



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

January 13, 2010

via U.S. mail and facsimile

Dr. Joseph Carleone, President and Chief Executive Officer
American Pacific Corporation
3883 Howard Hughes Parkway, Suite 700
Las Vegas, NV 89169

**RE: American Pacific Corporation
Form 8-K Item 4.01
Filed January 8, 2010
File No. 1-8137**

Dear Dr. Carleone:

We have reviewed your filing and have the following comments. If you disagree, we will consider your explanation as to why our comments are inapplicable. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone number listed at the end of this letter.

1. In detail, please tell us the amounts involved, as applicable, regarding the material weakness. Also, tell us:
 - in what period the material weakness, accounting error or misapplication of GAAP occurred,
 - the amount of each accounting error or misapplication of GAAP,
 - the reason(s) for each error or misapplication of accounting, and
 - whether or not you intend to restate any prior period for any adjustments. If not, tell us why not.
2. Please provide us with a schedule of your fiscal year end fourth quarter adjustments to close the books, or adjustments recorded in connection with or as a result of the audit. Clearly explain the reason for each adjustment. For each adjustment, show us the impact on pre-tax net loss. Quantify the net effect of all adjustments on pre-tax net income

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(loss). Also, tell us why none of the adjustments relate to prior period. Explain in detail why you believe the timing of each adjustment is appropriate.

3. Provide us with any letter or written communication to and from the former accountants regarding any disagreements or reportable events to management or the Audit Committee.

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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing reviewed by the staff to be certain that they have provided all information investors require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments in the filing reviewed by the staff do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Please furnish your supplemental response via EDGAR in response to these comments within 5 business days of the date of this letter. Please note that if you require longer than 5 business days to respond, you should contact the staff immediately to request additional time. You may wish to provide us with marked copies of each amended filing to expedite our review. Direct any questions regarding the above to the undersigned at (202) 551-3743.

Sincerely,

Jenn Do
Staff Accountant