

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

Mail Stop 7010

May 7, 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 have completed our review of your Form 10-K and related filings and have no further comments at this time.

If you have any further questions regarding our review of your filings related to legal matters, please direct them to Andrew Schoeffler, Staff Attorney, at (202) 551-3748. 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