



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

Mail Stop 7010

April 24, 2009

Via U.S. mail and facsimile

Ms. Dana M. Kelley
Chief Financial Officer & Treasurer
American Pacific Corporation
3883 Howard Hughes Parkway, Suite 700
Las Vegas, Nevada 89169

RE: Form 10-K for the fiscal year ended September 30, 2008
Form 10-Q for the period ended December 31, 2008
Definitive Proxy Statement filed January 20, 2009
File No. 1-8137

Dear Ms. Kelley:

We issued comments to you on the above captioned filings on February 25, 2009. As of the date of this letter, these comments remain outstanding and unresolved. We expect you will submit a supplemental response on EDGAR by May 8, 2009 addressing these outstanding comments.

If you do not respond to the outstanding comments by May 8, 2009, we will, consistent with our obligations under the federal securities laws, decide how we will seek to resolve material outstanding comments and complete our review of your filings and your disclosures. Among other things, we may decide to release publicly, through the agency's EDGAR system, all correspondence, including this letter, relating to the review of your filing, consistent with the staff's decision to release publicly comment letters and response letters relating to disclosure filings it has reviewed. You can find more information about the staff's decision to release filing correspondence at <http://www.sec.gov/news/press/2004-89.htm> and <http://sec.gov/news/press/2005-72.htm>.

You may contact Andrew Schoeffler, Staff Attorney, at (202) 551-3748 if you have any questions regarding legal matters. Please contact Nudrat Salik, Staff Accountant, at (202) 551-3692 or, in her absence, the undersigned at (202) 551-3769 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Rufus Decker
Accounting Branch Chief