



DIVISION OF
CORPORATION FINANCE

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

August 5, 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. 1 to Registration Statement on Form S-4
Filed July 22, 2010
File No. 333-166865**

Dear Mr. Grinnell:

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

Form S-4

General

1. Please note that we continue to have significant comments on your filing and hope that your responses will help us better understand your transaction and your disclosures. After you have amended your filing in response to our comments, note that we may continue to have new comments as the details of the transaction and other disclosures become more clear.
2. We have reviewed your response to comment 1 in our letter dated June 10, 2010. You now propose that your stockholders approve a range of reverse stock split ratios rather than a fixed one-for-three ratio, with the exact ratio to be established immediately prior to the effective time of the merger. Please note that pursuant to SAB Topic 4C, you should revise your financial statements and your disclosures throughout the filing to give retroactive effect to the stock split to the extent it occurs prior to effectiveness of your Form S-4.
3. We note disclosure in Note 4(a) to the pro forma financial data on page 41 that if CSI fails to complete the merger by August 2, 2010, which is the maturity date of CSI's secured convertible notes, the outstanding principal amount under the notes and any interest thereon and an additional payment premium of two times (2x) the outstanding principal amount will be due to the investors. Please tell us supplementally with a view towards appropriate disclosures, what the current status of this provision is. Clarify whether the parties have waived or extended this provision. Ensure that you disclose this provision where you discuss CSI's capital raise in the document, and clarify what impact,

if any, this has on the merger and the merger consideration payable to the note holders. Please also update your risk factor on page 20 to clarify that this provision was to become effective if the merger was not completed by August 2 and to reflect the current status of this provision.

Calculation of Registration Fee Table

4. We note your response to comment 11 in our letter dated June 10, 2010. Please revise the footnote in the table to disclose how you calculated the 12,247,137 shares of common stock and 2,881,540 warrants to purchase common stock. Please make sure that you describe what shares and warrants are included in the amounts of securities you are registering. It should not be necessary to discuss what shares and warrants are excluded from registration in the fee table. Those should be discussed in the prospectus as indicated below. In addition, to the extent that you register warrants, please ensure that you separately register the shares underlying the warrants as well, or tell us why registration of those shares is not required at this time. Please include these shares on a separate line with an explanatory footnote to the fee table.

Prospectus Cover Page

5. The fee table does not cover all of the shares of common stock and warrants that you state will be issued on the cover page of the prospectus. For example, you state that you are offering 14,204,847 shares of common stock in the merger, but you do not clarify how many of those are the shares being offered to the Class A holders in this registered offering of 12,247,137 shares. Similarly, you say that you will issue warrants to purchase 3 million shares to the Class A holders, but the fee table registers only 2,881,540 warrants. Please clarify supplementally and in your filing, which shares and warrants are being offered by the prospectus and which shares and warrants are being offered and sold privately. Note that any shares and warrants you are offering publicly must be reflected in the fee table and clearly described on the cover page of the prospectus.
6. We note your response to comment 3 in our letter dated June 10, 2010, including your statement that you intend to register the offer and sale of the Clean Diesel common stock to be issued in exchange for the CSI Class B common stock underlying the first tranche of notes. Please note that it is our view that shares underlying securities that are convertible or exchangeable within one year are deemed to be offered when the convertible or exchangeable security is offered, and that this offer continues until the overlying security is exercised. Please see Securities Act C&DI Question 139.01. Therefore, it appears that the Clean Diesel shares indirectly underlying the first tranche of the notes have already been offered privately and as such, the sale of these shares must also be completed privately. To the extent that you have included these shares in the fee table, please revise to exclude them. Please make conforming disclosures in your prospectus clarifying that the shares indirectly underlying the CSI notes are not covered by the registration statement.

7. Please revise your prospectus cover page to ensure that it complies with plain English principles, as required by Rule 421(d) of Regulation C. In this regard, please avoid the use of long sentences, multiple parenthetical phrases and defined terms. Consider whether the information regarding the various parties' relative ownership of the combined company could be presented in a tabular format.
8. Please state how many shares of common stock will be issuable upon exercise of a warrant.

Questions and Answers About the Merger, page ii; Summary, page 1

9. Please further revise your Q&A and Summary sections in response to our comment 16 in our letter dated June 10, 2010. As noted in that comment, if you use both a Q&A and Summary, these sections should have distinct purposes. Currently, you include substantive information about the merger, the reverse stock split, the consideration that CSI shareholders will receive, and the relative ownership of parties in the combined company in both of these sections. To better organize these sections, please discuss all of these related aspects of the transaction in one place, such as the Summary. The Q&A can then be used for the distinct purpose of answering questions about the meetings.

Q. How many shares of common stock of the combined company, . . . page v

10. We note your response to comment 18 in our letter dated June 10, 2010. In response to our comment above, we assume that you will move this disclosure in to the Summary section under "Merger Consideration". In that section, please enhance your disclosure in the table and/or surrounding text to provide investors with a more comprehensive picture of how you will calculate the number of shares and warrants that they and the investors in the CSI capital raise will receive. In this regard, please comply with the following:
 - Where you state that the number of shares that CSI holders will receive will depend on the number of shares of each company that are outstanding immediately prior to the merger, please elaborate on how this will impact the merger's exchange ratio. For example, if true, please state that the ratio will be calculated to provide the holders of the currently outstanding CSI common stock with 16% of the combined company, and disclose the total number of shares that Clean Diesel would need to issue to give CSI's Class A holders this number of shares. Provide this number on a pre-split basis and on the assumption that the companies each have a stated number of shares outstanding, which should reflect the actual number of shares each has outstanding as of a recent date. Then disclose the number of shares that a holder of 1,000 Class A shares would receive in the merger if there were no reverse stock split. Consider placing this information in your table as well. This will help investors to see the impact of the merger's exchange ratio as distinct from the impact of the reverse stock split.

- Please revise to disclose your calculations of the numbers of warrants in the table. Provide sufficient disclosure for investors to understand how you arrived at the number of shares issuable upon the exercise of warrants at each reverse stock split ratio. We note that you provided information regarding the warrants on pages 80 and 81 in response to comment 30 in our letter dated June 10, 2010; however, consistent with our earlier comment, we believe this information should also be presented in your summary discussions of the amount of consideration that the CSI Class A holders will receive.
- Please include a separate column or another table showing the numbers of shares that the Class B holders will receive in the merger, based on the various reverse split ratios presented. Disclose any other material assumptions upon which your calculations are based.

Summary, page 1

11. Please avoid repeating information within the Summary section. For example, we note that you include two sections entitled “Merger Consideration” on pages 1 and 8, and two sections discussing the ownership of the combined company on pages 2 and 11. You also have tax discussions on pages iv and 11.
12. In your Summary, please clearly and prominently disclose that there will be two groups of CSI holders who receive consideration in the merger:
 - one group consisting of the current CSI common stock holders, who will own CSI Class A shares at the time of the merger, who will receive registered shares and warrants in the merger and who will vote to approve the merger, and
 - a second group consisting of investors in CSI’s private note offering, who will own CSI Class B shares at the time of the merger, who will receive only unregistered shares in the merger, and who will not be entitled to vote to approve the merger.
13. Throughout this section, please reorganize information so that it flows logically and provides enough context for investors to thoroughly understand the disclosure. In this regard, we have the following observations that you should address in your disclosure:
 - Under “Merger Consideration” on page 1, you state that “each holder of shares to be designated as Class A common stock will also receive a warrant to purchase shares of Clean Diesel common stock . . .” However, you have not at this point discussed who will hold the shares to be designated as Class A common stock. Our understanding is that these are the current holders of the CSI common stock, who are also the persons who will be receiving this proxy statement/prospectus and are voting on the merger for CSI. Please clarify, if true, that these are the persons who will receive the warrants.

- Please discuss the treatment of outstanding CSI options and warrants under a separate subheading.
- Under “Ownership of Combined Company” on page 2, you discuss the fact that because the companies have met their cash targets, there will be no adjustment to the merger consideration under this provision of the merger agreement. You also discuss what CSI Class A shareholders will receive as merger consideration. However, you do not discuss the actual ownership of the combined company here. Instead you discuss this under the heading “Capital Raises” on pages 2 and 3. Please revise to discuss the ownership of the combined company under the appropriate subheading. Discuss the cash adjustment under a separately titled subheading, and discuss what Class A shareholders will receive in the section entitled “Merger Consideration” on page 1.
- You should discuss the ownership of the combined company after you discuss the capital raises. Investors will better understand your disclosure about the combined company’s ownership if they already understand the terms of the capital raises.

The above items are intended to provide examples of how the presentation of this information could be improved, consistent with plain English principles. It is not intended to be a complete list of every instance in which disclosure could be improved. Please review your entire Summary and revise as necessary with this comment in mind.

Ownership of Combined Company, page 2

14. Please include disclosure to accompany the table that you have provided to clarify that the purchasers of the CSI notes will also receive Clean Diesel shares in respect of their existing 30% interest in CSI’s common stock and as director fees, such that they will own approximately 49% of the combined company after the merger.

Reverse Stock Split, page 3

15. Please discuss how the board will exercise its discretion with regard to the reverse split ratio. For example, it is the intention of the board to select a split ratio that ensures a \$4 per share price of the Clean Diesel common stock immediately prior to the merger? Or are there other factors that the board may consider? Could the board select a ratio that produces a price that is higher or lower than \$4 per share?
16. Please clarify whether the board can select a split ratio that is other than a whole number of new shares for each shares of Clean Diesel outstanding. For example, could the board select a 1 for 4.5 share ratio? In this regard, we note that you have included a discussion of the reverse split under “Treatment of Fractional Shares” on page 3. Assuming that Clean Diesel does not have fractional shares currently outstanding, it is unclear why fractional shares would result from the reverse split unless the ratio itself provided for fractional shares.

17. Please provide an example of what the split ratio would need to be to achieve the required \$4 minimum share price based on the share price as of a recent date. If it is likely that the board would use its discretion to select a ratio to produce a higher price, please disclose that and provide an example of the ratio necessary to achieve that higher price as well. Please also discuss the companies' plans if the maximum 1-to-8 ratio is insufficient to result in a \$4 share price for Clean Diesel.

Treatment of Fractional Shares, page 3

18. Based on your discussion on page 78 under "Warrant Portion of Merger Consideration", it appears that each warrant will be exercisable for a fraction of a Clean Diesel share. Please address the treatment of fractional shares issuable upon exercise of the warrants in this section.

Merger Consideration, page 7

19. We note your response to comment 29 in our letter dated June 10, 2010. Please revise to disclose how you calculated the 3,828,710 share portion of the Class A consideration on page 77 and the 9,376,136 number of Class B converted shares on page 78.
20. Your response to comment 31 in our letter dated June 10, 2010 is unclear. We do not understand the distinction between clauses (a) and (b), where you refer to "shares underlying CSI's . . . warrants", versus (c) and (d), where you refer to "shares underlying Clean Diesel warrants *for* CSI's . . . warrants" (emphasis added). Please explain this supplementally with a view toward disclosure in the document. We note that this information is also inconsistent with note (2) to the fee table on the facing page of the registration statement. Please reconcile.

Interests of Directors, Executive Officers and Affiliates of CSI & Clean Diesel, page 9

21. We note your response to comment 33 in our letter dated June 10, 2010. Please revise to include Mr. Park's fees in connection with Innovator Capital in the "Certain Relationships and Related Transactions" section.

The Merger may not qualify as a reorganization . . . , page 21

22. Since you must include a definitive statement as to the tax consequences of the merger, it is generally not appropriate to qualify the statement by including risk factor disclosure. As requested in comment 40 in our letter dated June 10, 2010, please provide a definitive statement as to the tax consequences of this transaction to shareholders, and remove this risk factor.

Unaudited Pro Forma Condensed Combined Financial Data, page 35

General

23. We have reviewed your response to comment 43 in our letter dated June 10, 2010. Notwithstanding the fact that Item 301 of Regulation S-K is not applicable to you, we believe the information required by Item 3(f) of Part I.A. of the Form S-4 is important to investors and should be disclosed in the filing. As such, please address the following in your Form S-4/A:

- Please present the historical per share amounts, which should include the book value per share, cash dividends declared per share, and income (loss) per share from continuing operations, for each entity;
- Please clearly indicate which amounts represent the pro forma per share amounts and which amounts represent the equivalent pro forma per share amounts. We remind you that you should present book value per share, cash dividends per share, and income (loss) per share from continuing operations on a pro forma basis and an equivalent pro forma basis; and
- Please clearly disclose how you are calculating the pro forma per share and equivalent pro forma per share amounts, including the exchange ratios used.

24. Given the amount of activity that has occurred at CSI, please revise to present, on separate pages, the pro forma balance sheet and pro forma statements of operations of CSI. You should include columns related to CSI's historical amounts, pro forma adjustments that are not related to the proposed business combination of Clean Diesel and CSI, and a subtotal. You should then present, on separate pages, combined pro forma balance sheets and combined pro forma statements of operations in which you include columns related to Clean Diesel's historical amounts, pro forma adjustments that are not related to the proposed business combination of Clean Diesel and CSI, and a subtotal, and then include a column carrying forward the subtotal from the CSI pro forma statements. Next, you should present columns related to the pro forma adjustments that arise due to the proposed business combination of Clean Diesel and CSI and a pro forma total column.

Unaudited Pro Forma Condensed Combined Balance Sheet, page 36

25. Please revise to present separate line items for capital stock and additional paid in capital.

Notes to Unaudited Pro Forma Condensed Combined Financial Data, page 39

Note 2 – Estimate of Consideration Expected to be Transferred, page 39

26. You disclose that the fair value of Clean Diesel's stock options and warrants is a preliminary estimate of \$0.38. Please enhance your disclosure to clearly describe the specific assumptions used to determine the estimated fair value of the stock options and warrants.

Note 4 – Pro Forma Adjustments, page 41

27. CSI entered into agreements with a group of accredited investors providing for the sale of \$4,000,000 of secured convertible notes and did not reflect this transaction in the pro forma condensed statement of operations "as the secured convertible notes convert to capital stock upon closing of the Merger and therefore, no interest expense related to these notes will be recorded by the combined entity." Since CSI is considered to be the accounting acquirer, the financial statements of the combined entity actually will reflect this transaction. As such, please revise your disclosure and your pro forma financial statements to reflect the issuance of the convertible notes. Please also further enhance your disclosure to disclose the terms and rights of the convertible notes, including the conversion terms, and address whether there are any beneficial conversion features. In addition, clarify whether the investors are required to convert the notes into Class B common stock of CSI, which will then be exchanged for common shares of Clean Diesel, and address any related accounting implications.
28. You disclose in footnote 4(a) that in the event that CSI fails to complete the merger by August 2, 2010, the maturity date of the secured convertible notes as amended, the outstanding principal amount under the notes, any interest thereon and an additional payment premium of two times the outstanding principal amount will be due to the investors. Since the merger was not completed by August 2, 2010, absent a new agreement with the investors, please tell us what accounting treatment you have given to these amounts now being due to the investors.
29. CSI now has two classes of common stock, Class A and Class B. Please enhance your disclosure to discuss in detail the rights of each class of common stock. Please also disclose whether there are any different conversion rights associated with each class of common stock and address any related accounting implications.
30. Please enhance the disclosure related to footnote 4(c) to clearly disclose how you determined the estimated fair value of the acquired intangible assets.

Background of the Development of the Merger, page 46

31. We note your response to comment 56 in our letter dated June 10, 2010 and the additional information you have provided regarding Houlihan and Smith pursuant to Item

1015(b) of Regulation M-A. Please also include a summary of the procedures that Houlihan and Smith followed, bases for and methods of arriving at their findings as to the values of the two companies and the other information required by Item 1015(b)(6) of Regulation M-A.

32. We note your response to comment 59 in our letter dated June 10, 2010 and the statement in the proxy statement/prospectus that Mr. de Havilland's resignation cited his previously expressed desire to resign. We also note that the resignation signed by Mr. de Havilland that you have provided to us states that he originally intended to retire at the company's next AGM "but following our latest correspondence now . . . am resigning from the Board immediately," suggesting that Mr. de Havilland determined to resign earlier than originally planned based on earlier correspondence. The content of this letter and timing of the resignation (the day before the vote on the merger) suggests that there may have been a disagreement reportable on Form 8-K. Please tell us about the nature of the correspondence to which Mr. de Havilland refers in his resignation letter.
33. We note your new disclosure on page 49 that the parties agreed that CSI's stockholders would received warrants to purchase Clean Diesel stock in the transaction "to bridge the difference between the competing equity split proposals." Please disclose what the competing proposals were. We note that Clean Diesel had proposed a 50/50 equity split, but the competing proposal is not discussed. Please also clarify how the parties determined that the terms of the warrants (i.e., the number of shares issuable and exercise price) would be appropriate to bridge this difference.

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

34. In the paragraph below the bullet points, please:

- Disclose the market valuation of CSI's shares, which was significantly different from Houlihan and Smith's enterprise valuation of CSI.
- Explain why Ardour Capital considered the market capitalization of the two companies an insufficient basis for evaluation.
- Disclose the valuation implied by CSI's capital raise that was significantly different than Houlihan and Smith's valuation.
- Disclose who determined what valuation was implied for each company by the market valuation and capital raise.
- Explain why Clean Diesel's board, recognizing that these (presumably lower) implied valuations for CSI were due to CSI's impaired financial position, nevertheless thought that a 60/40 equity split in favor of CSI was appropriate. Your disclosure suggests that the board viewed CSI's impaired financial position as the likely reason for the market's lower implied valuation of CSI, and that such impaired financial

condition of CSI would not be a reason to conclude that the 60/40 equity split was not fair or in the best interest of Clean Diesel or its shareholders, notwithstanding its impact on the market values of CSI as implied by its market capitalization and recent capital raise. It is not clear why attributing CSI's lower market value to its impaired financial condition supports the board's decision to approve the transaction.

35. We were unable to locate your disclosure in response to comment 64 in our letter dated June 10, 2010, which asked whether or not the Board considered the valuations performed by Houlihan and Smith in approving the transaction, and if so, whether the valuations supported or detracted from the advisability of the merger. Please revise to include this disclosure or tell us supplementally where it is located.

Opinion of Financial Advisor of Clean Diesel, page 57; Opinion of the Financial Advisor to the Board of Directors of CSI, page 61.

36. With a view toward disclosure, please tell us supplementally why you believe that the comparable company analysis conducted by Clean Diesels' advisor resulted in mean equity value of CSI of \$38.3 million (versus in a value for Clean Diesel of \$12.7 million), while the Guideline Public Company Method conducted by CSI's advisor resulted in an enterprise value for CSI of only \$5.5 to \$10.8 million (versus a value for Clean Diesel of \$3.1 to 9.3 million). Explain why you believe the equity value for CSI as determined by Clean Diesel's advisor was so much higher than other analyses conducted with respect to CSI, and why this analysis provided such disparity in values between CSI and Clean Diesel.

Discounted Cash Flow Valuation, page 60

37. We have reviewed your response to comment 71 in our letter dated June 10, 2010. Please further enhance your disclosures to explain the specific factors considered in determining the 70% discount rate for Clean Diesel and the 40% discount rate for CSI. Your current disclosure that potential investors would apply a higher risk premium to Clean Diesel as compared to CSI based on recent operating performance, revenue trend and forward view is too general. For example, please explain how you define "recent operating performance" and the time periods used to evaluate each companies "forward view". Please also address how you considered the liquidity and going concern issues facing CSI.

Material United States Federal Income Tax Consequences of the Merger, page 73

38. We note your response to comment 19 in our letter dated June 10, 2010 and continued disclosures throughout the filing wherein you assume that the merger qualifies as a reorganization. Note that we would expect counsel to provide a more definitive statement in its tax opinion and that your disclosure will be revised to state that the transaction will constitute a reorganization.

39. We note your response to comment 76 in our letter dated June 10, 2010. We note your disclosure does not purport to “address all aspects of U.S. federal income taxation.” Disclaimers of this type are inconsistent with the requirement that all material information be provided in your registration statement. Please revise.

Clean Diesel Business, page 92
Revenue, page 102

40. We note disclosure on page F-12 in Note 2 of the Notes to your Consolidated Financial Statements that you derived more than 10% of your consolidated revenues from two of your customers. Please revise to disclose the name of the two customers and their relationship with you and your subsidiaries if the loss of any of these customers would have a material adverse affect on you or your subsidiaries taken as a whole pursuant to Item 101(c)(1)(vii) of Regulation S-K.

Legal Proceedings, page 104

41. Please revise to include the relief sought from the Hartford, Connecticut office of the U.S. Department of Labor pursuant to Item 103 of Regulation S-K.

CSI Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 138

Critical Accounting Policies and Estimates, page 139

Impairment of Long-Lived Assets Other Than Goodwill, page 141

42. We have reviewed your response to comment 80 in our letter dated June 10, 2010. As previously requested, to the extent that any of your long-lived assets or asset groups have estimated fair values that are not substantially in excess of the carrying values and to the extent that the asset amounts, in the aggregate or individually, could materially impact your operating results or total stockholder’s equity, please disclose the percentage by which fair value exceeds the carrying value as of your most recent impairment test. Alternatively, please revise to disclose that all of your long-lived assets or asset groups have estimated fair values substantially in excess of their carrying amounts.
43. So that we may better understand your goodwill impairment testing process, please compare and contrast the assumptions used to determine the fair value of CSI’s Heavy Duty Diesel Systems reporting unit as of December 31, 2009 with the assumptions used in the discounted cash flow analysis of CSI as a whole (as described on pages 59 and 60). While we understand that the analyses were performed for different purposes, it would be helpful for us to understand the reasons behind any differences in assumptions used.

Charles W. Grinnell, Esq.
Clean Diesel Technologies, Inc.
August 5, 2010
Page 12

Management Following the Merger, page 110
Directors of the Combined Company, page 159

44. We note your response to comment 83 in our letter dated June 10, 2010. Please revise to discuss, for each director of the combined company, the specific experience, qualifications, attributes or skills that led to the conclusion that such person should serve as a director pursuant to Item 401 (e) of Regulation S-K.

Agreements with Executive Officers Following the Merger, page 164

45. Please file the employment agreements of Messrs. Call and Mehta and Dr. Golden as exhibits to the registration statement.

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