

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

Mail Stop 6010

December 4, 2008

Mr. Sergio Edelstein President and Chief Executive Officer GSI Group, Inc. 125 Middlesex Turnpike Bedford, Massachusetts 01730

RE: **GSI Group, Inc.**

Form 8-K dated December 3, 2008

Filed December 4, 2008 File No. 000-25705

Dear Mr. Edelstein:

We have reviewed your filing (filings) and have the following comments. Where indicated, we think you should revise your documents 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. 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 numbers listed at the end of this letter.

Form 8-K dated December 3, 2008

Item 4.02

1. We note the Company intends to file restated financial statements for the first and second fiscal quarter of 2008. Please tell us how and when you intend to file the restated financial statements.

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2. Please tell us your consideration of the adequacy of your previous disclosures regarding internal controls and disclosure controls and procedures in light of the material errors you have disclosed.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings 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 filings;
- staff comments or changes to disclosure in response to staff comments in the filings 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.

Please file your supplemental response via EDGAR in response to these comments within 5 business days of the date of this letter. Note that if you require longer than 5 business days to respond, you should contact the staff immediately to request additional time. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review.

If you have any questions, please call me at 202 551-3618 or Angela J. Crane, Accounting Branch Chief at 202 551-3554. You may also speak with Martin James, Senior Assistant Chief Accountant at 202 551-3671.

Sincerely,

Dennis C. Hult Staff Accountant