

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

DIVISION OF CORPORATION FINANCE

September 10, 2010

Via U.S. Mail and Facsimile

Charles W. Grinnell, Esq. Clean Diesel Technologies, Inc. 10 Middle Street, Suite 1100 Bridgeport, Connecticut 06604

> Re: Clean Diesel Technologies, Inc. Amendment No. 2 to Registration Statement on Form S-4 Filed August 30, 2010 File No. 333-166865

Dear Mr. Grinnell:

We have reviewed your registration statement and have the following comments.

Form S-4

Prospectus Cover Page

1. We note your response to comment 5 in our letter dated August 5, 2010. Please revise the prospectus cover page to also reference the shares of common stock and warrants that are being registered for issuance pursuant to the exercise of the out of the money warrants. The cover should include all of the shares being registered. See Item 501(b)(2) of Regulation S-K.

Ownership of Combined Company, page 2

2. We note your response to comment 14 in our letter dated August 5, 2010. We also note disclosure that does "not give effect to" (1) shares of CSI common stock to be received for non-employee accrued director fees and (2) the conversion of such notes to CSI Class B common stock and the subsequent conversion of such stock to Clean Diesel common stock by virtue of the merger. Please revise to include disclosure of the excluded items to clarify that the purchaser of the CSI notes will also receive Clean Diesel shares in respect of their existing 30% interest in CSI's common stock and as directors fees, such that they will own approximately 49% of the combined company after the merger.

Risk Factors, page 19

3. We note your new disclosure on page 67 that Michael Asmussen informed Clean Diesel's board of directors that he would not join the combined company as a director or officer after the merger. Prior filings indicate that he was to have continued with the combined

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company as Chief Commercial Officer. Please consider revising your risk factors on pages 26 and 29 that discuss the fact that the success of the combined company depends upon the continued employment of key management to discuss the impact that Mr. Asmussen's resignation and the resignation of Clean Diesel's other officers, Messrs. Grinnell and Wynne, will have on the combined company.

Unaudited Pro Forma Condensed Combined Financial Data, page 39

Clean Diesel Technologies, Inc.

Unaudited Pro Forma Condensed Combined Statements of Operations, page 49

4. We note your response to comment 23 in our letter dated August 5, 2010. It is not clear why the amount of equivalent basic and diluted loss per share is blank for the six months ended June 30, 2010. Please advise or revise. In addition, please further enhance your disclosure to clearly disclose how you are calculating the equivalent pro forma per share amounts.

Clean Diesel's Reasons for the Merger . . . , page 53

- 5. We note your response to comment 35 in our letter dated August 5, 2010. Please revise to clearly disclose whether or not the Board considered the valuations performed by "Houlihan and Smith" in approving the transaction.
- 6. We note your response to comment 32 in our letter dated August 5, 2010, including your statement that on May 10, 2010, management believed that Mr. de Havilland was resigning in part because he did not support the transaction. If Mr. de Havilland expressed any views about the advisability of the merger to management or the board prior to his resignation, please ensure that this is reflected in the Background of the Merger section.

The Merger, page 60

Background of the Development of the Merger, page 60

7. We note disclosure in the first full paragraph on page 67 that on August 25, 2010, Michael Asmussen informed the board that he will not join the combined company as a director or officer after the merger. Please file a Form 8-K to disclose this information or tell us why you have not filed a Form 8-K. Please refer to Question 117.01 in the Exchange Act Form 8-K Compliance and Disclosure Interpretations dated June 4, 2010.

Houlihan Smith Valuations, page 72

8. We note that in November 2009 you engaged Houlihan to provide an independent comprehensive valuation report as to the estimated fair value of Clean Diesel as of

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September 30, 2009 and of CSI as of November 30, 2009. Please tell us why the two valuations were not performed as of the same date. Please also supplementally discuss the reasons why you decided to engage Ardour Capital in March 2010 to render a fairness opinion to the Clean Diesel board of directors instead of engaging Houlihan, who had already previously provided you with a valuation report for Clean Diesel. So that we may better understand the differences between the valuations performed by Houlihan and Ardour Capital, please supplementally provide us with copies of all valuation reports performed by Houlihan and Ardour Capital pertaining to Clean Diesel and CSI.

9. Please disclose the amount and form of compensation that Houlihan received from Clean Diesel for its services.

Material United States Federal Income Tax Consequences of the Merger, page 93

10. Please revise this section and counsel's opinion to clarify that counsel opines on the consequences to each company's shareholders, CSI's warrant holders and the companies that flow from the transaction being treated as a reorganization under Section 368(a) of the Internal Revenue Code. Note that counsel may file a short – form opinion, but such opinion should confirm that the discussion in the proxy statement/prospectus constitutes counsel's opinion, not merely that the discussion is an accurate summary of tax consequences. In that case, the prospectus disclosure should also clearly state that the information therein constitutes counsel's opinion. Please also ensure that you file a signed opinion of counsel regarding tax matters. The exhibit as currently filed states that it is only a form of opinion.

CSI Management's Discussion and Analysis of Financial Condition and Results of Operations, page 159

Critical Accounting Policies and Estimates, page 160

Impairment of Long-Lived Assets Other Than Goodwill, page 162

11. We note your response to comment 43 in our letter dated August 5, 2010. Your disclosure on page 77 indicates that Houlihan performed an enterprise valuation analysis for ECS (your Heavy Duty Diesel Systems business) on a standalone basis as of November 30, 2009. Please supplementally provide us with a copy of both your goodwill impairment analysis as of December 31, 2009 and the ECS valuation analysis performed by Houlihan. If Ardour Capital performed a separate valuation analysis for ECS, please provide us with that valuation as well. Please compare and contrast the assumptions used in each and explain the reasons for any differences in assumptions. To the extent that the Houlihan or Ardour Capital valuations resulted in values for ECS lower than those used in your goodwill impairment analysis as of December 31, 2009, tell us how you considered that the lower valuations were not a triggering event to perform an interim goodwill impairment analysis as of either March 31, 2010 or June 30, 2010.

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Index to Exhibits

12. We note your Form 8-K filed on September 7, 2010. Please file your letter amending the merger agreement as an appendix to the prospectus and incorporate it by reference, as you have done with the merger agreement. Please also include such letter in the exhibit list. Please also update your risk factors and other relevant disclosures throughout your document to clarify that CSI's lenders have now agreed to the extension. Please also clarify whether CSI's note holders have formally waived the August 2 deadline until October 15 and file any forbearance agreement or waiver to this effect as an exhibit. We note disclosure in Note 1 to CSI's pro forma financial data on page 44 that the holders of a majority of the notes had 'indicated their willingness to enter into a forbearance agreement."

You may contact Jeff Gordon, Staff Accountant at (202) 551-3866 or, in his absence, Lisa Haynes, Senior Accountant at (202) 551-3424 if you have questions regarding comments on the financial statements and related matters. Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or, in her absence, me at (202) 551-3760 with any other questions.

Sincerely,

Pamela Long Assistant Director

cc: Ernest M. Lorimer (*Via Facsimile 203/325-5001*) Finn Dixon & Herling LLP 177 Broad Street, 15th Floor Stamford, CT 06901-2048