in the Regional Board summarily dismissing potential remedies to a significant impairment to water quality due to increased erosion and extraordinarily high TSS levels in stormwater discharge from the site.

The Regional Board Should Order Pacific Clay to Increase Sampling Frequency as a Member of the Building Materials Industry Monitoring Group

Waterkeeper strongly encourages the Regional Board order increased sampling requirements against Pacific Clay as a member of the Building Materials Industry Monitoring Group (Monitoring Group). In 2005, Pacific Clay became a member of the Monitoring Group and immediately benefitted from reduced sampling requirements. The year prior, Pacific Clay submitted their 2004-05 Annual Report having exceeded the US EPA's TSS benchmark for each of their six discharge points for the first time since reporting began in 1993. The highest of these exceedances occurring at discharge point 4 and recording a TSS level 130 times benchmark (13,000 mg/L). Reduced storm water sampling requirements impairs the Regional Board's ability to analyze the effectiveness of Pacific Clay's erosion control BMPs despite the fact the facility is acknowledged to have a "history of high TSS discharges."⁹

Although the Regional Board is unable to order the withdrawal of Pacific Clay from the Monitoring Group, it can order increased water quality sampling above the level otherwise enjoyed by members of group

⁷ *Id.* at 4

⁸ State Mining & Geology Board, *Exec. Off. Rpt., Agenda Item No. 1., 2* (September 23, 2011).

⁹ Cal. Reg. Water Quality Control Bd. Santa Ana Region Complaint No. R8-2011-0008, *supra* n. 2, at 5.

monitoring plans. Based on Pacific Clay's record of non-compliance with the General Permit and their continuous threat to water quality Waterkeeper strongly supports increasing Pacific Clay's sampling requirements in order to verify whether their BMPs are achieving BAT/BCT as required under the General Permit.

In sum, Waterkeeper strongly encourages the Regional Board to modify the terms of their proposed ACL in order to more accurately reflect the economic advantage Pacific Clay obtained from years of noncompliance, discourage Pacific Clay, and similarly situated members of the regulated community, from engaging or committing the same or similar violations, and provide Pacific Clay with guidance on compliance and an incentive for continued compliance with the terms of the General Permit. Additionally, Waterkeeper supports the Regional Board coordinating this enforcement action with the SMGB, as an agency with concurrent enforcement authority, in order to best manage a continuing threat to water quality in and around Lake Elsinore.

On behalf of Waterkeeper, I look forward to working with you and the Regional Board on this issue. If you require any information to facilitate this request, please do not hesitate to contact me directly at (714) 850-1965 ext. 307.

Regards,

Colin Kelly
Staff Attorney
Inland Empire Waterkeeper

cc: Michael Roth
Regional Water Quality Control Board
Santa Ana Region
mroth@waterboards.ca.gov

January 20, 2012

VIA E-MAIL (Davidrice@waterboards.ca.gov)

David Rice
Legal Counsel, State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812-0100

Re: Administrative Civil Liability Complaint (ACLC)
Issued to Pacific Clay Products, Inc.
ACLC No. R8-2011-0008/Order No. R8-2012-0010

Dear Mr. Rice:

We are attorneys for Pacific Clay Products, Inc. (Pacific Clay), the Designated Party in this matter.

In accordance with the Hearing Procedure For Administrative Civil Liability Complaint No. R8-2012-0010, scheduled for hearing by the Santa Ana Regional Board on February 10, 2012, the following attachments are submitted as evidence in this matter:

1. A summary of storm water management improvements that have been made at the Pacific Clay Lake Elsinore mining site before and following issuance of the Draft Civil Liability Complaint No. R8-2011-0008 on July 20, 2011.
2. A summary of the costs expended for storm water management at this site since 1998, totaling \$2,148,563.
3. Mr. Chad W. Warren's August 29, 2011 letter to Ms. Milasol Gaslan, responding to the issues raised in the Draft Administrative Civil Liability Complaint, which were resolved in a revised Complaint sent to Pacific Clay on September 19, 2011.
4. Sections of Reclamation Plan RP-112, as approved by the City of Lake Elsinore and the Department of Conservation, that governs the reclamation

January 20, 2012

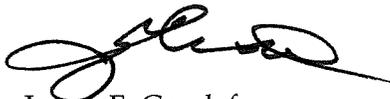
Page 2

of this mining site pursuant to the State Surface Mining and Reclamation Act (SMARA), which also deals with stormwater management.

5. The most recent Financial Assurance Cost estimate for reclamation of the site pursuant to SMARA.
6. Sespe Consulting, Inc. June 30, 2011 Memorandum, regarding the work then being done on stormwater improvements in reference to development of an amended reclamation plan for the site.
7. A list of the witnesses whom the Designated Party may call upon to testify at the hearing, the subject of each witness' proposed testimony, and the estimated time for each. Included are the qualifications of the Designated Party's expert witnesses, Mr. Joseph King and Mr. John Hecht of Sespe Consulting, Inc.
8. A large catalogue of photos of site improvements. Because of its size, downloading instructions are also attached.
9. Pacific Clay January 20, 2012 letter to the undersigned responding to the Inland Empire Waterkeeper letter to the Regional Board of October 24, 2011.

Please advise if you require additional information or clarification, and of any other matters of which we should be aware for the hearing.

Very truly yours,



James E. Good, for
GRESHAM SAVAGE
NOLAN & TILDEN,
A Professional Corporation

JEG:jmk
Enclosure

cc: (via e-mail)
Jennifer Guenther, Gresham Savage
Barry Coley, c/o Pacific Clay
Chad Warren, c/o Pacific Clay
Joe King and John Hecht, Sespe Consulting, Inc.

1

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION**

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT (ACLC) NO. R8-2012-0010, ISSUED TO PACIFIC CLAY PRODUCTS, INC., SCHEDULED FOR FEBRUARY 10, 2012 HEARING

The following is a brief summary of the storm water management improvements that have been made at the Pacific Clay Products, Inc. Lake Street mining site in Lake Elsinore, California (WDID No. 8 331 006218) over the last several months before and following issuance of Complaint No. R8-2011-0008 for Administrative Civil Liability on July 20, 2011. These improvements have been made to reduce the potential for storm water discharges, and improve the quality of storm water that could potentially leave the site and are part of an ongoing program to enhance onsite operations. At this same time, an updated SWPPP was being developed in conjunction with an amended reclamation plan for the site under the Surface Mining and Reclamation Act (SMARA).

Structural Changes

The following structural changes have been made at the site:

1. Enlarged the Stockpile Basin to increase storm water storage capacity and diverted additional flows into this basin.
2. Improved the swale along Lake Street by widening existing check dams, adding additional rock check dams, and stabilizing the spillway to better control storm water flows.
3. Regraded the areas around the facility entrance/exit on Lake Street to direct storm water flows.
4. Regraded the hillsides and slopes adjacent to the facility entrance/exit on Lake Street and installed straw waddles and hydromulch to reduce potential erosion and sedimentation from these areas.
5. Constructed a new storm water storage basin (named "Storage Yard Basin") in the northwest portion of the site to increase storm water storage capacity and diverted storm flows to this basin.
6. Increased the size of the berm along the northern portion of the finished material storage area to minimize the potential for storm water run on to this area.
7. Constructed a new storm water storage basin (named "Tree Line Basin") in the northeastern portion of the site to increase storm water storage capacity and diverted storm flows to this basin.
8. Enlarged the Mid-Yard Basin to increase storm water storage capacity.
9. Installed a new permanent 500 gallon per minute pump and piping to move water from the Propane Tank Basin to the Sloan East Basin to minimize the potential for discharges from the site.
10. Installed a new permanent 500 gallon per minute pump and piping to move water from the Blending Area Basin to the Rock Pit Basin to minimize the potential for discharges from the site.

11. Installed a new permanent 250 gallon per minute pump and piping to move water from the Temescal Canyon Road Basin to the Propane Tank Basin to minimize the potential for discharges from the site.

SWPPP Update

The Storm Water Pollution Prevention Plan (SWPPP) was updated to address current facility practices and improve compliance with the industrial storm water General Permit. Significant changes include the following:

1. Increased storm water discharge observation frequency from the first hour of discharge of one storm event per month during the rainy season to all storm events that may potentially cause discharge from the site during facility operating hours (regardless of the time of year).
2. Increased storm water sampling frequency from two (2) samples every five (5) years to sampling each day of each storm event that discharges from the site during facility operating hours.
3. Instituted a storm water run on sampling program.
4. Instituted a revised program to inspect the facility when there is a 50% or greater chance of rain.
5. Added a discussion of weather monitoring and tracking station used at the site to record rainfall amounts.
6. Developed a detailed list of specific erosion control and site stabilization BMPs used at the facility.
7. Continued refining and enhancing the analysis of site drainage areas. This includes calculating the storage capacity of drainage areas and detailed analyses of storm water run on into, and discharges from, each drainage area including identifying drainage areas that do not discharge.
8. Developed detailed site maps showing storm water flow and discharge points, run on, and storm water flow control BMPs.
9. Refined other portions of the SWPPP including:
 - a. Expanded the roles and responsibilities of storm water pollution prevention team members.
 - b. Additional analysis, and expanded discussion, of potential pollutant sources at the facility.
 - c. Updated and enhanced the discussion of material handling and storage areas.
 - d. Additional analysis of, and expanded discussion, of significant materials used and/or stored at the facility.
 - e. Refined the summary of potential pollutant sources and Best Management Practices (BMPs) employed to control pollutants in storm water discharges.
 - f. Refined the employee training program.

2

Pacific Clay Products
Storm Water Management Expenditures, 1999 - Present
Lake Elsinore, California

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	1/2011 to 8/2011	8/2011 to present	
Labor, including equipment	\$5,720	\$13,708	\$13,771	\$34,683	\$21,520	\$15,457	\$155,727	\$392,571	\$48,293	\$140,852	\$151,425	\$130,962	\$55,509	\$99,255	
Materials							\$7,450	\$30,172	\$197,932	\$6,019	\$94,741	\$25,161	\$6,400	\$21,579	
Supervision	\$3,200	\$4,000	\$3,000	\$4,300	\$6,450	\$4,600	\$8,500	\$14,770	\$19,020	\$28,570	\$35,520	\$16,960	\$33,040	\$14,500	
Consulting and Professional Services								\$19,561	\$52,600	\$60,600	\$51,409	\$45,600	\$31,900	\$21,556	
Total	\$8,920	\$17,708	\$16,771	\$38,983	\$27,970	\$20,057	\$171,677	\$457,074	\$317,845	\$236,041	\$333,095	\$218,683	\$126,849	\$156,890	\$2,148,563

3



August 29, 2011

Ms. Milasol Gaslan
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, California 92501

**SUBJECT: RESPONSE TO SARWQCB DRAFT ADMINISTRATIVE CIVIL
LIABILITY (ACL) COMPLAINT NO. R8-2011-0008, dated 7/20/11
Pacific Clay Products, WDID # 8 33I006218
Lake Elsinore, California**

Dear Ms. Gaslan:

We appreciate you and your staff meeting with us on August 15, 2011 to review and discuss the subject Draft ACL regarding the Pacific Clay facility in Lake Elsinore, California. Presented below please find our responses to the Draft ACL dated 7/20/11. Excerpts from the Draft ACL are presented below in italics with our responses and comments immediately thereafter.

4. Pacific Clay owns approximately 1,400 acres of land at the commonly known address of 14741 Lake Street in the City of Lake Elsinore (in the Alberhill area), California. The facility is currently regulated under the State's General Permit for Storm Water Discharges Associated with Industrial Activities, Water Quality Order No. 97-03-DWQ, NPDES No. CAS000001 (General Permit). The facility's Waste Discharge Identification (WDID) Number is 8 331006218, issued on April 22, 1992.

No comment.

5. A number of companies have mined clay and coal in the Alberhill area for over a century. Since 1963, Pacific Clay has owned the 1,400 acre facility. Pacific Clay mines clay and aggregates and has a brick manufacturing facility within the site. Pacific Clay is a leading manufacturer of quality clay products including face brick, thin brick, clay bullnose, clay pavers and wall caps.

Mining on the site has occurred in one form or another since approximately 1883 with numerous different companies operating on the site. Pacific Clay has been the sole owner of the 1,400 acre property since 1979 when approximately 320 acres of the property were acquired from Gladding McBean and Company. The site has vested mining rights since mining was occurring on the site prior to January 1, 1976. Initial reclamation plan approvals from the County of Riverside date back to 1978 and 1979.

14741 Lake Street, Lake Elsinore, California 92530
Phone (951) 674-2131, Fax (951) 674-4909

6. There are a number of creeks and channels flowing through the 1,400 acre site and Temescal Creek traverses through the northern portions of the site. Some of the mine excavations within the site are currently used as retention ponds. In addition, there are a number of detention/retention ponds constructed on the site to control storm water discharges from the site.

No comment.

7. This site has a long history of non-compliance with the General Permit, including the discharge of sediment laden storm water to waters of the U.S. During an inspection by Regional Board staff in 1997, Pacific Clay acknowledged its problems with high concentrations of total suspended solids (TSS) in the storm water discharges from the site.

Pacific Clay does not share the Regional Board's opinion that the site has a long history of non-compliance with the General Permit, particularly over the last three years since the current management staff at Pacific Clay has been in responsible charge of the site stormwater management. It is our strong belief that we have greatly improved our stormwater management program across the site. Basin capacities have been increased dramatically, erosion control has been improved in many areas, specifically within the actively mined portions of the site, and piping and pumps have been installed in several locations to distribute collected stormwater across the site. Any discharges that have occurred recently were caused by extreme rain events, generally exceeding 50 year storm levels. As discussed in the following sections, the site is extremely complex and despite the Draft ACL issues, Pacific Clay has spent significant effort in terms of hours and dollars complying with terms of the General Permit, recognizing that the SWPPP is an actively evolving document and improvements can always be made.

8. There are at least six discharge locations from where storm water is discharged from the site. On September 26, 2000, Regional Board staff issued a Notice of Violation (NOV) to Pacific Clay for lack of adequate best management practices (BMPs) at the discharge point near the entrance to the site on Temescal Canyon Road. The NOV also noted that the runoff had a TSS concentration of 10,700 mg/l (milligrams per liter or ppm). The U.S. EPA benchmark for TSS is 100 mg/l. High concentrations of TSS can cause pollution, contamination, or nuisance and adversely impact the beneficial uses in the receiving waters. The discharge of storm water containing high concentrations of TSS is a violation of Provision A.2 of the General Permit.

In the most current revision of the site's SWPPP there are 7 locations where stormwater could discharge from the site in the case of an extreme storm event. We would like to note that a discharge of high concentrations of TSS exceeding the EPA benchmark, not an effluent limitation, is not necessarily a violation of Provision A.2 of the General Permit. It does call into question the adequacy of the current SWPPP in achieving BCT. We view this as requiring that the SWPPP be improved, and not necessarily as a permit violation subject to penalty.



9. *During an October 7, 2004 inspection, staff discussed the high TSS discharges from the facility with Pacific Clay representatives. Staff also requested Pacific Clay to improve its BMPs to control the discharge of sediment from the site.*

Pacific Clay updated the SWPPP in place at that time to address the requested BMPs.

10. *On September 7, 2006, Regional Board staff was notified by the Riverside County Health Department that there was an unauthorized discharge of sediment laden water from the site. The discharge of sediment laden water could cause or threaten to cause pollution, contamination, or nuisance, which is a violation of Provision A.2 of the General Permit. During the September 7, 2006 site visit, Regional Board staff also discussed the need for either advanced treatment system to remove the fine sediment in storm water runoff from the site or other control measures to eliminate or minimize the flows from the site. The October 11, 2006 NOV noted the September 7, 2006 discharge and other potential violations of the General Permit including the lack of an up-to-date Storm Water Pollution Prevention Plan (SWPPP).*

Upon reviewing on-site and published (NOAA) rainfall data, there was no measurable precipitation on site during the entire month of September 2006. The October 11, 2006 NOV by the Regional Board states that the discharge on September 7, 2006 was an unauthorized, non-stormwater discharge. Subsequent to, and as a result of the events on September 7, 2006 Pacific Clay immediately developed and implemented an updated SWPPP to address these and other stormwater management concerns across the site. The option of advanced treatment systems were considered during the development of the updated SWPPP, however due to the large size of the site and the complex and ever-changing mining operations, increasing basin capacities were determined to be the most viable solution for the site.

11. *On November 30, 2007, Regional Board staff noted a discharge of muddy water at the entrance to the site from Temescal Canyon Road. This is a violation of Provision A.2 of the General Permit. Pacific Clay was notified and it agreed to address the problem. This discharge was from the same location that Pacific Clay had been issued a NOV on September 26, 2000 for muddy water discharges (see Paragraph 8, above).*

On site rainfall data indicates the site experienced 2.22 inches of rain for the calendar day of November 30, 2007. The 10-hour period between 6:00am and 4:00pm experienced 1.88 inches of rain. Much of the area that drains into the stormwater basin at or near this location is paved with asphalt. Subsequent to this rain event, the subject basin was enlarged in area and depth and improvements were made to the spillway at the basin discharge, typical of our ongoing BMP maintenance and improvement efforts.

12. *A number of problems were noted during an inspection on March 27, 2009, including a potential discharge of untreated sewage (septic system wastes) to ground and/or surface waters and the disposal of waste materials to streams within the facility boundaries. These problems were noted in the June 4, 2009, NOV. In a July 6, 2009 response to the NOV, Pacific Clay refuted the violations cited in the NOV. However, it also noted that most of the problems cited in the NOV were addressed, including problems with the malfunctioning septic system.*



Pacific Clay refuted several of the alleged violations contained in the June 4, 2009 NOV for a number of reasons. The alleged violation relating to the potential discharge of untreated sewage was not based on any factual data. No samples were taken and a violation was issued based on "indications". Pacific Clay did acknowledge that the on-site septic system was malfunctioning and was in the process of being repaired, however that does not mean that Pacific Clay acknowledged that a violation did occur or was occurring. Addressing the problems with the malfunctioning septic system took place irrespective of the subject NOV and in conjunction with the ongoing septic system upgrade. The alleged violation relating to waste materials being disposed of in streams within the facility boundary was also not based on factual data relating to the history of the site. In a meeting held with Mr. Michael Roth and Mr. Adam Fischer of the SARWQCB on July 1, 2009, Pacific Clay representatives demonstrated with photographic evidence that the subject "waste materials" in question had been placed in these areas as part of the routine mining operations on site over the course of several decades dating back to at least the 1940's. Subsequent mining activities, conducted in compliance with the site's reclamation plan, had re-exposed these materials.

13. A subsequent inspection on October 4, 2010, indicated that the septic system was backing up as the line leading to the leach field was severed as noted in the October 6, 2010 NOV. The NOV also noted problems with the small sediment basin next to the brick factory. Pacific Clay agreed to address the problems with the sediment basin by pumping water from this sediment basin into the larger retention ponds thereby eliminating any discharge from this pond. It was agreed that this work would be completed in four weeks from October 4, 2010.

The above noted work was completed in the agreed upon timeframe.

14. To address sediment discharge concerns, Pacific Clay plugged the drain pipe from the small basin next to the brick factory and began partially re-routing flows to the basin to other areas/basins.

The above noted work was completed accordingly in the agreed upon timeframe.

15. Regional Board staff inspected the site on December 22 and 24, 2010. December 22, 2010 was the last day of a long series of storms. When Regional Board staff arrived at the small basin at the corner of the brick factory (on December 22, 2010), the basin was overflowing, but it was not being pumped down as Pacific Clay had agreed during the October 4, 2010 inspection. There was a pump and a few hoses; but the hoses were not connected to the pump. The sediment laden water that was overflowing from the basin was flowing off the site and directly into Temescal Creek. This is a violation of Provision A.2 of the General Permit. Staff could not collect a sample on December 22, 2010 due to inclement weather conditions. A sample of the discharge collected two days after the storm event (December 24, 2010) from this basin had a turbidity of 814 NTU and TSS concentration of 167 mg/l.

On site rainfall data indicated that the storm event from December 16 to 22, 2011 exceeded several benchmark rainfall events based on the latest version of the NOAA Atlas 14, Volume 6, Version 2. The 7-day storm rainfall total of 10.77 inches exceeded a 50-year event.



The 4-day period of December 18 to 24 rainfall total of 9.97 inches exceeded a 50-year event. The two day rainfall total of 7.09 inches exceeded a 50-year event. The peak 24-hour period ending on December 22 rainfall total of 3.63 inches exceeded a 5-year event, and fell 0.2 inches short of exceeding a 10 year event. The storm water basins across the Pacific Clay site were sized to accommodate a 10-year, 24-hour rain event. The above rainfall totals demonstrate that the storm between December 16 and December 22 could be considered an extreme rainfall event. In as much as regulatory documents appear to be standardizing on a compliance storm event to be based upon 5 to 10 year storm events, a single storm event exceeding 10 inches of rainfall would appear to be an extreme condition beyond the capacity of standard BMPs, and consistent with the compliance storm event concept, should not have Water Quality standards applied to resulting discharges. Despite the large amount of rainfall the site experienced, Pacific Clay was able to retain nearly all of the rainfall for this storm; any discharges that occurred were at the end of the storm event, and specifically after the above noted pump failed on December 21. The subject pump was repaired and rebuilt in early January 2011 at a cost of \$3,700.

16. During the December 24, 2010 inspection, Regional Board staff also observed several mining stockpiles on the property's south side near the Lake Street entrances. These stockpiles were exposed and were eroding. Sediment laden flows from this area split into two discharge points: (1) some of the sediment laden discharge flowed through a swale with check dams between Lake Street and the mining stockpiles. The check dams were overwhelmed by sediment and the sediment laden discharge entered the creek next to Lake Street; and (2) another part of the flow entered a storm drain that flows into a flood control/sediment basin. According to Alberhill Ranch, Pacific Clay's sister company, who currently maintains this basin, it had to spend a significant amount of resources to remove the sediment from this basin.

As detailed in the above response to Item 15, the storm event of December 16 to 22, 2011 was an extreme event that exceeded benchmark storm events for 10 and 50 year recurrence intervals for given time periods. A single storm event exceeding 10 inches of rainfall would appear to be an extreme condition beyond the capacity of standard BMPs, and consistent with the compliance storm event concept, should not have Water Quality standards applied to resulting discharges. Further, the subject flood control/sediment basin also receives stormwater runoff from the City of Lake Elsinore's Right of Way for Lake Street, much of which is unpaved.

17. Regional Board staff also noted that numerous loads of faulty bricks had been dumped into a stream channel that runs through the northern portion of the site. Pacific Clay has questioned the appropriateness of designating this stream channel as a water of the U.S. and has indicated that this area would be addressed through the approved site restoration plan for which the City of Lake Elsinore is the lead agency. However, Regional Board staff is not aware of any regulatory provisions that would allow disposal of wastes into stream channels. Additionally, runoff from certain areas of Pacific Clay site leaves the site through this discharge point without adequate desiltation and appears to have caused heavy channel erosion. Furthermore, all discharges of storm water associated with industrial activities from the site are regulated under the General Permit.



As presented in the above response to Item 12, the bricks in question had been placed in the subject area as part of the routine mining operations on the site beginning in the 1940's and persisting for several decades after. Recent mining activities conducted in compliance with and within the limitations set forth in the site's reclamation plan re-exposed the bricks. In the meeting held with the Regional Board on July 1, 2009, Pacific Clay provided photographic evidence of these facts. Regional Board staff in attendance at this meeting could not provide any definitive guidance on this matter. It is Pacific Clay's opinion that the activities within the site are conducted within the limitations of the site's reclamation plan, the guidance document for the mining and reclamation operations of the site. Pacific Clay however does understand that it is incumbent upon them to conduct these mining and reclamation operations in compliance with applicable rules and regulations relating to stormwater management, and it is our intent to do so.

18. The Lake Street realignment project took place during the period from January 2009 to April 2009. Alberhill Ranch, the contractor for the realignment project, obtained coverage under the State's General Construction Activities Storm Water Permit and was issued WDID number 833C333722. Castle & Cooke Company is the parent company of Pacific Clay and Alberhill Ranch. Alberhill Ranch development is located immediately adjacent to Pacific Clay and on the east side of Lake Street. Pacific Clay was responsible for most of the areas adjacent to the road realignment project. The adjacent area was where the mining stockpiles mentioned in paragraph 16 were located. Staff observed unprotected slopes, over slope erosion, and channel erosion in the mining stockpile area. The check dams in the channel were made of 3 inch rocks and were filled with sediment that caused sediment to bypass the check dams, indicating a general lack of maintenance. Most of the disturbed areas within the Pacific Clay site had poor erosion control measures or erosion control measures that lacked adequate maintenance. On November 4, 2010, Regional Board staff requested Pacific Clay by e-mail to implement erosion control measures such as spraying the slopes. On December 24, 2010, Pacific Clay collected a sample of the discharge from the area that drains Pacific Clay's land adjacent to the realignment project. It had a total suspended solids (TSS) level of 17,300 mg/l. None of the additional erosion control measures that were requested were implemented.

Pacific Clay responded to the Regional Board's email of November 4, 2010 on November 8, 2010 stating that the above referenced slopes had in fact already been sprayed with hydromulch containing a native seed mix and Earthguard fiber matrix on February 17, 2010 at a cost of \$7,263. Photographs of the hydromulched slopes in question were also provided in the response email. Correspondence with the hydromulch company indicated that if undisturbed, the type of mulch Pacific Clay applied should last over a year. As stated in several sections above, the storm event from December 16 to 22, 2010 exceeding 10 inches of rainfall would appear to be an extreme condition beyond the capacity of standard BMPs, and consistent with the compliance storm event concept, should not have Water Quality standards applied to resulting discharges. It should also be noted that the Lake Street realignment project caused a significant change in the flow of stormwater along Pacific Clay's eastern boundary. In particular, a large amount of flow from the western gutter of Lake Street originally intended to travel the length of the gutter and into the storm drain system ended up running into the Pacific Clay facility just north of the site's exit road and into the above noted drainage swale. In early 2010, the City of Lake Elsinore constructed a drainage inlet just south of the Pacific Clay exit road to recapture



this water and direct it into the storm drain system. This seemed to reduce the amount of water flowing onto the Pacific Clay site somewhat, but it did not eliminate it altogether.

19. Regional Board staff inspected the areas within the Pacific Clay site adjacent to the realignment project on February 25, 2011. Staff noted a lot of evidence of sediment discharges, including a sediment basin that failed, some areas that had been at one point hydromulched/seeded that had germinated less than 25% and check dams in the channel that were still not maintained. Some of the flow from the swale drained to a flood control/sediment basin and some bypassed it and flowed directly to a creek, the same creek discussed in paragraph 16, above. Some of the slopes that drained to the swale were not stabilized and had undergone significant erosion. There were indications that the sediment laden discharges that bypassed the swale had entered the creek.

Pacific Clay is currently performing upgrades to the BMPs in this area in preparation for the upcoming rainy season. At the time of the February 25, 2011 inspection much of the area noted in Item 19 was still saturated from the December 16 to 22, 2010 storm, as well as smaller rain events in January and February 2011, and consequently unable to support the heavy equipment needed to perform the work to repair the BMPs from the prior storms. Flows into these areas had been diverted into areas where basin capacity was available until these areas could dry out and stabilize enough for work to take place.

20. The TSS levels in the storm water discharges from the Pacific Clay site have been consistently high. The following table summarizes TSS levels in mg/l in discharges from the site as reported by Pacific Clay in the annual reports from 1993-94 to 2009-2010. Every reported TSS analysis for each of the 6 discharge points (SWR) is listed in the table. TSS, like the other constituents tested under the General Permit, does not have a numeric effluent limit. The USEPA benchmark for TSS is 100 mg/l. Exceedance of this benchmark usually indicates that the BMPs at the site do not meet the required BAT/BCT standard for the General Permit and need to be improved. As can be seen in the table below, the site has a history of high TSS discharges. In 2005, Pacific Clay became a member of the Building Materials Industry Monitoring Group. Therefore, sampling did not have to be done every year as per the Group Monitoring Program requirements of the General Permit. The annual report for 2009-10 stated that there was no runoff from the site except on one occasion and no samples were taken on that day due to the need to concentrate on making emergency repairs caused by the 6 or 7 inches of rain received over two days. There is no exception in the General Permit for not collecting samples because of having to focus on emergency repairs. There is an exception for not collecting samples if it is dangerous to do so, but the annual report did not indicate such a situation. Therefore, not taking a required sample is a violation of Section 8.5 of the General Permit. 21. The discharge of high levels of TSS (sediment) to waters of the U.S. could cause or threaten to cause pollution, contamination, or nuisance and it could adversely impact the beneficial uses of the receiving waters. Pacific Clay did not implement BMPs that achieve BAT/BCT as required under Provisions B.3 and e.3 of the Permit. These are violations of Provisions A.2, B.3 and C.2 of the General Permit.



The subject storm event that produced a discharge as stated in the 2009-2010 annual report occurred between January 17 and 23, 2010. In total the Pacific Clay site received approximately 7½ inches of rain over those 6 days. As stated in the annual report, a discharge did occur due to a failed stormwater basin. If the objective of a stormwater management program is to protect water quality, it was Pacific Clay's opinion that it was more important to repair the failed basin to stop the discharge rather than to allow the discharge to continue in order to collect a sample of what was clearly, as disclosed in the annual report, sediment laden water.

22. In accordance with Section 13385(a)(2) of the CWC, civil liability may be administratively imposed by the Regional Board for any violation of waste discharge requirements.

No comment.

23. CWC Section 13385(c)(1) states that civil liability may be imposed administratively on a per day basis at \$10,000 for each day in which the violation occurs and Section 13385(c)(2) states that additional penalty may be imposed on a per gallon basis. It is reasonable to assume that there were discharges of sediment laden storm water from the site during most of the storm events during the last five years for which penalty is being proposed in this Complaint. Generally a rainfall intensity of 0.1 inches or higher produces storm water runoff. At the Pacific Clay site, due to the presence of a number of detention/retention basins, low intensity storm events do not always produce a runoff. There were at least 35 storm events with a rainfall intensity of 0.25 inches or higher during the last five years. However, staff visited the site only during five storm events during which sediment laden discharges were observed or evident and were documented. These inspections were conducted on September 7, 2006, November 30, 2007, December 22 and 24, 2010, and February 25, 2011. The maximum liability on a per day basis for the five days of violations is \$50,000 (5 days X \$10,000/day). During each of the five documented discharge events, Regional Board staff observed large volumes of sediment laden discharges, or evidence of sediment discharges, from the site but could not determine the discharge volumes from the site because of a number of changes to the capacity and number of retention and detention basins. As such, no penalty has been assessed on a per gallon basis.

The \$50,000 liability amount seems to be based upon discharges from five different storm events. Historical data appears to return different results than indicated in the subject Draft ACL.

1. September 7, 2006 No precipitation, unauthorized non-stormwater discharge alleged to have occurred
2. November 30, 2007 Yes, 2.22 inches
3. December 22, 2010 Yes, 2.81 inches
4. December 24, 2010 No rain after December 22, 2010
5. February 25, 2011 0.25 inches, beginning at 9:00pm, would not be sufficient to cause a discharge from the site.

It is Pacific Clay's understanding that, by definition, rainfall intensity is the measurement of the volume of rain during a given period of time. In Item 23 above, reference is made to



rainfall intensities of 0.1 inches and 0.25 inches, but no unit of time is stated or necessarily implied. For example, a rainfall intensity of 0.25 inches per hour is drastically different than 0.25 inches per day. If we were to assume that the intensity value of 0.25 inches stated in Item 23 above represented a 24-hour period of time, then the two storms on November 30, 2007 and December 22, 2010 would have exceeded that benchmark by factors of 9 and 11, respectively. Clearly these storms could then be considered extreme events. Of the five days in question, rainfall did occur on three of those days, and one of those days was the last in a major storm that could be considered between a 50 to 100 year event. The unauthorized non-stormwater discharge event that occurred on September 7, 2006 was immediately stopped upon its discovery and subsequently an updated SWPPP was implemented to address these and other stormwater management aspects for the site. Observations by the Regional Board on December 24, 2010 can be directly attributable to an extreme storm event and a pump that failed on the second to the last day of the subject storm. Further, the fact that the storm occurred across the entire southern California region and at the Christmas holiday, a replacement pump could not be located. From this perspective the fine should be reduced from \$50,000 to \$30,000 specifically relating to the three days that rain did occur on the Pacific Clay site.

24. CWC Section 13385(e) specifies factors that the Regional Board shall consider in establishing the amount of civil liability. The Water Quality Enforcement Policy (the Policy) adopted by the State Water Resources Control Board on November 19, 2009, establishes a methodology for assessing administrative civil liability pursuant to this statute. Use of the methodology addresses the factors in ewe section 13385(e). The policy can be found at: <http://www.waterboards.ca.gov/waterissues/programs/enforcement/docs/enfpolicyfinal111709.pdf>

No comment.

25. Using the methodology in the Policy, a penalty is assessed on a per day basis for the discharge violations cited above. In this case, using a "potential harm" of 6 (Factor 1: harm to beneficial use =3 [moderate] + Factor 2: characteristics of the discharge=2 [discharged material poses a moderate risk or threat to potential receptors] + Factor 3: susceptibility to cleanup = 1 [less than 50% of the discharge is susceptible to cleanup]) and considering it as a "major" deviation from requirement, the per day factor from Table 2 (Page 15 of the Policy) is 0.22. Using this per day factor, the assessed amount is \$50,000X0.22=\$11,000.

No comment.

26. The Policy also requires consideration of the violator's conduct factors such as culpability (range 0.5 to 1.5), cleanup and cooperation (0.75 to 1.5) and history of violations (1 and above). The Discharger was repeatedly asked to implement BMPs to reduce pollutant discharges from the site. The Discharger had approximately 19 years to implement a comprehensive program with effective BMPs. The Discharger did not take proactive steps to implement proper control measures and the BMPs that were implemented were completed on a piece-meal basis only after notices of violation were issued. The Discharger does not appear to have an ongoing program to recognize problems and implement timely corrective actions on its own. As such, the culpability



was set at 1.3, the clean-up and cooperation at 1.3 and the history of violations at 1.2. The total base liability after consideration of these factors is $\$11,000 \times 1.3 \times 1.3 \times 1.2 = \$22,308$.

No comment.

27. The Policy also requires consideration of the Discharger's ability to pay and ability to continue in business, economic benefit or savings resulting from the violations and other factors as justice may require. Each of these factors is discussed below:

A. The Discharger owns over 1,400 acres at the site. The assessed value of the parcel at 14741 Lake Street is \$15,726,191 according to County records. The parent company of Pacific Clay also owns other land across Lake Street and in other parts of the country. Current estimates show this company has an annual revenue of \$20 to 50 million.

Given the current depression in the construction industry across the United States, and in particular Riverside and San Bernardino Counties, it is not surprising to see construction material supplying companies with business levels reduced to 70 percent of normal. Pacific Clay is no exception, and has incurred reductions in staff levels on the order of 60 percent over the last three years. The estimated annual revenues stated above cannot be considered accurate at this time.

B. The Discharger realized at least \$232,500 in cost savings by failing to implement proper erosion and sediment control measures (from 2006 to 2011). This amount represents the lowest of the costs that staff estimated for construction and maintenance of onsite retention basins using Pacific Clay's own equipment and personnel and the two estimates that staff obtained from other vendors for sediment and/or flow control measures that could have controlled pollutant discharges from the site. The Policy requires that the liability amount shall be at least 10 percent higher than the economic benefit.

C. The costs of investigation and enforcement are considered as one of the "other factors as justice may require," and should be added to the final liability. Investigation costs have been estimated to be \$13,500 (90 hours at \$150 per hour = \$13,500).

D. If staff costs are added to the amount calculated as per the Policy, the total assessed amount as per the Policy is \$35,808 ($\$22,308 + \$13,500$).

Internal accounting records indicate that Pacific Clay has incurred costs dating back to 1999 totaling over approximately \$850,000.00 for activities on site related to stormwater management.

28. After consideration of these factors, the Division Chief proposes that civil liability be imposed on Pacific Clay in the amount of fifty thousand dollars (\$50,000) for the violations cited above. This amount is the maximum amount allowed per the Water Code for the five days of discharge violations from June 1, 2006 to June 1, 2011. The maximum amount is proposed in this case instead of the amount calculated using the Policy as the economic benefit was higher



than both the calculated and the maximum allowable penalties. Furthermore, no penalty was assessed based on a per gallon basis or for all the potential discharges from the site.

In summary, Pacific Clay respectfully requests that the Regional Board reconsider the proposed civil liability amount of \$50,000 in light of the above information. Pacific Clay has incurred significant costs over time in the amount of at least \$850,000 in the stormwater management of the site. Two of the five alleged events on December 22 and 24, 2010 were the result of an extreme storm event in the range of a 50 to 100 year storm, which we feel would be an extreme condition beyond the capacity of standard BMPs, and consistent with the compliance storm event concept, should not have Water Quality standards applied to resulting discharges. Prior to receiving the Draft ACL, Pacific Clay was already in the process of developing a new SWPPP for the site in conjunction with a reclamation plan amendment process conducted in partnership with the State of California Office of Mine Reclamation and the City of Lake Elsinore. The reclamation plan amendment just received final approval from the respective agencies, and as such the new SWPPP can be finalized and as we stated in our August 15, 2011 meeting, should be completed by mid-September.

Pacific Clay is also actively preparing for the upcoming rainy season. The updated SWPPP is being prepared by a qualified consulting firm experienced in stormwater management and SWPPP development. Their work effort will also include an engineering review of the site's hydrology based on the most recent topographic survey performed in March 2011 in conjunction with the above noted reclamation plan amendment process. They will also be providing monthly site visits and SWPPP reviews to assist us in continually monitoring and improving the site and SWPPP respectively, as well as performing sampling and testing at select run-on locations. At least two new stormwater basins are being constructed near the Pacific Clay brick plant area. A pumping system is being designed and constructed for the two existing stormwater basins near the Pacific Clay brick plant and entrance. This system will pump collected stormwater into a large basin in the central portion of the site. 6,000 rock-filled burlap bags are currently being placed throughout the site in appropriate areas. The existing drainage swale along the Lake Street realignment area is being regraded to direct stormwater into larger basins inside the site. Erosion control measures consisting of regrading areas to minimize concentrated runoff, revegetating, velocity dissipating features, and other appropriate BMPs are currently being constructed and/or installed across many areas of the site.

Pacific Clay is and has been committed to actively managing the stormwater aspect of the site and we feel that we have made improvements each year. The draft ACL and verbal comments reflecting the opinion that Pacific Clay has not made significant progress in developing a sustainable and adequate SWPPP is disturbing. The draft ACL addresses activity that has occurred on the property over a 20 year period. Pacific Clay would like the Regional Board to consider that despite significant personnel changes there have been many actions taken over the recent history of the site to improve our stormwater management program. Current site personnel that have been active in improving site modifications for a large and complex mining site have made significant progress. The December 16 to 22, 2010 storm can be a testament to that. The site retained nearly all of the over 10 inches of rain that fell in the 7 day storm. Any



discharges that occurred were on the last day of the storm when a pump failed and BMPs that were designed for a 10-year, 24-hour storm were simply overmatched. In a storm event that saw bridges and roads be destroyed, homes washed away, and six counties having a state of emergency declared by the Governor, overall the Pacific Clay site fared quite well. Pacific Clay learned and made improvements across the site based on a prior large storm of 7½ inches of rain in January 2010, which allowed us to be better prepared for the December 2010 storm.

In our meeting on August 15, 2011 you stated that water quality is the primary objective of the Regional Board. We hope we have provided you with enough information to demonstrate that it is our priority to conduct our operations with that same objective in mind. The above stated items currently taking place in preparation for the upcoming rainy season including the development of a new SWPPP for the site represent a portion of our plans towards continually improving the management of stormwater across our site. We will provide you with a copy of the new SWPPP for the site as soon as it is completed, and we would be happy to meet with you at that time to review and discuss the SWPPP. Finally, we ask your consideration that the final resolution of these issues be a Notice of Violation with a reduced penalty amount and not an Administrative Civil Liability as currently drafted.

We trust this information meet your current needs. Please feel free to contact us with any questions, comments, or concerns.

Respectfully submitted,

PACIFIC CLAY PRODUCTS



Chad W. Warren, CEG
Mining Manager



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SESPE CONSULTING, INC.

468 Poli Street, Suite 2E • Ventura, CA 93001
Office (805) 275-1515 • Fax (805) 667-8104

August 4, 2011

Mr. Ken Seumalo
Director of Public Works
City of Lake Elsinore
130 S. Main Street
Lake Elsinore, CA 92530

**Re: Pacific Clay and Pacific Aggregates
RP 112 Reclamation Plan Amendment**

Dear Mr. Seumalo,

On behalf of Mr. David Hollingsworth of Pacific Clay Products and Mr. Barry Coley of Pacific Aggregates please find attached a revised amendment to Reclamation Plan RP 112 that incorporates the following additional information:

- An additional figure showing the location of three existing onsite water wells and the location of current stormwater basins.
- Clarification of the industrial end use and creation of a figure showing an inventory of structures.
- Inclusion of potential topsoil collection locations on the aerial photo based figure.
- Adjustment of the FACE to account for the 2 acre 'Hoist' pit and removal of one water well and removal of industrial buildings.

We respectfully request that you review this revised plan and forward to OMR as soon as possible for their review and comment of the reclamation plan and FACE pursuant to SMARA Section 2774(c).

We look forward to your notice of when approval if this minor amendment project will be considered, and please call me at (805) 275-1515 or (805) 320-3211 if you have any questions or if you need additional information.

Regards,



John A. Hecht, P.E.
President
Sespe Consulting, Inc.

Mr. Ken Seumalo
City of Lake Elsinore

RP112 Reclamation Plan Amendment
August 3, 2011

Attachments: Reclamation Plan, dated August 3, 2011

Cc: Mr. Jim Pompy, Office of Mine Reclamation
Mr. David Hollingsworth, Pacific Clay Products w/o attachment
Mr. Barry Coley, Pacific Aggregates
Mr. Jim Good, Gresham Savage w/o attachment



1. 10' WIDE SIDEWALK
 2. 10' WIDE SIDEWALK
 3. 10' WIDE SIDEWALK
 4. 10' WIDE SIDEWALK
 5. 10' WIDE SIDEWALK

MANAGEMENT

NO.	DESCRIPTION	DATE
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1. 10' WIDE SIDEWALK
 2. 10' WIDE SIDEWALK
 3. 10' WIDE SIDEWALK
 4. 10' WIDE SIDEWALK
 5. 10' WIDE SIDEWALK



SESPE CONSULTING, INC.

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RP112 RECLAMATION PLAN AMENDMENT

Pacific Aggregates Inc. and Pacific Clay Products

28251 Lake Street
Lake Elsinore, California

August 3, 2011

Prepared for: Pacific Aggregates Inc.
Pacific Clay Products
28251 Lake Street
Lake Elsinore, California 92530

Prepared by: Sespe Consulting, Inc.
468 Poli Street, Suite 2E
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Technical Assistance: KWC Engineers
Corona, CA

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RP112 RECLAMATION PLAN Amendment Pacific Aggregates Inc. and Pacific Clay Products Lake Elsinore, Ca (including RP110, and SMP108)

CA Mine ID Nos.: 91-33-0073, (including 91-33-0020, and 91-33-0006)

August 3, 2011

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RP112 RECLAMATION PLAN
Pacific Aggregates Inc. and Pacific Clay Products
Lake Elsinore RP112, RP110, and SMP108
CA Mine ID Nos.: 91-33-0073, 91-33-0020, and 91-33-0006

August 3, 2011

1.0 INTRODUCTION

This amendment to the RP112 Reclamation Plan has been prepared to combine three reclamation plans and mine ID's into one document pursuant to a Stipulated Order to Comply effective May 11, 2011. The resulting reclamation plan will be known as RP112, Mine ID # 91-33-0073. Reclamation Plans RP110 and SMP 108 along with mine ID's 91-33-020 and 91-33-006 will no longer be active upon approval of the amendment by the lead agency.

The Pacific Aggregates and Pacific Clay Products Mine and Processing facility (Project) originally consisted of 3,457 acres of an existing clay mine in the Alberhill and Elsinore 7.5 minute U. S. Geological Survey quadrangles in western Riverside County, California. The RP112 Reclamation Plan reduces that amount to approximately 1390 acres and eliminates RP110 and SMP108. Please refer to Figure 1 – Site Location Map and Figure 1A for a graphic depiction of the boundary change. This Reclamation Plan generally adheres to the Department of Conservation Division of Mines and Geology prototype format found in Special Publication 51 "California Surface Mining and Reclamation Policies and Procedures", Third Revision, January 2000.

The Reclamation Plan was prepared in compliance with:

- The Surface Mining and Reclamation Act, as amended (Public Resources Code Section 2710 et seq);
- California Code of Regulation, Title 14, Division 2, Chapter 8, Subchapter 1, Article 9;
- The City of Lake Elsinore Municipal Code, Chapter 14.04 – Surface Mining and Reclamation;
- The City of Lake Elsinore Municipal Code, Chapter 17.144 – Mineral Resources and Related Manufacturing District; and
- The standards set forth in RP 112, RP 110, and SMP 108, approved by the County of Riverside in 1978 and 1979.

1.1 Project Background/Vested Rights

The project site consists of a comprehensive open pit mining operation in conjunction with a clay brick manufacturing plant, aggregate processing plants, ready-mixed concrete batch plant and associated support, maintenance, and administrative facilities. Pacific Clay Products and its predecessors have had the property since the early 1900's, and mining on the property has been continuous and extensive since 1883.

It was worked by separate operators in the very early years without much thought to future conditions. Those conditions have changed and the intent is to mine out all economic products and backfill the mined out areas with unmarketable material and overburden. The clays that are being mined today could not be economically mined in the past, and much of the material originally thought of as

overburden for the clay mining is now being utilized in the sand and gravel operations. With this in mind, the estimated life of the deposits is for the foreseeable future, likely 44 years or more.

Annual production of clays and aggregates can be expected to fluctuate in response to market demand, however the facility is capable of producing up to approximately 2,000,000 tons per year of combined resources. The general geology of the site is such that sedimentary sand and gravel (aggregate) deposits are situated stratigraphically above sedimentary and residual clay deposits, with isolated outcrops of intrusive igneous rocks and older varied metamorphic and volcanic rock present throughout the site. The mining progresses in a fashion such that the sand and gravel deposits are removed to expose the clay reserves beneath, which minimizes the amount of waste and/or overburden material required to be handled on site. Very little waste is produced from the operation as a whole. Many of the interim residual products from the operations are reused in other processing operations on site. Any resulting waste or overburden materials are used in the backfilling, re-grading, or revegetation aspects of site reclamation. The maximum anticipated pit depths are 250 feet below existing ground surface.

This reclamation plan Amendment continues to apply to mining areas vested under Section 2776 of SMARA and confirmed as vested by Riverside County's approvals in 1978/9. This approval covered areas included in both RP-112 and subsequently in RP-110. SMP-108 was approved as both a Surface Mining Permit and Reclamation Plan by Riverside County for Gladding McBean and Company in 1979 and the land was subsequently acquired by Pacific Clay Products.

1.1.1 Background RP112 Mine ID#91-33-0073

This vested mine site, approved in January 1979, is referred to as the Murdock Alberhill Ranch Mine and consists of approximately 913 acres of Reclamation Plan (RP) 112. Reclamation Plan 112 originally covered approximately 3,457 acres of land within the County of Riverside with an anticipated completion date of 2054 (please refer to Figure 1A for a graphic depiction of the boundary). In May of 1990, approximately 2,667 acres of the original Reclamation Plan was annexed into the City of Lake Elsinore with the County approved Reclamation Plan "grandfathered" into the City. From 1990 until March 2008, the land encompassing RP112 was contained in both the County of Riverside and the City of Lake Elsinore. In March of 2008, the City of Lake Elsinore annexed the last remaining portion of RP 112 west of Lake Street and assumed the Lead Agency role. During the period between 1990 and 2008, changes in ownership and land use plans took place.

Products extracted from within the boundaries of RP 112 include clay for the manufacturing of brick and other architectural items, decomposed granite, sand and rock are mined for construction materials, landscaping, and other uses. Facilities for the manufacturing of the clay products originally located on this site were annexed into SMP108 in 1995 under County of Riverside direction and authority.

A small area to the east of Lake Street known as the "Hoist Pit" was disturbed by mining activity both pre-SMARA and a small portion (2.1 acres) in 2010. See Figures 1(A,B, and C) for more detail. Additional disturbance of this area occurred as a result of geotechnical investigations for the non mineral development of this property and is not subject to SMARA requirements. All areas but the more recent 2.1 acres have been naturally reclaimed and/or reclamation is not required since the areas were pre-SMARA and have not been disturbed since. The revegetation standards that are presented in this amendment will apply to the 2.1 acre portion as presented in Figures 1A and 1C.

1.1.2 Background RP110 Mine ID#91-33-0020

Mountain Avenue Pit #2 is a vested site approved by the County of Riverside in 1978 as part of Elsinore Ready Mix's operations in the area. This site consists of approximately 80 acres. Originally, this site was operated by Elsinore Ready Mix dating back to at least 1968 with the property under lease from Pacific Clay. Similar to RP112, this site was originally overseen by the County of Riverside and subsequently annexed into the City of Lake Elsinore in March of 2008. Pacific Aggregates began operating the site in approximately 2004 under lease from Pacific Clay to mine in RP 112 and process in RP 110. The subject site is surrounded by the RP 112 on the south, east, and west sides of the site and SMP 108 on the north. Please refer to Figure 1A for a graphic depiction of the boundary.

The site produces and processes aggregate materials in the form of sand and gravel. Equipment present on the site includes a rock crushing plant, wash plant, ready-mix concrete batch plant, maintenance shop, and 6 small outbuildings and storage sheds (see Figures 2 and 3). Reclamation standards for the site generally consist of refilling mined-out pits as necessary to maintain positive drainage and safe slopes, leaving permanent slopes in a stable and safe condition, revegetation of disturbed areas with native vegetation, and removing any residual hazards that could pose a risk to public health or safety.

The County of Riverside Planning Department imposed Conditions of Approval on operations contained within the RP110 boundary which is now contained wholly within the RP112 Reclamation Plan boundary. A matrix with the Conditions of Approval and a figure showing the area subject to said conditions is included in Appendix 3.

1.1.3 Background SMP108 Mine ID#91-33-0006

The site currently using the name Pacific Clay Pits and Mine ID# 91-33-0006 operates under SMP108 on approximately 381 acres. This property was acquired by Pacific Clay from the Gladding McBean Company in July 1979 shortly after approval of SMP 108. The County of Riverside served as the Lead Agency for the site until March, 2008 when it was annexed into the City of Lake Elsinore and the City assumed the lead agency role. Please refer to Figure 1A for a graphic depiction of the boundary.

The northern portion of the site encompasses a large clay brick-making operation that has been active since at least 1925. In 1995, a portion of the site that includes the brick making operation, approximately 61 acres, was added to SMP108 from the adjacent RP 112 mine site. This resulted in a revision of the original Surface Mining Permit 108 to allow permitting authority to the County of Riverside for construction of a new fast-fire brick kiln. No changes in the extraction activities occurred. As approved in 1995, the pre- and post-annexation areas had slightly different reclamation objectives, briefly summarized below.

The approximately 320 acres of the pre-1995 annexation area is to be reclaimed to allow for open space use and will include the backfilling of any mine pits to create positive drainage. The disturbed surface areas will be revegetated to minimize erosion and sedimentation. Reclamation of the approximately 61 acres annexed in 1995 will be to prepare and stabilize the land for a future, undetermined, secondary use after removal of all mine related structures.

The County of Riverside Planning Department imposed Conditions of Approval on operations contained within the SMP108 boundary which is now contained wholly within the RP112 Reclamation Plan boundary. A matrix with the Conditions of Approval and a figure showing the area subject to said conditions is included in Appendix 3.

1.2 Project Phasing

Mining operations will continue on this mine site in generally the same manner as it has been since the early 1900s. Because of the nature of the deposits and the varied extraction requirements (i.e. material with specific individual characteristic are removed from many active locations on the site at any given time), phasing of the extraction, and therefore phasing of the reclamation is not practical nor proposed on the entirety of this operation. Reclamation will be initiated on areas where mining activities are complete and the initial reclamation area is noted on the attached Figure 2 - Reclamation Plan.

2.0 GENERAL OWNERSHIP/OPERATION INFORMATION

2.1 Mine Operator and Property Owner Information

MINE NAME: RP112

LOCATION OF MINE: 28251 Lake Street
Lake Elsinore, California 92530
(See attached Site Location Map, Figure 1)

ASSESSOR PARCEL #s

389-020-063-9, 390-130-006-8, 390-130-015-6, 390-130-016-7, 390-130-020-0, 390-130-021-1, 390-160-001-6, 390-160-011-5, 390-160-012, 390-170-001-7, 390-170-002-8, 390-190-011-8, 390-190-017-4, 390-190-019-6, 391-170-005-8, 391-170-007-0, 391-200-003-8, 391-200-004-9, 391-200-007-2, 391-200-010-4, 391-200-012-6, 391-230-002-0, 391-230-003-1, 391-230-004-2, 391-230-005-3, 391-230-007-5, 391-230-009-7, 391-230-010-7, 391-240-001-0, 391-800-011-9

LAKE ELSINORE PERMIT NOS.: RP112

MINE OPERATOR: Pacific Aggregates Inc.
Pacific Clay Products
Mr. Chad Warren

CA MINE ID #s : 91-33-0073

TELEPHONE NUMBER: (951) 245-2460

MAILING ADDRESS: 28251 Lake Street
Lake Elsinore, California 92530

OWNERS OF POSSESSORY INTEREST: Pacific Aggregates Inc. and Pacific Clay Products

2.2 Lead Agency Information

LEAD AGENCY: City of Lake Elsinore

STAFF CONTACT: Ken Seumalo

TELEPHONE NUMBER: (951) 674-3124 x244

MAILING ADDRESS: City of Lake Elsinore
130 S. Main Street
Lake Elsinore CA 92530

USE PERMIT NUMBERS: SMP108 applies to a portion of the RP112 area.

DATE PERMIT APPROVED: SMP 108 approved September 6, 1979

CUP EXPIRATION DATE: SMP 108 has no stated expiration date

2.3 General Mining Operation Information

MINED MINERAL COMMODITY: Clay and related clay products, aggregates and related rock products. Coal has also been historically mined from the site.

ESTIMATED ANNUAL PRODUCTION: Up to 2,000,000 tons

ESTIMATED TOTAL PRODUCTION: Operated since late 1800's, total production unknown.

TOTAL NUMBER OF ACRES TO BE DISTURBED: up to 1390 acres

TOTAL NUMBER OF ACRES TO BE RECLAIMED: up to 1390 acres

MAXIMUM ANTICIPATED DEPTH OF MINING: Approximately 250 feet from existing grade, or 990' above MSL.

START-UP DATE: Continuous operation since late 1800's

MINING TERMINATION DATE: For the purposes of compliance with SMARA Section 2772(c)(3) the expiration of this reclamation plan is in 44 years or, December 31, 2055

RECLAMATION COMPLETION DATE: Five years after termination of reclamation plan unless extended.

TOPOGRAPHIC MAP: USGS Alberhill and Elsinore topographic quadrangles
Portions of Sections: 15, 16, 21, 22, 27, 28
Township: 5 South
Range: 5 West
Meridian: San Bernardino
Baseline: San Bernardino

3.0 ENVIRONMENTAL SETTING

3.1 Topography, Drainage and Geohydrology

The elevation of the Alberhill-Temescal Valley project area ranges from a maximum of about 1,800 feet on the western and eastern sides of the valley to 1,200 feet above sea level at the northern edge of the project area near the bottom of Temescal Wash. The Alberhill project area is in a synclinal trough of a graben commonly described as the Elsinore Trough. The maximum relief is about 600 feet. The area is currently being dissected by Temescal Wash and several minor tributaries.

The site is a part of the Upper Santa Ana Valley watershed. Upstream, the San Jacinto River flows into Lake Elsinore. Prior to the subsidence that produced the Elsinore Trough, the San Jacinto River flowed across the Santa Ana Mountains and entered the Pacific Ocean near San Juan Capistrano. However, during the Quaternary time the Santa Ana Mountains rose faster than the San Jacinto River could down cut, and the river was diverted northward along the Elsinore Trough via Temescal Wash and Santa Ana River to the Pacific Ocean near Newport Beach in Orange County.

During the current dry climatic cycle Lake Elsinore rarely overflows. Despite the artificial recharge of the lake, the wet years of 1969 and 1978 failed to cause overflow of Lake Elsinore.

The main drainage through Walker Canyon and the project site has a gradient of about 15 feet per mile and the principal tributary adjacent and southeast of the site has a gradient of about 30 feet per mile.

Although the mine site is located in the Elsinore Trough and Temescal Wash passes through the area, the mine itself is not located so as to be significantly affected by run-off. Most of the water from areas upstream from the project area drains through the major established drainage such as in Walker Canyon.

3.2 Climate

The climate of the project area is typical of the southern California coastal interior. There are two contrasting seasons, a cool moist winter when nearly all the precipitation occurs, and a mild warm dry summer season. The weather is dominated by the Pacific high pressure system that grows during the summer and effectively blocks storm generation. Light fogs and clouds are common at lower elevations in the late spring and early summer but rarely remain for an entire day. About 85 percent of annual precipitation occurs in a wet season from November through March from cyclonic storms. Average annual rainfall is about 13 inches in the Temescal Valley-Alberhill area to over 28 inches atop Santiago Peak. Precipitation is mostly rainfall, accompanied with light snowfalls above 3,000 feet throughout the winter months.

High velocity winds known as "Santa Anas" develop during the late fall and early winter. These winds are northeasterly or easterly from the desert and obtain velocities in excess of 80 miles per hour as they cross mountain ridges. The regional prevailing wind is westerly averaging 5 to 7 miles per hour; however, the orographic effects of the northwest-southeasterly-trending "Elsinore Trough" have a profound local influence on local wind direction and velocities at Alberhill.

3.3 Vegetation and Wildland Fire

Vegetation is a result of the prevailing Mediterranean climate with intense winter storms. Fire plays an important part in the brushland vegetative sequence. Microclimatic differences have brought about

naturally occurring grasslands and other distinctive plant communities in the Temescal Valley and adjacent hillside areas. The project area is in the transition zone between chamise and broadleaf chaparral of the higher Santa Ana Mountains and more arid sage associations. The natural vegetation along the bottom of the Temescal Valley and in the Alberhill area has been greatly modified by farming, grazing, mining and urbanization.

The fire season can be yearlong. It is more critical from May to December. The July to September period is highlighted by often dry, moderate to severe lightning storms. Mild to severe Santa Ana winds blow in October, November and December. Warm temperatures of 90 to 100 degrees, low humidity (less than 10 percent), critical fuel moistures (less than 5 percent), and strong winds often occur during the summer months. The annual average burned areas within northern Santa Ana Mountains and Temescal Valley area is seldom less than 3,000 acres. The low amount of rainfall, climatic conditions, highly flammable vegetation, rugged terrain and heavy use of the region may make the threat of a fire a continual reality. Much of the wildland fire hazard within the project area has been removed because of the extent of the active mining operation and the accessibility of the area to fire suppression equipment. However, several "natural" chaparral covered areas within the project area represent a high fire hazard comparable to surrounding private and national forest lands. It is interesting to note that since mining has displaced much of the original soil cover during the past 128 years of mining, many of the cuts and fills have developed a climax chaparral cover. The sedimentary "rock" overburden in many dump areas such as in section 21, has developed a near climax "natural" chaparral cover within about 15 years. Some of these "naturally recovered" areas along with areas of undisturbed chaparral could be classified under the State Department of Forestry "Classification for Wildlands", as Class III or extreme fire hazard.

The normal reoccurrence interval for remote wildland fires in the southern California chaparral areas is about 27 to 30 years. Chaparral adjacent to populated areas burns more frequently, perhaps every 9 to 10 years. As it takes about 10 years for the chaparral to re-establish a protective cover, this time frame is not much different than natural revegetation on mine cuts and fills once mining activity has ceased.

3.4 Soils, Erosion, and Slope Stability

As identified in the referenced Reclamation Plan, the project site has 48 different soil types divided into 25 soil series. The majority of these soils have textures ranging from loams to loamy sands to gravelly loams. Soils are generally moderately deep to shallow with low to high erosion hazard. The permeability of the soils ranges from low to high, depending upon texture, relative density, and slope of the ground.

As mentioned above, erosion potential of the soils ranges from low to high. Erosion of the bedrock materials depend upon texture, hardness, chemical composition, degree of fracturing, and dip of the bedding planes. The run-off from the site itself is for the most part channeled to existing collection ponds which are created in the mining process (Storm Water Pollution Prevention Plan attached in Appendix 2). These pits are being used to trap the water allowing it to be used on site for dust control and processing activities. Excess remaining water is allowed to percolate through the soil and/or evaporate. Except in unusually heavy years of precipitation, dust control measures and processing activities have utilized virtually all of the water collected on the site. To the extent practicable drainage not channeled to these collection ponds is channeled to existing drainage channels.

Stability of the slopes cut during the mining operation depends upon numerous factors; among them being, height of cut, relationship of slope to bedding plane attitudes, joints in the material, and

groundwater influence. Final reclaimed slopes will not exceed 2:1, H:V.

3.5 Regional Geologic Setting

The project site is located within the northern part of the Peninsular Ranges Geomorphic Province of California. This province extends from the southern tip of Baja California to the Los Angeles basin and is characterized by a series of northwest trending mountain ranges separated by sub-parallel faults, with a coastal plain of subdued landforms in the western portion. Specifically, the site is situated along the boundary of two structural blocks of the province, the Perris Block to the east and the Santa Ana Mountains Block to the west. The Elsinore Fault Zone, which is located just southwest of the project site, separates these two structural blocks. The regional geology of the project vicinity is shown on Figure 4. The area covered by this map is underlain by plutonic, metamorphic, sedimentary and volcanic rocks that range in age from Jurassic to Quaternary. Crystalline igneous and metamorphic rocks are exposed at many places and underlie the entire region.

The Perris Block is underlain by a combination of batholithic and prebatholithic, primarily metasedimentary, rocks with a cover of Tertiary and Quaternary age sedimentary rocks and deposits. Several erosional and depositional surfaces are developed on the Perris Block, and there is evidence of extreme weathering of pre-Paleocene basement rocks and Paleocene sedimentary rocks during Paleocene time. The oldest rocks are slates, argillites, and quartzites, with lesser amounts of conglomerate and siliceous dolomitic limestone, of the Jurassic Bedford Canyon Formation. These rocks have been invaded by several series of volcanic rocks all probably of Jurassic age. These include (1) the Santiago Peak volcanics, a series of mildly metamorphosed flows, tuffs and breccias which range from latite to andesite and which in the northwestern Santa Ana Mountains unconformably overlie as well as intrude Bedford Canyon rocks; (2) quartz latite volcanic breccia, a shallow intrusive rock related to the Santiago Peak volcanics; and (3) quartz latite porphyry, a dense, blue-black to gray hypabyssal rock with aphanitic groundmass and abundant phenocrysts of quartz and feldspar. The Bedford Canyon metasedimentary rocks also have been intruded by a series of later Mesozoic plutonic and dike rocks, most of which represent the southern California batholith. The oldest plutonic rock is Cretaceous. It ranges widely in composition from a coarse-grained hornblende quartz diorite to hypersthene biotite gabbro, and locally norite. They include the San Marcos gabbro and diorite and gabbro of Engel (1959). The Woodson Mountain granodiorite is typically coarse grained, white to brownish-gray rock, in which biotite is commonly abundant. Oriented inclusions of the San Marcos gabbro, and streaks of dark mineral segregations characterize the Bonsall tonalite, which is ordinarily medium-grained, and light to dark gray. The Estelle tonalite is similar in mineral composition to the Bonsall tonalite, but finer grained and darker colored and lacks the numerous large dark inclusions found in the Bonsall tonalite.

Thin to relatively thick sections of primarily Quaternary age sediments overlie the older rocks described above. Much of these sediments are of non-marine origin and consist mostly of sandstone, conglomerate, and gravelly sands deposited as alluvial fans, fluvial channel fills, and upon broad alluvial plains. Tertiary age sedimentary rocks are present within the region, and generally consist of sandstone, claystone, and mudstone of marine origin. It is these sedimentary rocks that are part of the regional clay deposits.

The structure of the southern Temescal Valley is dominated by the Elsinore fault zone. This fault zone is characterized as a complex of northwest-trending faults that, in general, delineate a group of down-dropped blocks to form Temescal Valley. Most of the major faults trend northwest and include both left-stepping and right-stepping en echelon faults.

3.6 Site Geology

The clay deposits in the Alberhill area are confined to a single zone which contains clay of both residual and sedimentary origin. The residual clay was formed by the deep weathering of the Mesozoic crystalline bedrock and early Paleocene sedimentary rocks, apparently in Paleocene time. The sedimentary clay was eroded and transported from the ancient surface and is now part of the Silverado Formation, of Paleocene age, which unconformably overlies the residual clay. In the Alberhill and Elsinore quadrangles, this clay bearing zone underlies an area of about one and one-half square miles along the borders of and within the Temescal Valley. It is about 80 feet in average thickness and has a maximum thickness of about 150 to 200 feet.

The residual clay deposits are as much as 130 feet thick, and grade downward and laterally into (1) metasedimentary rocks of the Triassic Bedford Canyon formation, (2) andesitic rocks of the Jurassic Santiago Peak volcanics, (3) Jurassic quartz latite porphyry, and (4) Cretaceous diorite-gabbro. Slaty cleavage, outlines of feldspar phenocrysts and angular fragments, and hexagonal quartz grains are remnant features that indicate that the residual clay was derived from slate, volcanic breccia, and hypabyssal igneous rocks respectively.

Although sedimentary clay occurs throughout the generally 100 foot exposed thickness of the Silverado formation, the layers of clay of commercial importance generally occur only in the lower half. Individual layers are commonly less than 20 feet thick and less than 30 acres in areal extent. Layers of sandy, non-commercial material occur interbedded with the clay throughout the section.

The attitudes of the clay-bearing zone suggest a shallow, northwest-trending synclinal structure that is cut by northwest to northeast-trending high angle faults which in some places mark the boundary between the clays and relatively unweathered crystalline rocks. These faults have observed displacements that range from a few inches to at least several tens of feet. Although the clay beds locally dip as much as 30 degrees, the average dip is less than 10 degrees. The lithologic features of the clay-bearing units are shown in the generalized stratigraphic column of the site geology in Figure 5. The clay-bearing zone is broadly divisible into five units which show marked ranges in thickness, color, and lithology from one clay pit to the next, but which persist throughout the area. The lowermost unit is variably-colored, massive, plastic, residual clay. In some places this unit is overlain by a massive pisolitic "bone clay" (unit D) which is also of residual origin. Unit C, the lowermost clay unit that clearly is of sedimentary origin, consists of lignite and carbonaceous fire clay and lays unconformably either upon unit E or unit D. Unit B, which conformably overlies unit C, is a massive, sandy claystone that is white to pale gray in some areas and red and white mottled in other areas. Unit A conformably overlies and overlaps unit B, and consists of green to gray, waxy clay shale interbedded with coarse-grained, arkosic, micaceous sandstone. Adding to the complexity of the clay bearing zone are numerous faults which truncate and/or displace the particular units sometimes several tens of feet. The quantity and complexity of the faulting tends to increase in a southwesterly trend across the site. Evidence indicates that some faulting took place during deposition and/or lithification of the sedimentary units as well as post-depositional.

The Silverado Formation generally is overlain by a presumed Tertiary-age formation commonly referred to as the Olive Formation. It was originally thought to be a member of the Martinez Formation of central California, however this unit exhibits characteristics common to the Mount Eden Formation or the Puente Formation, both of which are early Pliocene and Miocene in age and found within the region.

Others feel that this unit is simply part of the Silverado Formation (Unit A as described above) as there are discontinuous beds and lenses of red and white mottled claystone present. However, field observations indicate that the presence of these claystone lenses and beds may be related to fault activity. This unit is characterized by dark grayish green plastic claystone and siltstone interbedded with micaceous, fine to medium grained green and gray sandstone and siltstone. The sandstone and siltstone layers typically contain lime-cemented concretions typical of the Mount Eden and Puente Formations. Although the micaceous sandstone and siltstone layers are of little commercial value, the plastic claystone deposits are used commercially in the brick making on site, as well as in low permeability soil applications off site such as sanitary landfill liners and caps.

Quaternary fanglomerate deposits correlated to the regionally pervasive Pauba Formation are found overlying much of the site, generally above the Olive Formation and/or the Silverado Formation. Rarely is this deposit found overlying the older crystalline basement rocks. The Pauba Formation is a prominent geologic unit in areas south of the project site of late Irvingtonian (0.3 – 0.24 ma) to early Ranchoabrean (0.24 – 0.2 ma) age. This deposit is about 20 feet in average thickness and locally is as much as 200 feet thick, and provides the source for the sand and gravel operations on site.. This formation is characterized by massive to thinly bedded, fine to medium grained silty sands with lenses of subangular to subrounded gravels, cobbles, and boulders. The gravels, cobbles, and boulders are of varying composition reflecting the wide range of basement rocks in the area. They primarily consist of moderately to intensely weathered granitic rock, slate, shale, and sandstone.

Colluvium and alluvium are present on site in some areas not yet disturbed by mining activities. The colluvium is generally present atop the Pauba Formation, and typically consists of orangish to reddish brown, fine to medium grained silty to clayey sand. The colluvium typically ranges between 3 and 5 feet thick where present. Alluvium represents the youngest natural geologic deposits on site, and is found in the bottoms of some of the natural drainages on site. The alluvium typically consists of light gray to light brown, fine to coarse grained sand with silt. Subrounded to rounded gravels, cobbles, and some boulders are present within the alluvial deposits, and are typically comprised of slightly to moderately weathered granitic rock, with lesser amounts of slate.

3.7 Faults and Seismicity

Figure 6 presents a regional fault location plot as related to the project site. The figure indicates that faults within the immediate vicinity of the site generally do not have historic (past 200 years) displacement. Some faults within a 100 kilometer radius of the site do exhibit historic displacement.

The southwest site boundaries are adjacent to the main trace of the Glen Ivy segment of the Elsinore fault zone, which has a continuous record of seismic activity, but is without historic (past 200 years) displacement. The Newport-Inglewood fault zone, approximately 30 miles from the site, is also seismically active. This fault zone also has not been known to rupture the ground surface in historic time.

The San Jacinto and San Andreas faults, approximately 21 and 31 miles distant, respectively, are seismically active and have exhibited historic displacement associated with surface rupture, fault creep slippage, and/or displaced survey lines.

The principal faults of the Elsinore fault zone range in dip from gently southwestward to essentially vertical. The horizontal component of displacement is principally right lateral, and segments along the

southwest side of the trough generally are up vertically to the southwest. The total right lateral displacement of rocks of the southern California Batholith and pre-batholithic rocks is about 6 to 6.5 miles. One observed vertical component of very late Quaternary displacement is about 200 feet near Corona (Webber, 1977).

A moderately large earthquake (estimated Magnitude 6.0) took place in the Elsinore fault zone in 1910 in the Temescal Valley area (Topozada, 1978), and earthquakes of that magnitude can be expected in the future. Maximum credible earthquakes, based on overall apparent length of the zone, may be in the range of M6.5-7.

Figure 7 presents the site location as plotted on the Alquist-Priolo Earthquake Fault Zoning Map for the Alberhill Quadrangle. The southwestern portion of the site is located immediately adjacent to the northern extent of the mapped Earthquake Fault Zone for the Glen Ivy segment of the Elsinore fault zone. The Alquist-Priolo Earthquake Fault Zoning Act requires that a site specific geologic fault investigation be performed for the proposed construction of structures for human occupancy located within the delineated zones. No structures for human occupancy are located or proposed for the portions of the project site adjacent to the delineated Earthquake Fault Zone.

4.0 MINING AND PROCESSING

4.1 History of Production and Utilization

Historically, the clays of the Alberhill area were used to produce two main types of clay products; heavy clay products such as sewer pipe, face brick, and tile, and refractory clay products such as fire brick, flue lining, and pottery. Currently, clay utilization and production is focused on face brick and brick pavers, with lesser amounts of fire brick, tile, and pottery. Clay sewer pipe use has been superseded by the use of PVC or other plastic compound pipe, and currently there is no clay pipe production on site. Throughout its history, the site and surrounding area have provided much of the clay resources and clay-related products for southern California for over a century. From about 1890 to the mid-1950's, the Alberhill Coal and Clay Company mined coal and clay from their deposits near Alberhill. Although the company did not manufacture clay products, they supplied large tonnages of high-aluminous clay to ceramic plants in the Los Angeles area. By 1923, the Company was mining about 12 varieties of clay, including some red-burning clay with relatively low alumina content. Although in 1923 the clays were being used to make 21 different products, most of it was being sold to producers of face brick and fire brick. In 1922, the Company shipped 2,500 fifty-ton carloads of clay to local and Los Angeles producers. By 1945, a large proportion of the 7,000 tons per month of clay that was being mined at Alberhill was the red-burning plastic clay used extensively in sewer pipe. A smaller amount of fire clay was being produced for Kaiser Steel Corporation, Santa Fe Railroad, and various pottery manufacturers.

The Los Angeles Brick and Clay Products Company acquired their clay properties from the former owner, the California Clay Manufacturing Company, and built their plant in 1925. In 1963 Pacific Clay Products, which was founded in 1886 as Pacific Sewer Pipe Company, acquired the Los Angeles Brick and Clay Products Company. This same brick plant originally built in 1925 still stands today in the location of the current Pacific Clay Products plant, and is still used in the ongoing operations. Through the mid 1950's to the late 1970's, much of the clay mined from the site was shipped to various plants throughout the region to be used primarily in the production of sewer pipe and face brick. As the use of sewer pipe declined starting in the 1980's, much of Pacific Clay Products production focused on face brick, brick pavers, and to a lesser extent fire brick and pottery. By the mid 1990's, Pacific Clay was no longer producing clay sewer pipe. The regional pipe plants were closed and operations were focused on brick production at the project site. However in 1996 a new state of the art fast fire brick kiln was put into production making Pacific Clay one of the largest brick facilities in the western United States.

Throughout much of 20th century, however, Pacific Clay Products and its predecessors were not the only mining operations on the site. With its acquisition of the Los Angeles Brick and Clay Products Company in 1963, Pacific Clay Products became the owner of nearly all of the land that is the subject of this report (that being the land west of Lake Street). Gladding McBean, and Company maintained ownership of an approximately 320 acre parcel of land in the central portion of the subject site (previously known as SMP108 or CA Mine ID# 91-33-0006) until July 1979 when this land was acquired by Pacific Clay Products. During its ownership period, Gladding McBean, and Company mined clay from the site for use in their plants throughout southern California primarily for sewer pipe manufacturing. Additionally, beginning on or about 1968 Elsinore Ready Mix began leasing an 80 acre parcel of land in the south central portion of the subject site for the mining and processing of sand and gravel and the production of ready mixed concrete. This 80 acre parcel of land became known as Reclamation Plan 110 or CA Mine ID#91-33-0020 pursuant to the adoption of SMARA and Riverside County Ordinance 555. The lease agreement between Elsinore Ready Mix and Pacific Clay Products ended in 2003, and shortly thereafter in 2004, Pacific Aggregates, Incorporated resumed sand and gravel mining and processing and ready mixed concrete production operations within this 80 acre parcel.

Today the site is a comprehensive mining and production operation utilizing an abundant and unique geologic resource to provide quality construction materials to the southern California market. Very few, if any, other sites exist that can provide world class ceramic clay products and Portland cement concrete grade aggregates all from one raw material reserve. In the beginning coal and clay were mined by underground methods employing hand tools and man and mule power. Today, modern equipment such as bulldozers, excavators, and scrapers are used to mine the raw materials by open pit methods.

4.2 Land Use, Economic Considerations, Life of Operation

The use of the property for mining since 1883 represents a long-term commitment of the site to the extraction of an important natural resource. Mining is expected to continue for the foreseeable future, 44 years or more. When the deposit was first exploited in the late 19th century, nobody envisioned the market and urban conditions that exist today, over 100 years later. Essentially, all mining was by tunnel or adits. Today all mining is by open pit methods and it is still difficult to estimate with any degree of accuracy the life of any one area within its operations. The reason for this inability is that from any one area or region generally two, and in many cases, several, of the fifteen primary clay ore types found on the property are extracted. Those primary types are then blended into twenty different base materials which are then utilized in the production of several different categories of clay products. These products include fire brick, face brick, decorative brick, brick pavers, floor tile, and bulk material. Each of the preceding product categories is further divided into sub-products based on physical properties and appearance.

In every case, several areas would be involved in making a final product. The use of any one area, therefore, is so dependent on market specification and changes that although the Company believes the entire reserve will ultimately be mined, it is impossible to predict the sequence of mining of the various areas within the mine. The Reclamation Plan must be viewed as covering one deposit. The best estimate is that the life of the deposit, without regard to individual areas, is in excess of 44 years.

5.0 RECLAMATION PLAN

5.1 Statement of Responsibility

As required by Public Resources Code §2772 (c)(10), the owner and operator of the Pacific Aggregates Inc. and Pacific Clay Products operations listed above accepts responsibility for reclaiming the mined lands in accordance with the provisions of this Reclamation Plan. Please refer to Section 8 of this Reclamation Plan for a signed copy of the statement.

5.2 Proposed End Use

Per SMARA, Article 1 General Provisions, §2712(a) this Mining and Reclamation Plan has been designed to reclaim the project site to a usable condition which is readily adaptable for alternative land uses. As such, the mine operator is proposing that the end use for this reclamation plan be primarily suitable for Open Space with a northern portion of the project suitable for industrial development. This use would be allowed by the current zoning in the City of Lake Elsinore. Please see Figure 2 – Reclamation Plan and Figure 2A – Detail Industrial End Use Structures with a description of the current use of structures in the industrial area of the site.

5.3 Proposed Time Schedule of Reclamation

Reclamation activities, other than monitoring, will be completed within five years after the completion of mining. Monitoring will be conducted as described in this Reclamation Plan by a qualified third party representative appointed by the mine operator and will continue until standards are met. Reclamation of portions of the site will be completed in the near future, see Section 1.2 and Figure 2 for additional detail.

5.4 Impact of Reclamation on Future Mining

Although the intent is to mine all economically feasible material, this would not necessarily preclude future mining on the site. Future economic and market conditions may warrant future mining at the site and the proposed end-use of Open Space would not restrict that activity.

5.5 Public Health and Safety

Since the Project site is located on a relatively remote parcel of private property with limited public access, existing and probable future public exposures to the site are limited.

The site is fenced and/or bermed with signs to prevent public access. Security personnel are onsite when the facility is not operating. Entrance and exit gates are locked when not in use and equipped with video surveillance systems.

5.6 Control of Potential Contaminants and Non-Marketable Material

On and off road equipment is fueled from aboveground diesel tanks located at the Pacific Aggregates facility area and underground gasoline and diesel tanks at the Pacific Clay plant area. Mobile fueling trucks are used to fuel the heavy equipment when it is being used in an area remote from the stationary tank. The existing mining operations require the use and onsite storage of fuel, lubricants and other materials. These materials are delivered by truck and stored at the site in appropriate drums/containers which are kept in the shop and facilities located in Area's 2 and 3 on Figure 2.

Unsalable overburden and excess fines removed by processing are stockpiled in locations as noted on Figure 2 – Reclamation Plan.

Pacific Aggregates and Pacific Clay products maintain applicable Spill Prevention Control and Countermeasures Plans, Hazardous Material Business Plans, Storm Water Pollution Prevention Plan, and necessary Department of Environmental Health and/or Hazmat permits as appropriate. These plans and permits are filed with the appropriate agencies and posted on site as required.

6.0 SMARA RECLAMATION STANDARDS

This combination of three individual approved reclamation plans into one document has been completed at the request of the OMR and the City. This consolidation has been completed primarily to simplify administrative aspects of SMARA compliance monitoring and it is not a substantial deviation as described in CCR § 3502 (d), see additional discussion in Section 7.0. The approved and proposed new reclamation standards as they relate to each regulatory section are presented in the following sections and illustrated on Figure 2 attached.

6.1 Wildlife Protection, CCR §3703

The site has been in operation since the late 1800s and most extraction and operation areas have been disturbed for decades, therefore existing wildlife habitat on the project site is limited or nonexistent. Revegetation of disturbed areas as described in section 6.3 below will be completed to return disturbed habitat to a natural state using native plant species to provide habitat for wildlife.

6.2 Backfilling, Regrading, Slope Stability, and Recontouring, CCR §3704

Upon the termination of each phase of the operation, final slopes, overburden stockpiles, abandoned spoil piles, and the general premises shall be graded and smoothed so as to control erosion, prevent the creation of potentially dangerous areas and present a neat and orderly appearance. All spoil piles shall have a stabilized angle of repose. No pit excavation shall remain with a slope exceeding one vertical to two horizontal unless shown to be stable with a factor of safety suitable for the end use by engineering, geology, or soils engineering evaluation. All grades and slopes shall be oriented to control drainage and to conform to the natural drainage and natural slopes for the area.

This reclamation plan proposes final slopes no greater than 2:1. Project slopes are also inspected by a Certified Engineering Geologist on a routine basis; copies of such certifications are included in Appendix 1.

Any backfill that remains on the site will be placed in a manner consistent with the end use of the site. Back fill in areas that will remain industrial will be placed in accordance with appropriate UBC standards and City Building Official oversight. Backfill in open space areas will be non-engineered, but will be placed in generally small lifts and be compacted by the rolling force of heavy equipment used to place the material.

6.3 Revegetation Plan CCR §3705

A vegetative cover suitable for the proposed end use and capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer shall be established on disturbed areas of the site. Revegetation of the disturbed areas will be performed utilizing a combination of broadcast seeding and hydroseeding. Disturbed areas with topography ranging from flat to gently sloping (< 3:1 h:v) will be reseeded with a broadcast spreader while slopes in excess of 3:1 (h:v), and up to the maximum allowed inclination of 1:1 (h:v), will be hydroseeded. Portions of the site where surface mining activities have resulted in compaction of the soil will be scarified by ripping, disking, or other appropriate means to eliminate compaction to an adequate depth to establish a suitable root zone in preparation for planting.

Irrigation is not proposed because it will increase the likelihood of invasive weed species becoming

established on the site. Consequently, the plant palette chosen for the site is comprised of drought-resistant species that if planted at the correct time of year, can survive and spread on natural precipitation alone. Seeding activities will be conducted in late October through November, just prior to the onset of the rainy season.

The seed mix will consist of the following native, locally-occurring species in the following quantities:

6.3.1 Table 1 - Seed Mix

Species	Typical Purity (%)	Typical Germination Rate (%)	Pure Live Seed (%)	Application Rate (lbs/acre)
Native California Brome (<i>Bromus carinatus</i>)	95	80	76	8
Small Fescue (<i>Vulpia microstachys</i>)	90	80	72	6
California buckwheat (<i>Eriogonum fasciculatum</i>)	50	20	10	12
Golden yarrow (<i>Eriophyllum confertiflorum</i>)	30	60	18	4
California poppy (<i>Eschscholzia californica</i>)	98	80	78	1
California Goldfields (<i>Lasthenia californica</i>)	70	50	35	1
Deerweed (<i>Lotus scoparius</i>)	90	60	54	4
Desert mallow (<i>Sphaeralcea ambigua</i>)	90	70	63	1
Brittlebrush (<i>Encelia farinosa</i>)	40	60	24	4
TOTAL				41

6.3.2 Control of Non-native Vegetation

Mining activities create and maintain disturbed conditions suitable for the growth and reproduction of a variety of non-native invasive weeds. Competition from exotic or native weedy species is a major problem in the success of most reclamation projects. Use of amendments, other than the initial inclusion of fertilizer in the hydroseed mixture, will be discouraged due to the rapid response of weedy species to such soil treatments.

A combination of mechanical and chemical methods will be used to remove and control non-native, invasive plants. Mechanical treatment will involve the use of weed trimmers, where necessary, to remove large stands of tall invasive plants, such as castor bean or fennel. The cut stems of these plants will immediately be sprayed with Roundup. This herbicide is nonvolatile and the active ingredient quickly biodegrades. Chemical control of herbaceous invasive plants will occur by aerial application of Roundup with portable tank sprayers.

Mechanical and chemical removal of non-native weeds will be conducted twice each year (late spring and late fall) for three to five growing seasons following initiation of the revegetation effort, or until native vegetation has attained a ground cover and reproductive rate sufficient to out-compete non-native weed species.

6.3.3 Soil Analysis

A topsoil salvage and redistribution program will be developed to ensure that soil conditions at the time of revegetation will be adequate to support the native plant palette. Soil analysis will be conducted to evaluate the nutrient levels in the topsoil and will be compared to soil test results from adjacent, undisturbed areas. Topsoil will be augmented if growth-inducing deficiencies in essential nutrients are

noted. Some topsoil stockpiles are currently present on site as shown on Figure 2 – Reclamation Plan. In addition, potential topsoil collection areas are shown on Figure 3.

6.3.4 Performance Standards

Performance standards quantitatively evaluate the success of the revegetation effort and weed control in relation to similar native, undisturbed habitats.

Success of the revegetation will be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area. Reclamation will be considered complete for a given area when these standards have been achieved or the subsequent land uses are ready to begin operation.

6.3.5 Table 2 - Revegetation Performance Criteria

Native Cover Seed Mix	
<i>Goal</i>	Native vegetation attaining similar cover, density and composition as nearby areas.
<i>Performance Criteria</i>	<i>Overall Cover:</i> 60 percent of baseline <i>Density:</i> 80 percent of baseline <i>Species Richness:</i> 80 percent of baseline. (Baseline studies will be conducted prior to clearing native vegetation for mining activities to fully identify percent cover, density and species richness).
<i>Contingency Action</i>	Reseed if densities and/or diversity of plants are low.
Weeds/Invasive Species	
<i>Goal</i>	Less than 25 percent of any 20 square foot area.
<i>Performance Criteria</i>	Weeds present in the revegetation area will be removed if more than 25 percent of any 20 square foot of the area is occupied by weeds greater than six inches in height.
<i>Contingency Action</i>	Remove manually and spray cut stems of large invasive species, such as castor bean or fennel with Roundup.

*No single species shall constitute more than 50% of the vegetative cover

6.3.6 Test Plots

A Revegetation Test Plot program will be established to determine the effectiveness of the proposed seeding methods and species composition, and seeding rates. The test plots will be used to determine the necessary germination rate of the proposed seed palette, the ultimate vegetative cover of native plants and weeds that may emerge.

Table 1 shows the seed mix that would be used. This mixture would be hydroseeded on some portions of the test plots and broadcast by hand on other portions of the test plots to test both application methods. Results of the test plots would be matched against baseline information gathered from a representative, undisturbed area. Density, cover and diversity of a representative site would be measured. If necessary, monitoring criteria of the seeding prescription would be altered to conform to the naturally occurring species composition and distribution.

Test Plots would be monitored for at least five years. Results of the Test Plots would be matched against the baseline conditions previously gathered from a representative, adjacent, undisturbed area. If necessary, the seed palette and/or planting procedures would be adjusted to be similar to the adjacent naturally occurring species composition and distribution. Results would be memorialized and used at the time of reclamation.

6.3.7 Monitoring and Reporting

Monitoring is designed to evaluate the success of the seeding procedures and subsequent native plant growth over time and to implement contingency measures in the event the specified performance criteria are not achieved. Pursuant to § 2773(a) of SMARA, the success of reclamation will be monitored annually for three years, or until performance standards are met, provided that, during the last two years, there has been no human intervention, including weeding. Monitoring will be conducted by a qualified applicant appointed representative after seed introduction to gauge the success of the revegetation effort. Remedial measures will be implemented, as necessary, to achieve the performance criteria presented in Table 2 above.

A stratified random sampling program for monitoring vegetative recovery will be implemented. An adequate number and size of sampling plots to achieve an 80% confidence and precision level (not less than 14 for most vegetation types) as required by Article 9 of the SMGB regulations will be determined based on the monitoring biologist's identification and mapping of uniform landscape units or ecological sites delineated at the time of revegetation monitoring.

The monitor will evaluate the need for weeding as well as plant establishment. Annual reports and recommendations will be submitted to the SMARA Lead Agency. Follow up monitoring will continue for three years, as described above, and will not cease until performance criteria have been met.

6.4 Drainage, Diversion Structures, and Erosion Control, CCR §3706

The operator will ensure that during mining operations the offsite storm run-off through the property outfalls at substantially the same location as exists under natural conditions. Figure 2B illustrates the location of current storm water basins and onsite water wells.

The site is subject to the General Industrial Stormwater permit and has filed a Notice of Intent (NOI) with the Regional Water Quality Control Board. A Storm Water Pollution Prevention Plan (SWPPP) has been prepared for and is currently in use at the Project site. The SWPPP (attached in Appendix 2) will be updated and amended by Pacific Clay Products and Pacific Aggregates, Inc., whenever there is a change in site drainage, significant materials used at the facility, material handling areas or practices, or in response to changes in permit requirements. The SWPPP utilizes recognized Best Management Practices and the site will meet the standards identified within the approved SWPPP at the completion of reclamation activities.

The SMARA guideline requires a 20 year, 1 hour design flow rate and volume while the SWPPP (attached in Appendix 2) guideline requires containment and treatment of the 10 year 24 hour design volume. An analysis conducted by a State of California Registered Civil Engineer confirmed that the existing site controls for collection and retention of stormwater flows under the SWPPP guidelines exceed the SMARA required flow rates and design volumes. Please see Appendix 2 for the analysis discussed above including figures showing site specific drainage maps depicting all erosion control and drainage facilities.

Upon Project completion, the site will be a depression that collects and retains storm water run on. In the reclaimed state, erosion control will be provided by revegetation and berms at the top of slopes as noted on Figure 2 - Reclamation Plan.

As part of the final configuration of the site at the time of final reclamation, locations where offsite drainage flow run-on will be identified. At these locations, the location specific grade and drainage flow characteristics will be analyzed and solutions will be designed to eliminate effects from offsite erosion and scour. The designs will be based on hydrologic and hydraulic studies completed prior to final reclamation. Options for addressing flow and debris management will include but are not limited to grading and contouring to reduce flow velocity, installation of rip rap or spillways, debris basins, bioengineered solutions or other appropriate engineered protection methods.

Erosion rills and other erosional areas that are greater than 12" in depth, 24" in width or 12' in length will be filled prior to the rainy season and identified and corrected as part of the routine stormwater inspections. Correction may include placement of graded rock receptors and or straw bales to slow concentrated runoff within 1 week following a rainfall event.

Stockpiles will be managed to minimize wind and water erosion by stabilizing with water spray on an as needed basis. Clay stockpiles in the brick plant area are also bermed and runoff is controlled to capture sediment runoff. Stockpiles are also shaped to provide a minimal amount of surface area for a given pile size, and graded to minimize the potential for ponding water on the surface of the pile that could lead to concentrated runoff and/or erosion of the pile itself.

Regarding water quality and recharge, the existing setting for this analysis is the site as it exists today. The overall impact of the site on water recharge is to slow and retain stormwater from the project and adjacent upstream sites. On a qualitative basis, this provides equal or greater recharge potential than the current and pre-mining (1880s) condition. Additionally, Pacific Aggregates and Pacific Clay products maintain a Spill Prevention Control and Countermeasures Plan to provide protection from recharge water impacts.

6.4.1 Detention Pond Maintenance

The facility has multiple detention and retention basins along with mining pits that capture storm water and sediment. The Stormwater Pollution Prevention Plan (SWPPP) attached in Appendix 2, includes the location of all facility basins. The water collected in the basins and pits stays on-site and is used in industrial processes. The basin facilities are cleaned and maintained on an as needed basis with the sediment regularly excavated and stockpiled for future use. The facility visually inspects each outfall, detention basin and retention basin prior to forecast storm events to ensure that the appropriate BMPs described in the plan have been implemented. The SWPPP (Appendix 2) further defines an inspection program which includes weekly manager inspections, wet season manager inspections and annual comprehensive site compliance evaluations as described in Sections S. and Q. of the SWPPP.

6.5 Prime Agricultural Land Reclamation, CCR §3707

Not applicable to this Project.

6.6 Other Agricultural Land Reclamation, CCR §3708

Not applicable to this Project.

6.7 Building Structure and Equipment Removal, CCR §3709

Equipment, supplies and other materials shall be stored in designated areas. Waste shall be disposed of in accordance with state and local health and safety ordinances. All buildings, structures, and equipment shall be dismantled and removed prior to final mine closure. Areas 1, 2, and 3 are noted on Figure 2 - Reclamation Plan. A description of the building and structures to be removed in each of these areas follows:

Area 1 – Pacific Aggregates Offices – All structures in this area will be removed when mining is complete.

Area 2 – Pacific Aggregates Facilities – This area currently provides material processing and maintenance functions. Equipment currently in place includes the rock plant, wash plant, ready mixed plant, maintenance shops, fuels tanks and other support structures. All structures in this area will be removed when mining is complete.

Area 3 – Pacific Clay Facilities – This area currently provides clay processing and manufacturing functions. Temporary and permanent structures would be removed when mining is complete. See Figure 2A for a description of current uses of these structures.

Remainder of Site – Portable and temporary equipment and structures are utilized as needed on the remainder of the site. All equipment and structures needed for drainage and erosion control will be removed when mining is complete.

6.8 Stream Protection, Including Surface and Groundwater CCR §3710

Streams on the Project site have been disturbed due to previous mining operations and no change in these operations is proposed for this Reclamation Plan Amendment. The SWPPP attached in Appendix 2 provides the methods and means for onsite protection of downstream water quality.

In active flow areas that were previously mined, the on-site collection of mineable materials is controlled and monitored as part of the SWPPP document and operations. Flow controls and basin management provide several areas for material management. In several of these areas where flows enter the site, previous mining operations were conducted to collect and process the material. Excavation has ceased in these areas and they are part of an adaptive management program to establish and stabilize the natural flow areas.

These adaptive management controls currently consist of basins configured using natural onsite materials to collect the aggregate materials, slow the storm flows and retain the flows to prevent stormwater discharges. Regular removal and basin maintenance is performed to maintain the basin capacity and control flow rates. Annual monitoring of storm flows, storm intensities and volume calculations of new material entering the site is documented. The annual variation of material collected and stabilization of the natural flow areas determines the operational changes for the site, and assess potential for offsite impacts. The SWPPP is updated with annual topographic data changes to provide additional information in the adaptive management approach to the natural areas.

Other agencies will be consulted when work is performed in these areas that may require additional permits or authorization.

Three groundwater wells exist on the site and are located on Figure 2B. Wells #2 and #3 on the northern part of the site have reported groundwater depth of 10'. Mining activities to date have not encountered groundwater, and if groundwater is encountered in any excavation area, excavation in that area will cease and be backfilled with native material to ensure that groundwater does not remain exposed.

6.9 Topsoil Salvage, Maintenance, and Redistribution CCR §3711

As part of the Revegetation Program discussed in Section 6.3 above, a topsoil salvage and redistribution program will be developed to ensure that soil conditions at the time of revegetation will be adequate to support the native plant palette. Soil analysis will be conducted to evaluate the nutrient levels in the topsoil and will be compared to soil test results from adjacent, undisturbed areas. Topsoil will be augmented if growth-inducing deficiencies in essential nutrients are noted. Some topsoil stockpiles are currently present on site as shown on Figure 2 – Reclamation Plan. Future topsoil stockpiles will be segregated from overburden, see Figure 2 for the topsoil storage areas. In addition, potential topsoil collection areas are shown on Figure 3.

6.10 Tailing and Mine Waste Management CCR §3712

While the operator may ultimately be able to sell much of the material generated on site, a portion of the unmarketable excess mined material will be used in the reclamation revegetation efforts. Additional excess material will remain on site and will be backfilled into mined out portions of the pits as described below.

The waste materials onsite resulting from the mining and processing operations consist primarily of grog which is inert broken fired clay materials, and fine grained soils generated from the washing of aggregates. Much of the grog is actually reused in the clay products as filler by Pacific Clay, or is sold to other clay products manufacturers. A minor amount is backfilled into the pits or used for on-site drainage control. Fine grained soils resulting from the aggregates processing consists of silts and clays with minor amounts of sand. These materials can be reused on site in the brick-making process, as well as being sold off site for use in low permeability applications such as landfill liners and covers. The overburden on site primarily consists of colluvium and other surficial soils that develop atop the formational materials. These materials vary in composition across the site reflecting the different underlying geology, but generally consist of sands, silts, clays and gravels and combinations thereof. Lesser amounts of overburden occur within the geologic units as interbeds of non-marketable materials, typically between the commercial grade clays. These are removed by ordinary earthmoving equipment and would be classified as soils in the Unified Soil Classification System. These materials are far from sterile and do not compare to tailings or similar processed mine wastes. They are usually covered with grasses and other plants after the first rainy season. Mature natural vegetation recovers once the material is undisturbed. Climax chaparral is found on many stockpiles as young as 15 to 20 years old.

As discussed in Section 6.2. any backfill that remains on the site will be placed in a manner consistent with the end use of the site. Back fill in areas that will remain industrial will be placed in accordance with appropriate UBC standards and City Building Official oversight. Backfill in open space areas will be non-

engineered, but will be placed in generally small lifts and be compacted by the rolling force of heavy equipment used to place the material.

6.11 Closure of Surface Openings CCR §3713

No surface openings as described in CCR §3713 (b) have been or will be produced during mining or reclamation activities.

Three onsite water wells are shown on figure 2B. Well # 1 will be abandoned in place while wells # 2 and #3 will remain as part of the future industrial end use. Fencing or other measures will be implemented on the remaining wells to ensure public access is restricted.

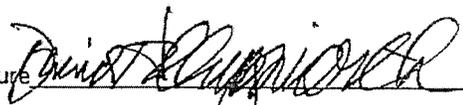
7.0 LAKE ELSINORE MUNICIPAL CODE (LEMC), CHAPTER 14.04 – SURFACE MINING AND RECLAMATION CHAPTER 17.144 – MINERAL RESOURCES AND RELATED MANUFACTURING DISTRICT

This Reclamation Plan Amendment has been prepared for this mining site in compliance with applicable portions of SMARA and Lake Elsinore Municipal code.

Pursuant to LEMC Section 14.04.170 this Amendment can be processed as a minor amendment because this Amendment combines currently approved reclamation plans, and reduces the area covered by those reclamation plans from 3457 acres to 1388 acres. This will not result in disturbance of lands that are not either already disturbed or proposed for disturbance in the previous applications. In addition, because the new Plan demonstrates compliance with current SMARA reclamation standards, it reduces, and has no potential in increase, any potential effects on the City and the environment.

8.0 STATEMENT OF RESPONSIBILITY

I, the undersigned, hereby agree to accept full responsibility for reclamation of all mined lands as described and submitted herein and in conformance with the applicable requirements of Articles 1 and 9 (commencing with Sections 3500 et seq. and 3700 et seq., respectively) of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, the Surface Mining and Reclamation Act commencing with Section 2710 et seq., and with any modifications requested by the administering agency as conditions of approval.

Signature 

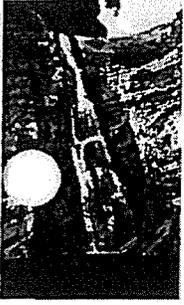
Name DAVID HOLLINGSWORTH

Signed this 10 day of MAY, 2011

9.0 FINANCIAL ASSURANCES

The project is currently in operation and financial assurances in place per SMARA requirements. An updated Financial Assurance Cost Estimate has been prepared and is included in Appendix 4 of this Amendment.

5



SESPE
CONSULTING, INC.

468 Poli Street, Suite 2E • Ventura, California 93001

FINANCIAL ASSURANCE COST ESTIMATE

Pacific Aggregates Inc. / Pacific Clay Products

28251 Lake Street
Lake Elsinore, California

Riverside County

CA Mine ID # 91-33-0073
(including 91-33-0020 and 91-33-0006)

August 4, 2011

Prepared for: City of Lake Elsinore
130 S. Main Street
Lake Elsinore, California 92530

Prepared by: Sespe Consulting, Inc.
468 Poli Street, Suite 2E
Ventura, California 93001
(805) 275-1515

FINANCIAL ASSURANCE COST ESTIMATE

Pacific Aggregates, Inc. / Pacific Clay Products
Lake Street Facility

August 4, 2011

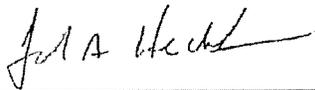
Certification Statement

This Financial Assurance Cost Estimate was prepared based on:

- Public Resources Code Section 2207(a)(9) and 2773.1;
- California Code of Regulations Title 14 Section 3804;
- State Mining and Geology Board Financial Assurance Guidelines (revision dated January 16, 1997-A; July 23, 2004);
- Information obtained from Pacific Aggregates and Pacific Clay Products; and
- Conditions noted during previous site visits.

I hereby certify that:

- I am familiar with the requirements of the Surface Mining and Reclamation Act of 1975 and the Public Resources Code Section 2710;
- I have visited and am familiar with the facility;
- This Financial Assurance Cost Estimate has been prepared in accordance with good engineering practice; and
- This Financial Assurance Cost Estimate is adequate for this facility.



John A. Hecht, P.E., R.E.A.
President
Sespe Consulting, Inc.

FINANCIAL ASSURANCE COST ESTIMATE

Pacific Aggregates, Inc. / Pacific Clay Products Lake Street Facility

August 4, 2011

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FINANCIAL ASSURANCE COST ESTIMATE

Pacific Aggregates, Inc. / Pacific Clay Products Lake Street Facility

August 4, 2011

1.0 EXECUTIVE SUMMARY

The Surface Mining and Reclamation Act of 1975 (SMARA), as amended, and Public Resources Code Section 2710 et seq., requires surface mining operators to prepare a lead-agency-approved Financial Assurance Cost Estimate (FACE) for reclamation activities. Once the FACE is approved by the lead agency, the mine operator must provide a financial assurance mechanism to cover reclamation costs in the event that the mine is abandoned or the operator is financially unable to complete the required reclamation activities.

This Financial Assurance Cost Estimate (FACE) has been prepared for the Pacific Aggregates, Inc. / Pacific Clay Products facility located at 28251 Lake Street in Lake Elsinore, California (California Mine IDs 91-33-0073 [including 91-33-0020 and 91-33-0006]).

The following table presents the estimated reclamation costs for the site.

Table 1: Summary of Estimated Reclamation Costs

Item		Cost
Primary Reclamation Activities		\$ 3,821,529
Revegetation		\$ 1,165,805
Plant Structures and Equipment Removal		\$ 298,595
Miscellaneous Costs		\$ 15,000
Monitoring		\$ 291,451
Total Direct Costs:		\$ 5,592,380
Supervision	3.4%	\$ 190,141
Profit and Overhead	6.3%	\$ 352,320
Contingencies	7.0%	\$ 223,695
Mobilization	3.0%	\$ 167,771
Total Indirect Costs:		\$ 933,927
Total Direct and Indirect Costs:		\$ 6,526,307
Lead Agency Administrative Cost	10.0%	\$ 652,631
Total Reclamation Estimate:		\$ 7,178,938

2.0 BACKGROUND

The RP112 Reclamation Plan Amendment for the site calls for the merging of three (3) mine sites into a single site and presents an updated Reclamation Plan for the entire site. This Financial Assurance Cost Estimate (FACE) was prepared to address the entire site as discussed in the Reclamation Plan Amendment.

The following tasks will be accomplished as a part of reclamation:

- Mining equipment and sand and gravel processing equipment will be removed from the site;
- Oversteepened slopes will be laid back at a 2:1 (h:v) slopes;
- Mined areas will be contoured to create natural looking slopes;
- The site will be revegetated.

This cost estimate assumes that the structures associated with the clay products production facility in the northern portion of the site will be left in place for subsequent industrial use as allowed by the reclamation plan.

To ensure adequate reclamation of the site, this estimate addresses the following additional task:

- Preparation of a Phase 1 Environmental Site Assessment.

2.1 Site End Use

The proposed end use of the site is primarily Open Space with a northern portion of the site to be prepared for a subsequent industrial land use as yet to be determined.

2.2 Current and Projected Site Conditions

The site currently consists of approximately 724 acres of unreclaimed disturbed land. This area includes several active excavation areas, aggregate processing facilities, clay processing facilities, and a concrete batch plant as well as the "Hoist Pit" located east of Lake Street. Appendix 1 presents various figures that show the site location and current site conditions.

Please note that the operator plans to disturb up to 20 additional acres over the next year. In addition, if the manufacturing buildings located at the northern portion of the site were removed, there would be an additional 20 acres that would have to be revegetated. Therefore, this document assumes a maximum of 764 disturbed acres.

2.3 Cost Estimate Calculation Methodology

This FACE is based on the remaining activities necessary to implement the Reclamation Plan. It includes the cost of required physical improvements as well as various indirect costs, including mobilization and contingencies as described by the California State Mining and Geology Board's (SMGB) *Financial Assurance Guidelines*.

Where possible, specific unit equipment and labor costs were used. The cost and unit efficiency / capacity data were obtained from the following sources:

- *RS Means Heavy Construction Cost Data, 25th Annual Edition, 2011* ("Means"). Means guides are widely used to estimate construction costs. They present material, labor and equipment costs to perform a wide variety of construction tasks. These costs are presented on a per unit basis (e.g. per square foot or cubic yard) and thus can be used to estimate the cost to complete a variety of tasks. The Means guide can be used to estimate construction costs throughout the United States using a "location factor" to adjust the costs to the specific geographic area where the activity will take place. In the calculations presented in Appendix 2 of this FACE, the location factor is presented as the "Unit Cost Adjustment" when Means values were used;
- State Prevailing Wage Rates ("SPWR") were used to determine labor rates for various job classifications. (*General Prevailing Wage Determination Made by the Director of Industrial Relations, Pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773, and 1773.1*; <http://www.dir.ca.gov/dlsr/PWD/Southern.html>);
- CalTrans Equipment Rates (*Labor Surcharge and Equipment Rental Rates (Cost of Equipment and Ownership)*, effective April 1, 2011 through March 31, 2012) were used to determine equipment rental rates; and
- Caterpillar Handbook (*Caterpillar Performance Handbook, Edition 40*) to determine equipment capacity and cycle times.

In addition to the references listed above, third party cost estimates were obtained for the cost of seed to reclaim the site. This estimate is presented in Appendix 3.

California Division of Mines and Geology (DMG) graphs were used to calculate supervision and profit/overhead costs. These graphs are presented in Appendix 3.

3.0 PRIMARY RECLAMATION ACTIVITIES

This section presents details regarding the primary reclamation tasks and the methodology used to calculate the costs for each. Appendix 2 presents detailed calculations for each task as well as a summary of costs.

3.1 Building Demolition

Southern Area of Site

As part of the primary reclamation, office buildings, maintenance shops, and various other structures will be dismantled and removed from the southern portion of the site. This includes the following buildings:

- Manufacturing building (steel frame): 60' x 130'
- Warehouse (steel frame): 40' x 120'
- Open-walled canopy building (steel frame): 100' x 120'
- Open-walled canopy building (steel frame): 60' x 90'
- Maintenance shop (steel frame): 50' x 150'
- Storage building (wood frame): 20' x 25'
- Storage building (wood frame): 25' x 30'
- Storage building (wood frame): 25' x 30'
- Storage building (wood frame): 15' x 25'
- Office building (wood and masonry): 30' x 40'
- Modular office trailers (7 each, steel frame): Average size: 12' x 60'

Northern Area of Site

The northern area of the site (where the manufacturing area is located) also includes various buildings including:

- Laboratory
- Open Storage
- Lavatory
- Offices
- Storage and Maintenance
- Maintenance Shop
- Maintenance Shop
- Maintenance Shop
- Brick Plant
- Brick Plant
- Offices
- Grinding Plant
- Block Cutting

The following Means cost factors are used to estimate the cost of this task:

Building Demolition:

- Means ID – 024116.13-0500 (steel frame building demolition)
- Means ID – 024116.13-0700 (wood frame building demolition)
- Means ID – 024116.13-0650 (masonry building demolition)

These costs include loading waste material into a dump truck and transporting it to a disposal site.

Dump Charges:

- Means ID – 024119.19-0100 (building construction materials)

3.2 Concrete/Foundation Removal

As part of the direct cost of reclamation, various concrete pads and concrete building footings must be removed. The total amount of concrete to be removed is presented in the calculations in Appendix 2.

The Caterpillar Handbook indicates a Model H90C hydraulic hammer attached to a Model 416C backhoe can demolish 90 to 160 cubic yards of non-reinforced concrete, or 50 to 80 cubic yards of reinforced concrete, within an 8 hour shift. Given that the majority of the concrete at the site is non-reinforced, an average production of 120 cubic yards per 8 hours (15 cubic yards per hour) was assumed.

A fleet of 25-ton dump trucks will be used remove the material. A Caterpillar 966G front end loader will be used to load the concrete pieces into the dump trucks. The material will be hauled to a nearby concrete recycling facility; therefore, the estimated cycle time (load, travel, dump, and return travel) is 1 hour. The loader will be used the entire time to load the demolished concrete into the trucks.

Assume one laborer will be present during the demolition and concrete removal processes to assist the operation.

CalTrans Labor Surcharge and Equipment Rental Rates (CalTrans Rates) were used to determine the rental rates for the equipment. SPWR was used to determine labor rates for equipment operators and laborers. It is assumed that the concrete recycling facility will accept the material free of charge.

3.3 Distribute Material

As part of the cost of primary reclamation, stockpiled material in various locations around the site must be distributed. This includes raw materials (sand, gravel, and clay) as well as finished aggregate products. A scraper will be used to transport some of the material to backfill mined out pits. The remaining material will be leveled and spread around with a dozer. In addition, a water truck would be used 25% of the dozer time to control dust emissions.

Finished clay products such as bricks are assumed to have value and could be sold or given away. However, to be conservative, this estimate assumes that – as a worst-case scenario – that the bricks will be used to fill in mining pits at the site and their volume is included with the other materials discussed in the previous paragraph.

Using a fleet of one (1) dozer and four (4) scrapers, the daily production would be 5,000 tons (or 625 tons per hour). To control dust emissions, a water truck will be utilized 25% of the total equipment time

CalTrans Rates were used to determine the rental cost of the dozer, scraper, and water truck. Equipment operator and truck driver hourly rates were determined from SPWR.

3.4 Establish Final Slopes

Approximately 477 acres of the site are relatively level or gently sloping. The remaining 267 acres are moderately to steeply sloping.

Using a fleet of two (2) dozers and two (2) scrapers, the estimated production rate is 5 acres per hour in the level to gently sloping areas and 1.5 acres per hour in areas with moderate or steep slopes.

To moisten the dirt and to control dust emissions, a water truck will be utilized 25% of the total equipment time.

CalTrans Rates were used to determine the hourly rental rate for equipment; hourly labor rates were determined using SPWR.

3.5 General Grading and Contouring

As a conservative estimate, it is assumed that 100% of the disturbed surface area of the site (764 acres) will be graded and contoured before revegetation.

A Caterpillar model 163H motor grader can contour three acres in one hour. This rate takes into account the typical operating speed of heavy blading (3 mph), the blade length of the grader (14 feet), the typical pass overlap of a grader (2 feet) and typical work efficiency (0.83).

To control dust emissions, a water truck will be utilized 25% of the total equipment time.

The Caterpillar Handbook was used to determine the operating capacity of the grader. CalTrans Rates were used to determine the rental cost of the grader and water truck. The hourly rate for a medium equipment operator and truck driver were determined from SPWR.

3.6 Soil Preparation

It is assumed that the entire disturbed surface area (764 acres) will be scarified to decompact surfaces to aid revegetation. This includes stockpile areas, staging areas, and unpaved roads and the asphalt around the manufacturing facility on the northern portion of the site.

The time to scarify the area using a Caterpillar model D8R dozer with a ripper attachment was calculated using information found in the Caterpillar Handbook.

To control dust emissions, a water truck will be utilized 25% of the total equipment time.

CalTrans rental rates were used to determine the rental cost of the dozer and water truck. Hourly rates for a medium equipment operator and a water truck driver were determined from SPWR.

3.7 General Site Clean Up

Trash, debris, and scrap material will be loaded into a dump truck with a front end loader and hauled to a landfill for disposal. Two laborers will assist in the process. It is assumed that the clean up activities will take one week to complete and generate 50 tons of waste material.

CalTrans rental rates were used to determine the rental cost of the loader and dump truck. Hourly rates for a medium equipment operator, truck driver, and laborers were determined from SPWR. Means was used to determine landfill disposal costs.

3.8 Well Closure

There is one (1) well at the site that must be closed as a part of reclamation. The well has an 8" casing and is 300 feet deep.

Means was used to calculate the equipment and labor costs for this item. This estimate assumes that the associated permitting fees for well destruction are accounted for in the Lead Agency Administrative Cost presented in Section 8.

There are two (2) other wells located in the northern portion of the site that will be left to support post-reclamation activities.

4.0 REVEGETATION

The site will have to be revegetated as a part of reclamation. Relatively flat and gently sloping areas will be scarified (see Section 3.6) and broadcast seeded. Steeper slopes will be hydroseeded. The following table presents the amount of area to be reseeded.

Location	Area to be broadcast seeded (acres)	Area to be hydroseeded (acres)
Pacific Clay Pits	135	77
Mountain Avenue Pit #2	50	30
Alberhill Ranch Mine	310	160
Hoist Pit	2	0
Total:	497	267

The following Means cost factors are used to estimate the cost of this task:

- Means ID – 329219.14-5700 Seeding, wildflower, tractor spreader
- Means ID – 329219.14-5800 Seeding, wildflower, hydro or air seeding

The following seed mix will be used:

Genus Species	Common Name	Pounds per acre
Bromus carinatus	Native California Brome	8.0
Vulpia microstachys	Small Vescue	6.0
Eriogonum fasciculatum	California Buckwheat	12.0
Eriophyllum confertiflorum	Golden Yarrow	4.0
Eschscholzia californica	California Poppy	1.0
Lasthenia californica	California Goldfields	1.0
Lotus scoparius	Deerweed	4.0
Sphaeralcea ambigua	Desert-mallow	1.0
Encelia farinosa	Brittlebrush	4.0
Total:		41.0

S&S Seeds has provided a quote for this seed mix. A copy of the quote is presented in Appendix 3.

Monitoring

Costs to monitor and maintain (including weed removal) the revegetation efforts are addressed in Section 7 of this document.

5.0 PLANT STRUCTURE AND ANCILLARY EQUIPMENT REMOVAL

Removal of the following items is considered part of plant structure and ancillary equipment removal activities at the site:

1. Plant structures (hoppers, crushers, conveyors, screens);
2. Retaining wall;
3. Clay processing facility equipment;
4. Fuel storage tanks; and
5. Scales.

Each of these is discussed in more detail in the following sections.

5.1 Plant and Associated Structures Removal

The plant structures at the site that will be removed as a part of reclamation include:

- Rock Crushing Plant
- Sand and Gravel Wash Plant
- Concrete Batch Plant

This estimate includes a cost for dismantling the rock crushing plant, wash plant, and concrete batch plants. Because these units are mostly steel and many of the components are portable, it is assumed that these items could easily be sold or, at a minimum, they could be delivered to a salvage company to reclaim the material in them for no cost.

An electrician would be used to deenergize the equipment prior to dismantling. A crew of laborers would be used to disassemble the equipment. A crane would be used to load the pieces onto a fleet of trucks for transport. The estimated hours to dismantle the equipment was based on information from the operator regarding how long it took to install the units.

CalTrans rental rates were used to determine the equipment rental costs. Hourly labor rates were determined using SPWR.

The cost to remove the concrete pads and footings associated with these structures is presented in Section 3.2.

5.2 Retaining Wall Removal

The soldier pile and timber lagging retaining wall located at the sand and gravel wash plant would be removed. This wall is approximately 20 feet high and 192 feet long with 24 individual steel beam soldier piles. The wall would be removed in five foot vertical increments using a crane to remove the beams and timber as they are cut from the wall. An excavator will be used to dig away the soil as the wall is removed. A dozer would then be used to perform final grading of the wall area to eliminate any oversteepened slopes. It is estimated that it will take five days to remove the wall and one day to perform the final dozer work.

CalTrans rental rates were used to determine the equipment rental costs. Hourly labor rates were determined using SPWR.

5.3 Clay Processing Facility Equipment

Various industrial equipment associated with the clay processing facility is located at the northern portion of the site. The cost to remove this processing equipment (kilns, dryers, and other ancillary support equipment) is included in this estimate.

It is assumed that it will take a crew of two (2) laborers, a front end loader operator, and a crane operator one (1) week to dismantle the equipment and load it onto a dump truck. It will take 8 hours for a dump truck operator 8 hours to haul the waste to a landfill.

CalTrans rental rates were used to determine the rental cost of the loader, crane, and dump truck. Hourly rates for a medium equipment operators, truck driver, and laborers were determined from SPWR. Means was used to determine landfill disposal costs.

5.4 Fuel Storage Tank Removal

There are three (3) underground storage tanks (UST) and two (2) aboveground storage tanks (AST) at the site. This includes:

- 1,000-gallon gasoline UST
- 2,000-gallon diesel fuel UST
- 10,000-gallon diesel fuel UST
- 10,000-gallon diesel fuel AST
- 10,000-gallon diesel fuel AST

The following Means cost factors are used to estimate the cost for removal of this tank:

Storage Tank Removal / Disposal

Means ID – 026510.30-0130

- Tank removal / loading (9,000 – 12,000 gallon tank)

Means ID – 026510.30-0320

- Remove sludge, water, product (9,000 – 12,000 gallon tank)

Means ID – 026510.30-0390

- Offsite sludge disposal

Means ID – 026510.30-0403

- Inert tank with dry ice (1.5 lbs / 100 gallon of tank capacity)

Means ID – 026510.30-1029

- Haul tank to certified salvage dump (9,000 – 12,000 gallon tank)

For simplicity, and to be conservative, following assumptions were used when calculating the tank removal costs:

- The costs to remove the ASTs were calculated using the UST costs (which are more conservative because it costs more to remove a UST).
- The cost to remove the 1,000 and 2,000 gallon USTs were calculated using the larger (9,000 – 12,000 gallon) tank removal costs.

The cost to remove the concrete associated with the storage tanks is included in Section 3.2 ("Concrete and Foundation Removal").

This estimate assumes that the lead agency oversight cost presented in Section 7 addresses associated regulatory costs such as permitting.

5.5 Remove Weigh Scales

There are two weigh scales at the site to weigh incoming and outgoing trucks. These scales will have to be removed as a part of reclamation. Assume that a 40-ton crane will be used to load the scales onto a flat bed truck which will transport them to a landfill for disposal and two laborers will assist in the process.

CalTrans rental rates were used to determine the rental cost of the loader and dump truck. Hourly rates for a medium equipment operator, truck driver, and laborers were determined from SPWR. Means was used to determine landfill disposal costs.

6.0 MISCELLANEOUS COSTS

This estimate assumes that a Phase I Environmental Site Assessment will be prepared to assist the lead agency in ensuring that necessary environmental issues have been addressed and document the condition of the site.

In addition, a cost is assumed to perform minor site improvements such as repairing fencing, gates, and signs.

7.0 MONITORING/MAINTENANCE

The Reclamation Plan calls monitoring and weed control to ensure that revegetation is successful and meets the performance criteria. This includes using mechanical and chemical methods to remove and control non-native invasive species twice each year. In addition, annual reports must be prepared and submitted to the lead agency.

The monitoring and maintenance cost is estimated to be 25% of the revegetation cost presented in Section 4.0.

8.0 INDIRECT COSTS

Supervision

Project inspection and supervision is usually performed by a consultant or staff member with experience in reclamation of disturbed lands. Management activities include but are not limited to recommending change orders, verifying completed work, and verifying compliance with project specifications. The cost factor for management is based on the Division of Mines and Geology's Reclamation Management graph (see Appendix 4).

Profit and Overhead

In the event that a third party must be retained to do the reclamation work, profit and overhead costs must be added to the total reclamation cost estimate. Profit and overhead are not included in the reclamation cost sheets. The cost factor for profit and overhead is based on the Division of Mines and Geology's Profit and Overhead graph (see Appendix 4).

Contingencies

Contingency costs are included in the financial assurance estimates to provide for project uncertainties and unexpected natural events. A contingency cost of 4% of the total direct cost of reclamation is assumed in this FACE.

Mobilization

Mobilization costs are required to move equipment to the project site for reclamation activities. These costs normally range from one to five percent of the total direct cost of the reclamation activities and vary depending upon the site location. A mobilization cost of 3% of the total direct cost of reclamation is assumed in this FACE.

Lead Agency Administrative Cost

An administrative cost of 10% of the total direct and indirect costs has been included in the FACE to account for lead agency costs to implement the Reclamation Plan.

6

SE SPE CONSULTING, INC.

468 Poll Street, Ste. 2E • Ventura, California 93001
Office • (805) 275-1515 Fax • (805) 667-8104

MEMORANDUM

Date: June 30, 2011

From: Jeff Palmer, P.E.

Re: Pacific Aggregates, SMARA hydrology analysis



The Pacific Clay and Pacific Aggregates site, located at 14741 Lake Street, Lake Elsinore California is an approximately 1400 acre site used for mining of clay and aggregate products. The site is located approximately 3 miles northwest of Lake Elsinore and is surrounded by various natural and disturbed land uses. A number of residential, street and related improved areas drain through the site. In addition, large tracts of natural areas drain to the site. The enclosed exhibits, sheets 1-5, include all the areas and basins as part of the Stormwater Pollution Prevention Plan (swppp), dated October 2006.

The SWPPP includes various onsite improvements to collect both mineable materials that enter the site as well as collection of both off-site and on-site storm flows. Several natural channels, deposit various aggregate materials within the site boundaries. The onsite storm flow controls collect this material for removal and processing. The onsite controls also collect and retain all onsite and offsite flows for a ten-year, 24 hour design storm.

// An analysis of the SWPPP and SMARA stormwater control guidelines indicates that the site fully contains both the required SWPPP and SMARA required flowrates and design volumes.

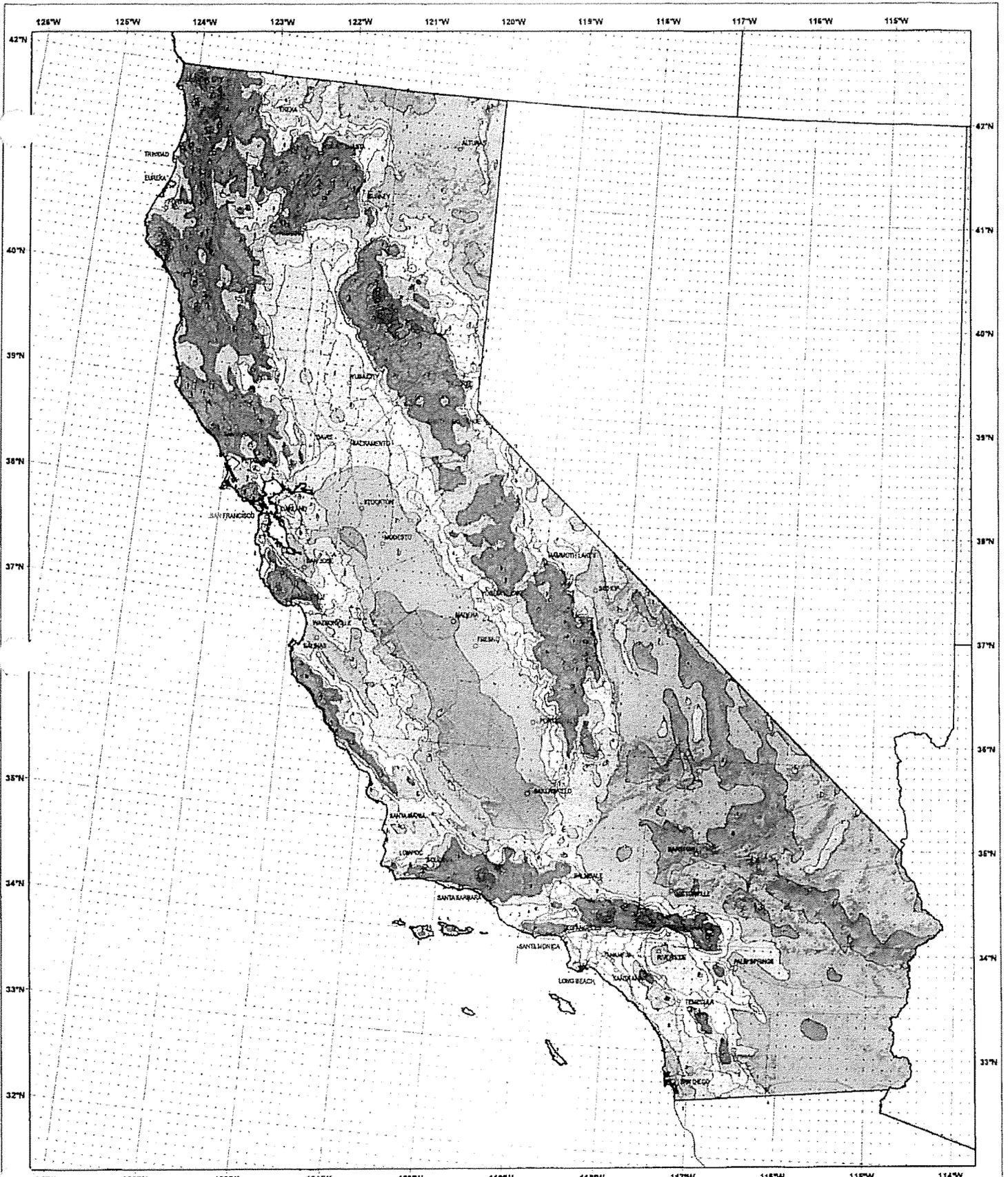
The SMARA guideline requires a 20 year, 1 hour design flow rate and volume while the SWPPP guideline requires containment and treatment of the 10 year 24 hour design volume. The attached exhibits 1 and 2, provide a comparison of the guidelines. Per the NOAA Atlas Maps, the 10-year 24-hour maximum isopluvial used for the SWPPP guideline design volume is 5.0 inches. A 25 year storm was used in lieu of the SMARA required 20-year 1-hour guideline for comparative analysis since data was not available for a 20 year storm. Per the NOAA Atlas Maps, the 25-year 1-hour maximum isopluvial for the site is 1.0 inches. Accordingly, the existing site controls for collection and retention of stormwater flows under the SWPPP guidelines exceed the SMARA requirement

Areas where storm flows 'run in' from offsite are monitored on a routine basis. Where run in flow has been concentrated by offsite residential developments, onsite BMP's have been adjusted to minimize erosion.

In active flow areas that were previously mined, the on-site collection of mineable materials is also controlled and monitored as part of the SWPPP document and operations. Flow controls and basin management provide several areas for material management. In several of these areas where flows

enter the site, previous mining operations were conducted to collect and process the material. Excavation has ceased in these areas and they are part of an adaptive management program to establish and stabilize the natural flow areas.

These adaptive management controls currently consist of basins configured using natural onsite materials to collect the aggregate materials, slow the storm flows and retain the flows to prevent stormwater discharges. Regular removal and basin maintenance is performed to maintain the basin capacity and control flow rates. Annual monitoring of storm flows, storm intensities and volume calculations of new material entering the site is documented. The annual variation of material collected and stabilization of the natural flow areas determines the operational changes for the site, and assess potential for offsite impacts. The SWPPP is updated with annual topographic data changes to provide additional information in the adaptive management approach to the natural areas.



NOAA Atlas 14, Volume 6, Version 2
California

CALIFORNIA

Isoplths of 10-year 24-hour precipitation in inches

SCALE 1:2 500,000

0 10 20 30 40 50 Miles

0 10 20 30 40 50 60 70 Kilometers

- 0.70 - 1.00
- 1.01 - 2.00
- 2.01 - 3.00
- 3.01 - 4.00
- 4.01 - 5.00
- 5.01 - 6.00
- 6.01 - 7.00
- 7.01 - 8.00
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- 9.01 - 10.00
- 10.01 - 11.00
- 11.01 - 12.00
- 12.01 - 13.00
- 13.01 - 14.00
- 14.01 - 14.53



Prepared by U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE
OFFICE OF HYDROLOGIC DEVELOPMENT
HYDROMETEOROLOGICAL DESIGN STUDIES CENTER
April 2011



Source: U.S. Army Corps of Engineers, Hydrologic Engineering Center, Sacramento, CA, 1984. U.S. Census Bureau, 1997.

NOAA's National Weather Service
Hydrometeorological Design Studies Center
 Precipitation Frequency Data Server (PFDS)

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- Precipitation Frequency (PF)
- PF Data Server
- PF in GIS Format
- PF Maps
- Temporal Distr.
- Time Series Data
- PFDS Perform.
- PF Documents

- Probable Maximum Precipitation (PMP)
- PMP Documents
- Record Precipitation

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- List-server



NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES

DATA DESCRIPTION

Data type: precipitation depth Units: english Time series type: partial duration

SELECT LOCATION

1. Manually:

- a) Enter location (decimal degrees use "-" for S and W) latitude longitude
- b) Select station: select station

2. Use map:

a) Select location (move crosshair)
 b) Click on station icon
 show stations on map

LOCATION INFORMATION:
 Name: Temecula, California US
 Latitude: 33.5361
 Longitude: 117.1346
 Elevation: 1116ft

Map data ©2011 Europa Technologies, Google, INEGI, TerraMetrics, Microsoft, DeLorme, USGS, AeroGRID, IGN, Esri, Swire

source: Google Maps

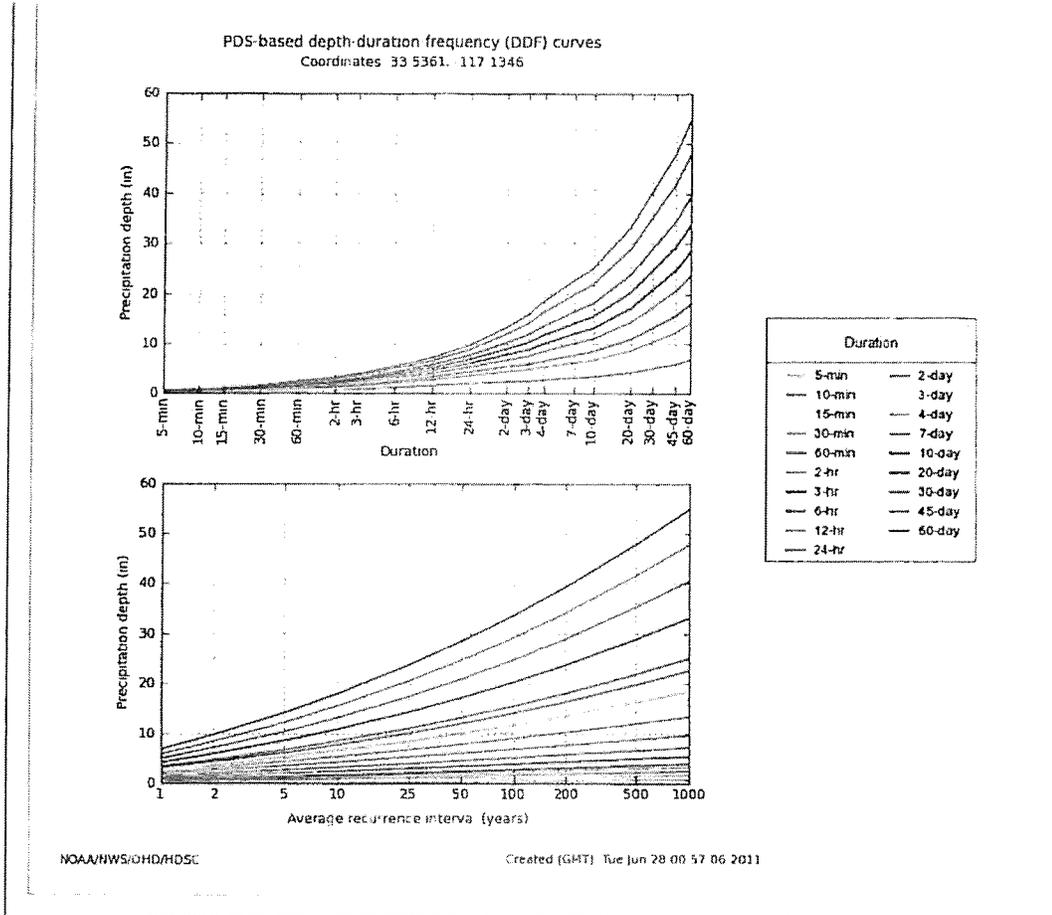
POINT PRECIPITATION FREQUENCY (PF) ESTIMATES
 WITH 90% CONFIDENCE INTERVALS AND SUPPLEMENTARY INFORMATION
 NOAA Atlas 14, Volume 6, Version 2

- PF tabular
- PF graphical
- Supplementary information



Curves PF estimates with confidence intervals

Average recurrence interval (years)
1
2
5
10
25
50
100
200
500
1000



Map Link Categories
Home | OHD

US Department of Commerce
 National Oceanic and Atmospheric Administration
 National Weather Service
 Office of Hydrologic Development
 1325 East West Highway
 Silver Spring, MD 20910
 Page Author: HDSC webmaster
 Page last modified: April 8, 2011

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SHEET 2



SHEET 4

SHEET 3 OF 5



SHEET 5

MAY 2008 AERIAL TOPOGRAPHY

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 NEW YORK, NY 10038
 TEL: (212) 692-1000
 FAX: (212) 692-1001
 WWW.MVGENG.COM

James Good

From: Coley, Barry [bcoley@pacificaggregates.com]
Sent: Friday, January 20, 2012 9:42 AM
To: John Hecht
Cc: Warren, Chad; James Good; Joe King
Subject: sections of rec plan for evidence submittal
Attachments: FACE section RP 112 RWQCB submittal.pdf; RP 112 text section RWQCB submittal.pdf

These are the sections of the reclamation plan that I recommend we provide as evidence without a lot of the other supporting documentation. They will have some of the maps included in the SWPPP.

Any comments??

Barry J. Coley

Pacific Aggregates Inc.
28251 Lake Street
Lake Elsinore, CA 92530
951-245-8522 direct
951-529-2909 cell
951-471-1783 fax

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION**

Administrative Civil Liability Complaint (ACLC) No. R8-2012-0010, Issued to Pacific Clay Products, Inc., Scheduled for February 10, 2012 Hearing

LIST OF WITNESSES

1. Barry J. Coley, Senior Vice President, Pacific Aggregates, inc., a subsidiary of Pacific Clay Products, inc., in charge of the mining operations at the Pacific Clay Lake Elsinore site. A general overview of the site operations and stormwater management improvements. (Estimated time: 3 minutes.)

2. Chad W. Warren, CEG, Mining Manager at the site. Provide more specifics regarding stormwater measurement improvements before and following issuance of the draft ACLC on July 20, 2011, the reclamation plan for the site, and the relationship between the plan and the SWPPP. (Estimated time: 8 minutes.)

3. Joseph King and/or John Hecht, Sespe Consulting, Inc. Experience in stormwater management issues and educational backgrounds are attached. Provide expert regarding assistance in the preparation of the revised SWPPP submitted to the Regional Board in September 2011. (Estimated time: 9 minutes.)

Joseph King, PE, REA, CPESC, QSD/QSP

Mr. King has prepared over 80 Storm Water Pollution Prevention Plans (SWPPPs) during the past two decades. This has included SWPPPs for a variety of industrial sites including aggregate mining and concrete production facilities as well as construction projects. Mr. King is skilled at identifying appropriate Best Management Practices (BMPs) to control pollutants in storm water.

In addition to preparing SWPPPs, Mr. King has prepared a variety of other storm water documents (including Storm Water Pollution Control Plans (SWPCPs), Water Pollution Control Plans (WPCPs), and Post-Construction BMP Operations and Maintenance Plans), conducted storm water training classes, and reviewed and analyzed storm water data including preparing storm water Annual Reports.

Mr. King has also authored papers on storm water issues and is actively involved in California's current Industrial General Permit renewal process.

Mr. King has a Bachelor of Science degree in Mechanical Engineering from UCSB and a Masters in Business Administration from UCLA. He is a Registered Professional Engineer (Mechanical, California), a Registered Environmental Assessor (REA), a Certified Professional and Erosion and Sediment Control (CPESC), and a Qualified SWPPP Developer / Qualified SWPPP Practitioner (QSD/QSP).

Mr. King's testimony will be related to the revised SWPPP that was prepared for the site.

EDUCATION

THE ANDERSON SCHOOL AT UCLA Los Angeles, CA
Master of Business Administration (MBA) 1999

UNIVERSITY OF CALIFORNIA, SANTA BARBARA Santa Barbara, CA
B.S., Mechanical Engineering 1992

WORK HISTORY

SESPE CONSULTING, INC. Ventura, CA
Vice President 2009 – Present

TELEDYNE SCIENTIFIC & IMAGING Thousand Oaks, CA
Manager – Environment, Health & Safety (EH&S) 2007 – 2009

WEST COAST ENVIRONMENTAL AND ENGINEERING Ventura, CA
Last Position: Senior Manager 1992 – 2007

Work history includes:

- Assisting clients in achieving and maintaining compliance with applicable environmental and safety requirements.
- Interfacing with government agencies and personnel at all levels of clients' organizations; including senior management, facilities, operations, human resources, and legal to achieve goals.
- Services provided includes:
 - Overall EH&S program development and implementation
 - Preparing plans and reports to meet regulatory requirements
 - Training, auditing, and regulatory impact analysis
- Client and project management including scheduling, coordination, budgeting, and quality control.
- Experienced with a wide variety of industries including:
 - Semiconductor manufacturing
 - Metal forging and forming
 - Food processing
 - Aggregate mining and processing
 - Real estate development
 - Automobile service and distribution
 - Power generation

- Fiberboard recycling
- Glass production
- Ready mixed concrete production
- Oil blending and distribution

EXPERIENCE

EH&S Management

- Developed and implemented comprehensive Environmental Health and Safety (EH&S) programs designed to address applicable EPA, OSHA, and DOT regulations as well as state and local requirements.
- Created custom databases for tracking environmental compliance information. The databases streamline compliance through improved record keeping, quick access to information, and simplified reporting. Database modules include:
 - Environmental permit requirements
 - Hazardous waste manifest tracking and emissions tracking and reporting
 - MSDS management
- Conducted multimedia environmental compliance audits at facilities throughout California and the United States. Worked with facilities to resolve issues identified during the audit process.
- ISO14000 program development and implementation.

Worker Safety

- Developed a variety of plans and programs to meet regulatory requirements including:
 - Injury and Illness Prevention Plans (IIPPs)
 - Lockout / Tagout Programs
 - Hearing Conservation Plans
 - Respiratory Protection Programs
 - General safety procedures
 - Conducted monitoring to determine if employees were being exposed to parameters above regulatory or recommended thresholds. Monitoring included calculating exposures, and transmitting this information to affected personnel. Parameters included noise, heat, and airborne contaminants such as acids and metals.
- Conducted safety training sessions in Hazard Communication, Forklift Safety, Lockout / Tagout, Electrical Safety, and Hazardous Waste Operations and Emergency Response.
- Created Emergency Response and Contingency Plans including reviewing materials and equipment used to determine potential failures (e.g. fire, leak and sabotage) and developing emergency response procedures to minimize potential impacts.

Air Quality

- Applied for and obtained air emission permits (local and federal Title V) from the Ventura County Air Pollution Control District (VCAPCD) and South Coast Air Quality Management District (SCAQMD).
- Performed air emission calculations and completed annual emission reports.
- Used computer modeling to determine expected concentrations at various locations in and around the sources. Calculated resulting impacts including acute health risk, chronic health risk, and cancer risk.
- Evaluated various operational scenarios to identify potential risk reductions.

Water Quality

- Industrial sewer discharge support including:
 - Preparing baseline monitoring reports
 - Obtaining local sewer permits
 - Preparation of self-monitoring reporting packages
 - Notice of Violation (NOV) resolution
- Preparation of Storm Water Pollution Prevention Plans (SWPPPs) for a variety of industrial and manufacturing facilities. Assisting facilities in SWPPP implementation including monitoring, annual reporting, and conducting employee training sessions.
- Construction storm water compliance support including: preparation of SWPPPs for construction sites throughout southern California, developing post-construction storm water treatment device maintenance plans, and employee training.
- National Pollutant Discharge Elimination System (NPDES) and Waste Discharge Requirements (WDR) permitting, monitoring, and reporting.

Hazardous Materials

- Hazard Communication Program development and implementation including conducting hazardous material audits and creating MSDS tracking and reporting systems.
- Hazardous Material Business Plan preparation and Tier II reporting.
- Prepared and/or certified Spill Prevention Control and Countermeasure (SPCC) Plans for over 100 facilities located across the United States.
- Prepared Facility Response Plans for large oil blending and packaging facilities.
- Prepared Toxic Release Inventory (TRI) reports for a variety of manufacturing facilities and reported emissions using Form R/Form A.
- Risk Management Plan (RMP) development including:
 - Conducting Hazard Reviews and Process Hazard Analysis (PHA) studies to determine potential failure modes
 - Identify existing safety systems
 - Recommend additional safety equipment and procedures to minimize the potential for a release

- Offsite Consequence Analysis (OCA) development including computer modeling of potential release scenarios to identify the expected impact of various release scenarios and the population and sensitive receptors within the impact zone.
- Hazardous material shipping compliance including developing shipping procedures and DOT security plans.
- Facility design support including evaluating California Fire Code (CFC) and California Building Code (CBC) requirements and interfacing with company, architects, and permitting agencies to obtain design approval.

Hazardous Waste

- Hazardous waste compliance support including waste characterization, developing waste handling and labeling procedures, conducting employee training, and preparing hazardous waste reports.
- Waste Minimization (SB14) Plan and Report preparation for a number of manufacturing facilities. This included:
 - Working with personnel in various departments to identify the types of hazardous waste generated and their characteristics
 - Identifying the processes that generated the wastes and assessing potential options to reduce the amount of hazardous waste generated
 - Selecting appropriate measures to implement
- California Tiered Permitting support including preparation of necessary reporting forms, developing closure cost estimates, and certifying hazardous waste treatment tanks and containment areas.

REGISTRATIONS AND CERTIFICATIONS

Registered Mechanical Engineer: California M029846

Registered Environmental Assessor: REA I - 08295

Certified Professional in Erosion and Sediment Control: 5603

Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP): 00628

PUBLISHED ARTICLES

Draft Industrial Storm Water Permit: Issues and Challenges
The Conveyor, Fall/Winter 2011

Draft Industrial Storm Water Permit: A Brave New World
California Asphalt Magazine, July 2011

Environmental Crisis Prevention and Management
The John Liner Review, Winter 2001

EDUCATION

<u>COLORADO SCHOOL OF MINES</u> Professional Degree, Geophysics	Golden, CO 1987
<u>VALPARAISO UNIVERSITY</u> B.S. Electrical Engineering	Valparaiso, IN 1981

REGISTRATIONS

- Professional Mechanical Engineer, California (#M28331)
- Environmental Assessor, California (#Y822)
- South Coast Air Quality Management District Permit Processor (#B4321)

WORK HISTORY

<u>SESPE CONSULTING, INC.</u> <i>President</i>	Ventura, CA Present
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<u>WEST COAST ENVIRONMENTAL AND ENGINEERING</u> <i>Last Position: President</i>	Ventura, CA 1990 – 2009
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- Responsible for general company management as well as providing senior technical support to environmental projects.
- Extensive experience in the Surface Mining and Reclamation Act (SMARA), CEQA compliance, air quality impact studies, health risk assessments and general facility compliance.

<u>SCHLUMBERGER</u> <i>Last Position: General Field Engineer and Division Geophysicist, Wireline</i>	Houston, TX 1981 – 1990
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EXPERIENCE

Over 29 years of wide ranging professional experience working with a variety of industries and agencies, including multi-jurisdictional project development, compliance support for major corporations, development and implementation of corporate level environmental health and safety programs.

Environmental Planning and Permitting

- Provided technical guidance and management of permitting and reclamation planning aspects to the development and construction materials industry throughout California. Work has included:
 - New project development and engineering
 - Preparation of reclamation plans
 - Technical review of environmental impact reports
 - Development of mitigation measures
- Attended public hearings and agency meetings, provided technical assistance to legal counsel in resolving critical issues related to the projects.

Air Quality Management

- Conducted air quality compliance audits, prepared permit applications AB 2588 emissions inventory plans, and health risk assessments for facilities located throughout the United States.
- Conducted air quality impact studies pursuant to CEQA and federal conformity requirements for a variety of facilities.
- SCAQMD Certified Permit Processor (CPP) with the South Coast Air Quality Management District and is experienced with RECLAIM, Title V and new source permitting in SCAQMD and Ventura County APCD.

Aggregate, Industrial Minerals, and Metal Mining

- Preparation of Reclamation Plans and Financial Assurance Cost Estimates
- Mineral resource-reserves evaluations
- Preliminary feasibility studies and technical reviews
- Currently Project Manager providing mining consulting services to the San Bernardino Waste Management Division on the Mid Valley Environmental Protection Project.

Other Experience

- Prepared storm water pollution prevention plans and storm water monitoring plans for numerous applications, including mining operations, port operations and manufacturing facilities.
- Directed a program to perform engineering certification of Spill Prevention Control Countermeasure Plans for 160 automotive maintenance facilities located across the United States.
- Designed corporate regulatory compliance programs for major automotive distribution centers affecting dozens of sites nationwide.

ASSOCIATIONS

- California Construction and Industrial Materials Association, Member and Chair of Associate Member Services, Associate Member of the Executive Committee
- Air and Waste Management Association

COMMUNITY INVOLVEMENT

- Planning Commissioner for the City of San Buenaventura, 1999-present, Chair from 2003-2004 and 2007.
- Design Review Committee Member, City of San Buenaventura, 2007-present.

PUBLICATIONS/PRESENTATIONS

- 2010 *Case Study –The Successful Permitting of a New Asphalt Mixing Facility in Ventura County, CalCima Education Conference*, Co-Presented with Bruce McGowan, Granite Construction
- 2009 Distance Matters Panel *The Economics of Distance* CalCIMA Education Conference
- 2008 *Case Studies in CEQA Analysis of Air Quality, Greenhouse Gas and Health Risk Impacts*, California Construction and Industrial Materials Association, Co-Presented with Scott Cohen, P.E.
- 2005 *Reclamation and Redevelopment – A Case Study and More*, California Mining Association.

- 2004 Soledad Canyon Permitting Challenges for a Multi-Jurisdictional Project, California Mining Association.
- 2003 Reclamation Costs in California, California Mining Association.
- 2003 *Mineral Property Tax Assessment Seminar*, California Mining Association.
- 2003 *The Riverpark Project – A Case Study in Urban Reclamation*, California Mining Association.
- 2001 *Air Quality Conformity Federal Requirements*, California Mining Association.

HONORS/SPECIAL RECOGNITION

2004/2005 – Served as judge for the Reclamation and Sustainable Mineral Development Awards Program sponsored by the Bureau of Land Management.

2003 – California Mining Association Excellence in Reclamation for Riverpark Development, LLC.

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FTP Site Instructions:

The files can be uploaded and downloaded at the following location by using the following credentials:

<https://filestogo.com/>

Login: **gsnt-user1875**

Password: **a8k47gm28g**

To upload file(s):

1. Click on 'Upload' tab
2. Click on 'Upload Multiple Files'
3. Locate file(s) in left-hand window
4. Click and drag files to the 'Drop Files Here' window
5. Click 'Start Upload'

To download the file(s):

1. Click the 'Download' tab
2. Check all files to download
3. Click on 'Download Selected' button



January 20, 2012

Mr. James Good
Gresham Savage Nolan & Tilden
550 East Hospitality Lane, Suite 300
San Bernardino, California 92408

**SUBJECT: Comments Responding to Inland Empire Water Keeper Letter dated October 24, 2011
Pacific Clay Products
Lake Elsinore, California**

Dear Mr. Good:

In response to the specific items included in the October 24, 2011 letter from the Inland Empire Waterkeeper we have attached the enclosed documents as described below. We will expand on how these documents respond to some of the issues raised by the Waterkeeper in our presentation at the February 10, 2011 hearing.

1. In response to the financial issues raised, please see attached a summary of the resources that we have expended on storm water management dating back to 1999. Pacific Clay did not receive financial benefit from non compliance.
2. In response to the timeline requested, Pacific Clay has met all deadlines requested by RWQCB staff and will continue to meet deadlines going forward.
3. In response to the request for an abatement order and restoration of waters of the US, we include portions of the recently approved reclamation plan and financial assurance cost estimate for the site. Since this site is a vested active mining operation, the activities are appropriately authorized and will be reclaimed according to the approved reclamation plan and a bond (over \$8,000,000) is in place to ensure that reclamation is completed. No additional action by other agencies is required. We also want to clarify that the City of Lake Elsinore has satisfied the State Mining and Geology Board that they are appropriately implementing SMARA (confirmed by the SMGB at the January 12, 2011 meeting in Lake Elsinore) and the Orders to Comply have been resolved by the approval of the amended reclamation plan that is attached.
4. In response to the request for increased sampling, the revised SWPPP has already addressed this comment by incorporating additional sampling.

We trust this information meets your current needs. Please feel free to contact our office with any questions or comments.

PACIFIC CLAY PRODUCTS

A handwritten signature in black ink, appearing to read "Chad W. Warren".

Chad W. Warren, CEG
Mining Manager

14741 Lake Street, Lake Elsinore, California 92530
Phone (951) 674-2131, Fax (951) 674-4909