

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

October 9, 2014

Via E-Mail
Mr. Michael F. Doolan
Chief Financial Officer
Molycorp, Inc.
5619 Denver Tech Center Parkway
Suite 1000
Greenwood Village, CO 80111

Re: Molycorp, Inc.

Form 10-K for the Year Ended December 31, 2013

Filed March 3, 2014 File No. 001-34827

Dear Mr. Doolan:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/Tia L. Jenkins

Tia L. Jenkins Senior Assistant Chief Accountant Office of Beverages, Apparel, and Mining