

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

VIA FACSIMILE AND U.S. MAIL

May 7, 2009

Kathleen E. Redd Vice President, Chief Financial Officer and Secretary GenCorp Inc. P.O. Box 537012 Sacramento, California 95853-7012

RE: GenCorp Inc.

Form 10-K for Fiscal Year Ended November 30, 2008 Form 10-Q for Fiscal Quarter Ended February 28, 2009 Definitive Provy Statement filed Moreh 2, 2000

Definitive Proxy Statement filed March 2, 2009

File No. 1-01520

Dear Ms. Redd:

We have reviewed your response letter dated April 28, 2009 and have the following comments. Where indicated, we think you should revise your disclosures in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. 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 phone numbers listed below.

FORM 10-K FOR THE YEAR ENDED NOVEMBER 30, 2008

Item 1. Business, page 1

1. We note your response to comment two in our letter dated April 1, 2009, and in particular the sentence in your proposed revised disclosure for future filings that "Some important risk factors that could cause actual results or outcomes to differ from those expressed in the forward-looking statements are described in the section "Risk Factors" in Item 1A of this Report." Your use of the word "some" in this sentence suggests that there are other material risks that are not set forth in your risk factor disclosure. Your risk factor disclosure should address all of the material risks that you face. Please revise your disclosure accordingly.

Definitive Proxy Statement filed on March 2, 2009

Executive Compensation, page 24
Compensation Discussion and Analysis, page 25
Compensation Benchmarking, page 26

- 2. We note your response to comment 14 in our letter dated April 1, 2009. Based on your disclosures, its still appears to us that your compensation committee has engaged in benchmarking. In this regard, we note the following disclosures in your definitive proxy statement filed March 2, 2009:
 - Page 26: "The Compensation Committee sets base salaries, target annual cash incentive levels and target annual long-term incentive award values at the 50th percentile of competitive market levels."
 - Page 27: "In determining the amount of any increases in salaries, the Compensation Committee (i) compares current cash compensation with compensation for comparable executive positions in industry studies and data described under Compensation Benchmarking"
 - Page 27: "The target annual cash bonus is established through an analysis of
 compensation for comparable positions as noted in the studies described under
 Compensation Benchmarking and is intended to provide a competitive level of
 compensation when the executives achieve their performance objectives.
 Combined salaries and target bonus levels, on an aggregate basis, are intended
 to approximate the 50th percentile level."
 - Page 30: "The amount of equity-based awards granted to executives has been determined by subtracting the executive's annual cash compensation opportunity from the total targeted annual compensation that is competitive with the market (generally in the 50th percentile range)."

In future filings, please identify by name the companies the committee uses for comparative purposes in order to make compensation decisions. To the extent any specific elements of compensation are tied to a benchmark, please identify the benchmark and discuss where your actual payments and awards fell with respect to the benchmark, and to the extent that actual compensation deviated from the benchmark, please provide an explanation of the reasons for this deviation.

* * * *

Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please file your response on EDGAR as a correspondence

Ms. Kathleen Redd May 7, 2009 Page 3

file. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Dietrich King, Attorney, at (202) 551-3338 or, in his absence, Craig Slivka, Special Counsel, at (202) 551-3729 if you have any questions regarding legal matters. Please contact Ernest Greene, Staff Accountant, at (202) 551-3733 or, in his absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Rufus Decker Accounting Branch Chief