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November 4, 2010

VIA EDGAR AND OVERNIGHT MAIL

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street N.E. Washington, D.C. 20549 Attention: Mr. Jay Ingram Ms. Chambre Malone

Re: Gevo, Inc. Registration Statement on Form S-1 (File No. 333-168792) Amendment No. 3

Dear Mr. Ingram and Ms. Malone:

Enclosed for electronic filing via EDGAR pursuant to the Securities Act of 1933, as amended (the "*Securities Act*"), on behalf of our client, Gevo, Inc. (the "*Company*"), is Amendment No. 3 ("*Amendment No. 3*") to the Company's Registration Statement on Form S-1 filed with the Securities and Exchange Commission (the "*Commission*") on August 12, 2010 (the "*Initial Registration Statement*"), as amended by Amendment No. 1 on Form S-1/A filed with the Commission on October 1, 2010 ("*Amendment No. 1*") and Amendment No. 2 on Form S-1/A filed with the Commission on October 21, 2010 ("*Amendment No. 2*"). For your convenience, Amendment No. 3 is marked to show changes from Amendment No. 2. The Initial Registration Statement, as amended by Amendment No. 1, Amendment No. 2, Amendment No. 3 and all future amendments, is referred to herein as the "*Registration Statement*."

Amendment No. 3 is being filed in response to comments received from the staff of the Commission (the "*Staff*") by letter dated November 1, 2010 with respect to Amendment No 2, and also to update the Company's financial information through the third quarter of 2010. The numbering of the paragraphs below corresponds to the numbering in the comment letter, the text of which we have incorporated into this response letter for your convenience.

Staff Comments and Company Responses

Exhibit 5.1

1. Please note that investors are entitled to rely on the legality opinion. Please have counsel revise the opinion to delete the reliance limitations in the last paragraph on page two.

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The Company and its counsel respectfully acknowledge the Staff's comment and have revised the form of legality opinion filed as Exhibit 5.1 to the Registration Statement to delete the reliance limitations in the last paragraph on page two. Please see the revised form of legality opinion which has been filed as Exhibit 5.1 to Amendment No. 3.

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The Company respectfully requests the Staff's assistance in completing the review of Amendment No. 3 as soon as possible. Please advise us if we can provide any further information or assistance to facilitate your review. Please direct any further comments or questions regarding Amendment No. 3 or this response letter to Teri O'Brien at (858) 458-3031 or Deyan Spiridonov at (858) 458-3044.

Sincerely,

/s/ Teri O'Brien Teri O'Brien for PAUL, HASTINGS, JANOFSKY & WALKER LLP

Enclosures

cc: Patrick R. Gruber, Ph.D., Gevo, Inc.
Brett Lund, Esq., Gevo, Inc.
Mark Smith, Gevo, Inc.
David J. Goldschmidt, Skadden, Arps, Slate, Meagher & Flom LLP
Deyan Spiridonov, Paul, Hastings, Janofsky & Walker LLP