

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

September 8, 2010

Patrick R. Gruber, Ph.D., Chief Executive Officer Gevo, Inc. 345 Inverness Drive South, Building C, Suite 310 Englewood, CO 80112

Re: Gevo, Inc.

Registration Statement on Form S-1

Filed August 12, 2010 File No. 333-168792

Dear Dr. Gruber:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

- 1. We will process this filing and your amendments without price ranges. Since the price range triggers a number of disclosure matters, we will need sufficient time to process the amendment when it is included. Please understand that its effect on disclosure throughout the document may cause us to raise issues on areas not previously commented upon.
- 2. As indicated in the comment above, we note that you have omitted certain pricing-related information as well as other information from this filing. If you intend to rely on Rule 430A, please note that Rule 430A does not allow for the omission prior to effectiveness of amounts that may be computed based on the maximum number of shares offered and the mid-point of the offering price range, or the number of shares to be offered on the cover. In addition, please confirm that you will not circulate copies of the registration statement or the preliminary prospectus until you include an estimated price range, maximum number of shares, dollar amounts dependent upon the offering price that are

based on the mid-point of the offering price range, and all other information except information you may exclude in reliance upon Rule 430A.

- 3. Prior to the effectiveness of your registration statement, please inform us as to whether or not the amount of compensation allowable or payable to the Underwriters has received clearance by FINRA
- 4. Please provide us with copies of any artwork or other graphics you intend to use in your prospectus. Please refer to Section VIII of our March 31, 2001 update to our Current Issues and Rulemaking Projects outline for additional guidance.

Inside Front Cover

5. Please relocate the dealer prospectus delivery obligation to the outside back cover page. See Item 502(b) of Regulation S-K.

Conventions that apply to this prospectus, page i

- 6. Please provide us with copies of the reports citing the market data you provide throughout your prospectus, marked with page references tracking your disclosures in the filing.
- 7. We note your disclosure in the last paragraph. Please tell us why you provide product market volumes for the year 2007 rather than as of a more recent date and discuss the impact that using dated information has on the reliability of the information you are providing to investors.

Prospectus summary, page 1

8. Please revise to include a discussion of your weaknesses that is equally prominent as the discussion of your competitive strengths on page six to ensure that investors receive a balanced summary description of your company and your business. For example, we note your statement on page 20 that no market currently exists for your product as a fuel or fuel blendstock.

Business overview, page 1 Our company, page 1

9. Please revise to state that you are a development stage company that has generated minimal revenues and experienced net losses since inception.

Summary historical and pro forma as adjusted financial data, page 12

- 10. Please expand the introductions to the summary historical and pro forma as adjusted financial data on page 12 and the pro forma financial statements on page 57 to provide prominent disclosure of your plans to discontinue Agri-Energy's production of ethanol and retrofit the Luverne facility to produce isobutanol. Discuss how you believe these activities are expected to impact the operations and liquidity of the combined companies going forward.
- 11. The calculation of pro forma net loss per share on the statements of operations and pages 13 and 56, and the presentation of pro forma balance data on page 14 and the capitalization table on page 50 apparently assume the conversion of all preferred stock into common stock on a one-for-one basis. In Note 1 to the financial statements and in footnotes to the pro forma data elsewhere in the document, you disclose this fact and refer to Note 8 for conversion ratio adjustments that may be applicable upon future events. We note that certain of these adjustments may be triggered by your offering. For example, the conversion price of Series D-1 preferred stock is adjusted to 75% of the offering price in an offering prior to December 31, 2010. Please provide us supplementally with an analysis of the expected and potential adjustments to the conversion ratios that may result from your offering. Explain to us how your current presentation of pro forma earnings per share is appropriate and how your current disclosure of summary financial data and capitalization adequately informs investors of the expected and potential impacts of these adjustments.

Risk factors, page 16

Our planned acquisition of Agri-Energy may be delayed or may never occur . . . , page 15

12. We note your disclosure in the third sentence. Please disclose, if applicable, any unique closing conditions required under the acquisition agreement.

Our ability to compete may decline if we do not adequately protect our proprietary . . . , page 29

13. We note your disclosure in the first full paragraph on page 32. Please tell us whether you are aware of any other patents or patent applications for the processes in your GIFTTM proprietary system.

Forward-Looking Statements, page 45

14. We note the disclosure in the last paragraph on page 46. By including the statements of third parties in the prospectus you are reasserting the statements that were initially made by the referenced third parties and your belief as to the accuracy and reliability of those statements is implied through the prospectus disclosure of such information. The reference to "undue" reliance is not clear in providing investors with information about

how they are to use the information. As such, please revise to remove any implication that you are not responsible for assessing the reasonableness and soundness of the market data and industry statistics presented. If the industry and market data requires disclaimers such as those presented here, it does not appear the market data contributes to an informed investor understanding of the market for the company's products and services as of the time of their potential investments.

Selected financial data, page 55

15. On page 56 you attribute footnotes (2) and (3) to the line item "net loss per share of common stock attributable to Gevo, Inc. stockholders, basic and diluted," and attribute footnote (4) to "net loss used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)." It appears, instead, there should be no footnotes attributed to "net loss per share of common stock attributable to Gevo, Inc. stockholders, basic and diluted," and footnotes (2) and (3) should be attributed to "net loss used in computing pro forma net loss per share of common stock, basic and diluted (unaudited)," such that the presentation mirrors that on page 13. Please revise accordingly.

Unaudited pro forma financial information, page 57

16. Please tell us whether the acquisition of Agri-Energy is probable. We note your statement on page 15 that the acquisition agreement is an executory contract subject to numerous closing conditions. Please revise to disclose any unusual closing conditions or any deemed to be non-customary.

Management's Discussion and Analysis of Financial Condition . . . , page 62

Agri-Energy Acquisition, page 65

- 17. We note the gross losses Agri-Energy incurred for the year ended December 31, 2008 and the three months ended March 31, 2009 as shown on page F-51. Since you intend to report revenue from the production of ethanol on an interim basis until you begin generating revenue from sales of isobutanol, please revise MD&A herein to discuss the reason(s) for these gross losses, and the factors that may contribute to future gross losses during the retrofit/interim period.
- 18. Please revise MD&A herein to discuss the nature of the inflows and outflows that comprise the line item "net change in parent investment" as shown on page F-52.

Critical Accounting Policies and Estimates, page 66

19. Property and equipment represents 18% of total assets at December 31, 2009, and you disclose on page F-11 that no impairment charges have been recorded related to your long-lived assets from inception through March 31, 2010. Given the significance of these

assets to your overall financial condition, please revise your filing to include a critical accounting policy that addresses why no such impairments have been warranted despite your history of operating losses and negative operating cash flows, as noted in ASC Topic 360-10-35-21e.

Stock-based compensation, page 66

- 20. Please confirm to us that there were no grants of share based compensation, including stock options and restricted stock, subsequent to December 1, 2009. If so, clearly disclose this in MD&A.
- 21. Until you provide a bona fide estimate of the offering price, we cannot complete an accounting review of the disclosures on pages 14 and 49-54. Note that any significant disparity between the IPO price and your compensation accounting fair value estimates should be fully explained in the critical accounting estimate section of MD&A. Further, if any known valuation evidence was given disproportionate weight in the estimation of stock values then that fact should be explained and the basis fully disclosed.

Beneficial conversion feature of Series D-1 preferred stock financing, page 72

22. You disclose that the beneficial conversion feature on the Series D-1 preferred stock is \$2,849,000. Please revise to disclose the fair value of the Series D-1 preferred stock at the issuance date in March 2010. Please also revise to disclose the fair value of the Series D-1 preferred stock issued in April and May 2010 that will result in a beneficial conversion feature of \$2,895,000, as noted on page F-44.

Contractual Obligations and Commitments, page 82

23. We note that interest commitments under your interest-bearing debt are not included in the table. We also note your statement that the table reflects only payment obligations that are fixed and determinable. It appears interest is fixed and determinable, since you state on page 84 that the terms of your Lighthouse and TriplePoint long-term debt facilities provide for a fixed rate of interest, and therefore are not subject to fluctuations in market interest rates. Accordingly, please revise your filing to include such interest in this table, or provide textual discussion of this obligation below the table. If you provide a textual discussion, the discussion should quantify the interest payments using the same time frames stipulated in the table.

Background and perspective, page 86

24. Please revise to state the basis for your claim in the last sentence on page 87.

Business, page 88

Our Markets, page 89

Isobutanol for the production of plastics, fibers, rubber and other polymers, page 89

25. You make several statements regarding the desires of producers of plastics, fibers, rubber and other polymers. Please revise to provide the source of this information.

Production and Distribution, page 92

26. Please file the letters of intent and file any definitive agreements you enter into with the referenced parties as exhibits to the registration statement.

Our Production Technology Platform, page 96

27. We note the disclosure relating to the commercial engineering study conducted by ICM, Inc. and the disclosure relating to the testing performed by DNV Columbus, Inc. in the last paragraph on page 104. Please tell us what consideration you have given to identifying these third parties as experts and obtaining their consents to be named. Refer to Interpretation 233.02 of the Division's Securities Act Rules Compliance and Disclosure Interpretations. Additionally, advise us as to whether you commissioned these studies and the extent to which the information is publicly available.

Feedstock Flexibility, page 99

28. Please disclose the source and availability of fuel ethanol feedstock. Please refer to Item 101(c)(1)(iii) of Regulation S-K.

Grants of Plan-Based Awards in 2009 Table, page 139

29. The disclosure in the "Grant date fair value of option awards" should reflect the aggregate fair value of the award and not the per share full grant date fair value. See Item 402(d) of Regulation S-K. Please revise.

Gevo, Inc. Consolidated Financial Statements

30. Please note the updating requirements of Rule 3-12 of Regulation S-X.

1. Nature of Business and Significant Accounting Policies, page F-9

31. On page F-12, you state your revenues from inception through March 31, 2010 related to government research grants and cooperative agreement. The government research grants

and cooperative agreement primarily related to research and development activities. Please explain to us how you have appropriately classified these amounts as revenues.

Exhibit Index, page II-10

32. We note that you have requested confidential treatment for certain portions of several exhibits to your registration statement. Please be advised that we will take your filing effective only after resolving any comments with respect to your confidential treatment application. We will send our comments on your confidential treatment application under separate cover.

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 Act of 1933 and all applicable Securities Act rules 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jennifer Do, Staff Accountant at (202) 551-3743 or Terence O'Brien, Accounting Branch Chief at (202) 551-3355 if you have questions regarding comments on the

financial statements and related matters. Please contact Chambre Malone, Staff Attorney at (202) 551-3262 or Jay Ingram, Legal Branch Chief at (202) 551-3397 with any other questions.

Sincerely,

Jay Ingram Legal Branch Chief

cc: Teri O'Brien, Esq. (*via facsimile at* (858) 458-3005)
Paul, Hastings, Janofsky & Walker LLP
4747 Executive Drive
12th Floor
San Diego, CA 92121