



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

July 18, 2011

Via E-mail

Nathan Ticatch  
President and Chief Executive Officer and Director  
PetroLogistics LP  
909 Fannin Street, Suite 2630  
Houston, TX 77010

**Re: PetroLogistics LP**  
**Registration Statement on Form S-1**  
**Filed: June 21, 2011**  
**File No.: 333-175035**

Dear Mr. Ticatch:

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 of Regulation C under the Securities Act of 1933, 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. In addition, please confirm that you will not circulate copies of 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. We encourage you to file all exhibits with your next amendment or otherwise furnish us drafts of your legal and tax opinions and underwriting agreement. Please understand that we will need adequate time to review these materials before effectiveness.
  5. Please monitor your requirement to provide updated financial information. Refer to Rule 3-12 of Regulation S-X.
  6. Please provide a currently dated, signed auditors' consent with your next amendment.

Market and Industry Data, page iv

7. Please confirm if true that, other than the report prepared by Chemical Data, L.P., whose consent has been filed as Exhibit 23.4 to the registration statement, all other market and industry data represents information that is generally available to the public and was not prepared for you for use in the registration statement.
8. We note your disclosure in the last sentence at the end of the paragraph with respect to investor reliance on the third-party data you have included in the prospectus. Clarify the extent to which you are cautioning investors in their evaluation of this data. More clearly express the company's views regarding the reliability of the data and statistics in your registration statement. If you believe that the industry and market data requires a disclaimer such as that presented here, tell us why you believe 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. Alternatively, please remove this sentence.

Prospectus Summary, page 1

General

9. The information in your summary is rather detailed, lengthy and repetitive of information found elsewhere in the prospectus. The summary section is intended to provide investors with a clear, concise and coherent snapshot of the most significant aspects of the partnership offering. Please consider revising the summary to more concisely summarize the most important aspects of the offering, which are explained in detail in the later sections of the prospectus. We note, for example, that substantially identical information appears to have been included in the Business section starting on page 85 of the filing. For guidance, please see Section II.A.3.c. of SEC Release No.33-6900 (June 17, 1991).
10. We note your statements throughout the prospectus that you own and operate the “world’s largest propate dehydrogenation (“PDH”) facility.” For this and similar statements throughout the prospectus, please revise your disclosure to disclose the measure against which you are making these statements (e.g., by production capacity).

Our Business, page 1

11. At the end of the first page, please identify or provide examples of the “other industry experts” referenced in your disclosure. Please also tell us supplementally what information you are relying on as the basis for this reference.

Organizational Structure, page 8

12. Please revise your disclosure to include a chart that depicts your structure before giving effect to the offering and related transactions. This may also help provide additional context for the discussion of the various transactions under The Transactions” on page 41.

The Offering, page 10

13. We note disclosure on pages 13 and 43 that you may sell fewer or more common units than the number set forth on the cover page of the prospectus. This implies that the offering may not be a firm commitment and that the prospectus may not accurately disclose the size of the offering. Please note that at the time of effectiveness your prospectus must set forth the number of units you intend to sell, and that any changes in the size of the offering after effectiveness must be reflected in a prospectus supplement or post-effective amendment, as required by Rule 430A, or in a new registration statement for additional units. Please confirm your understanding. If you keep the disclosure on page 13 in your filing please

also include an explanation of your filing obligations in the event of a change in the size of the offering.

Use of Proceeds, page 10

14. In the second paragraph you discuss the additional net proceeds you will raise if the underwriters exercise the overallotment option in full. Since you will issue your sponsors and others the shares subject to any unexercised portion of the overallotment option, please explain whether the amount of proceeds that you raise will be impacted at all by the exercise of the overallotment option by the underwriters. In this regard, please clarify what consideration, if any, the sponsors and others will pay for the overallotment shares that are not purchased by the underwriters.

Call Right, page 13

15. In light of the general partner's right to call and purchase not less than all of the common units held by the public unitholders, please advise us whether you will comply with the tender offer rules and file a Schedule TO when or if this right is exercised. If you believe an exemption from the tender offer rules would be available, please explain why.

Material U.S. Federal Income Tax Consequences, page 13

16. Please revise your disclosure to include a brief discussion of the material tax consequences so that you are not solely cross-referencing to the more detailed discussion set forth on page 144. See Section II.A.3.c. of SEC Release No. 33-6900. Please also disclose the identity of counsel who is rendering the opinion at each place in the prospectus where you discuss the tax consequences of investing in your securities and what counsel's opinion is.

Summary Historical and Pro Forma

17. Please clarify, in the second bullet, whether this transaction is the acquisition of all of the overallotment shares by the sponsors and others after the underwriters' failure to exercise the overallotment option, or whether it reflects the purchase by the sponsors and others of new shares in the offering pursuant to the Directed Unit Program. Please also disclose what consideration, if any, you are assuming that the sponsors and others would be paying for the shares under each scenario.

Risk Factors, page 17

18. We note throughout your document that you state the production from shale gas formations has contributed to the improved propane-to-propylene spread. Please

consider adding a risk factor to address the following risks associated with the shale gas industry, and how these factors could impact the propane-to-propylene spread and your overall business:

- It appears several states that encompass the major shale gas formations are contemplating legislative restrictions on drilling and overall development of these hydrocarbons. In addition, it appears some states have concerns regarding the chemicals used in hydraulic fracturing drilling techniques and the overall consequences of fractured gas formations effects to ground water supplies. Please consider the risks to your business associated with legislative restrictions to shale gas development that are currently being contemplated.
- The productive lives of shale gas wells are inherently uncertain and the development and production of these formations is at an early stage. It appears from certain industry reports that the production decline curves associated with shale gas wells may be steeper than originally anticipated. Given the current market pricing environment for natural gas, the overall economics of shale gas development and production may be negatively impacted as a result of the need for additional drilling of new wells and re-work of existing shale gas wells in order to maintain current production levels. Please consider whether this represents a risk to your business and the propane-to-propylene spread.

Cost reimbursements due to our general partner and its affiliates will reduce cash available for distribution to you, page 32

19. Please disclose here or in a separate risk factor whether there are any limits on the amount or types of expenses for which your general partner and its affiliates may be reimbursed. Please also include such disclosure in other relevant sections of the prospectus where this matter is discussed.

Limited partners may not have limited liability if a court finds that unitholder action constitutes control of our business, page 32

20. To the extent that Texas law differs significantly from Delaware law, please identify any material differences in your disclosure to better inform the investors of the likelihood that they may not have limited liability as limited partners.

The Transactions and Our Structure and Organization, page 41

Management, page 41

21. Please include in an appropriate section of the prospectus a summary tabular presentation, itemizing by category and specifying dollar amounts where possible, of all compensation, fees, profits, and other benefits (including reimbursement for out of pocket expenses) which the general partner and its affiliates may earn or receive in connection with the offering or operation of the partnership. Refer to Securities Act Release No. 33-6900 and Item 4.A. of Industry Guide 5.

Use of Proceeds, page 43

22. With a view towards disclosure, please explain to us how the amount of distribution to your executive officers and “certain” of your employees will be determined.

Dilution, page 45

23. Please explain where in the calculation of dilution, and in the comparative table on page 46, you are including any shares to be issued to your sponsors and others if the underwriters do not exercise the overallotment option.

Our Cash Distribution Policy and Restrictions on Distributions, page 47

Limitations on Cash Distributions..., page 47

24. Please revise your disclosure in the second bullet point to provide more context to your generalized statement that your cash flows will be less stable than the cash flows of “most publicly traded partnerships.”

Forecasted Available Cash, page 48

25. With respect to your page 49 disclosure, please consolidate your statements to remove information which appears redundant and repetitive. For example, the disclosure both at the beginning and at the end of page 49 seems to disclaim any responsibility by your auditor related to the preparation of the forecasted cash flows.
26. We note your statement in the first paragraph that the prospective information is, to the best of management’s knowledge and belief, the expected course of action and your expected future financial performance. However, the next paragraph says that the available cash discussed in the forecast should not be viewed as management’s projection of the actual available cash that you will generate.

Please explain the basis for this distinction and how investors should use this information.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Three Months Ended March 31, 2011 Compared to Three Months Ended March 31, 2010, page 62

27. We note a component of your cost of sales includes a line item described as a "Change in inventory." Please clarify for us and in your document the nature of this adjustment including how it arises. We note from your accounting policy disclosures that you use a weighted-average method to value your inventories.

Liquidity and Capital Resources, page 67

Existing Credit Facility, page 67

New Credit Facilities, page 68

28. We note that you have not filed any of your credit agreements as exhibits to your registration statement. Please file complete copies of your existing credit agreement together with a form of the new credit agreement as exhibits with your next amendment. Please confirm that the "form of" agreement that you plan to file will be consistent with Instruction 1 to Item 601 of Regulation S-K, and that any "form of" agreement that deviates from the final agreement in any other way will be re-filed accordingly. Otherwise, please tell us how you intend to comply with the requirements of Item 601(b)(10) of Regulation S-K with respect to the filing of these material contracts.

Capital Spending, page 69

29. We note that on June 27, 2011, the Oil & Gas Financial Reporting Journal reported that you may develop an ethylene plant in West Virginia for Marcellus Shale gas. With a view towards disclosure, please tell us whether you anticipate this project to commence within the next 12 months, when the new facility will be placed in service, how you believe it will impact your operations, how you will fund this project, and what its projected costs will be.

Industry Overview, page 72

International Propylene Markets, page 80

30. Please revise your disclosure to identify the information source(s) serving as basis for your international market disclosure. If this information is based upon

management's belief, please indicate that this is the case. If the information is based upon other sources, please provide us supplementally copies of these sources.

The Propane-to-Propylene Spread, page 83

31. Based on your disclosure here, please consider revising "The propylene business is, and propylene prices are, cyclical..." risk factor disclosure on page 19, or add a separate risk factor to address the impact that the volatility of the gas prices may have on the propane-to-propylene spread.

Business, page 85

General

32. Please ensure that your disclosure in this section addresses all relevant Item 101(c)(1) requirements. For example, we note that Item 101(c)(1)(v), (vi) and (vii) disclosures related to the seasonality of the business, working capital practices, and dependency on certain customers appear to be missing. If material to an understanding of your business, please discuss these items or include a cross-reference to the other sections of the filing where you address these items.

Our Products and Customers, page 85

Contracted Propylene Sales, page 85

33. Briefly disclose each of Dow's, Total's and INEOS' rights pursuant to the terms of their respective sales contracts to terminate their agreements with the company.
34. Please tell us what consideration you have given to filing as exhibits to the registration statement the agreements with customers upon which your business appears to be substantially dependent. In this regard we note that your sales to Dow and Total accounted for 44% and 36% of your total sales, respectively. Refer to Item 601(b)(10)(ii)(B) of Regulation S-K.

Our Sponsors, page 90

35. Please expand your disclosure related to the sponsor's prior performance and track record by providing, among other things, objective support for statements such as Lindsay Goldberg has "successfully invested over \$5.6 billion of equity capital in 27 portfolio companies." For guidance, please refer to Item 8 of Industry Guide 5.



Our PDH Technology, page 92

36. Please file the license agreement with CB&I Lummus as an exhibit with your next amendment.

Feedstock Supply, page 93

37. Please file the agreement with Enterprise as an exhibit with your next amendment.

Competition, page 94

38. Please explain how Dow's plans to build its own on-purpose PDH facility may impact your relationship with your largest customer. To the extent necessary, please revise "We currently derive substantially all of our sales from three customers..." risk factor on page 23 accordingly.

Employees, page 98

39. Based on your disclosure that the general partner "will" employ approximately 90 employees, please clarify whether you currently employ any employees in the operation of your business.

Management, page 99

Board Committees, page 99

40. Please identify the individuals who will serve on your audit and conflicts committees.

Compensation Discussion and Analysis, page 103

Elements of Compensation, page 105

Salary, page 105

41. Please revise your disclosure to clarify the factors considered by the board of managers of PL Manufacturing in adjusting the annual base salaries. Your reference to "factors discussed above" in the second paragraph is unclear.

Discretionary Bonus Awards, page 106

42. Please disclose how the board determined the size of the bonus awards based on the factors it considered. If a named executive officer's individual performance is measured against pre-established personal goals or individual objectives, please

disclose the objectives and describe how performance or non-performance impacted the board's decision to award the discretionary bonus awards. Please note that to the extent that the board's decisions regarding a named executive officer's individual performance were based upon a subjective evaluation, please ensure to disclose each executive officer's personal objectives by also identifying the specific contributions made by each executive and contextualize those achievements for purposes of demonstrating how they resulted in specific compensation decisions. Although quantitative targets for subjective or qualitative assessments may not be required, you should provide insight into how qualitative inputs are translated into objective pay determinations.

Employment Agreements, page 108

43. Please file Ms. Spurlin's employment agreement as an exhibit with your next amendment.

Summary Compensation, page 109

44. We note your "Executive Compensation" disclosure on page 108. We also note that based on your footnote (2) disclosure, it appears that you are reporting the profit interest awards as equity compensation. Please revise the "Profits Interest Awards" heading on the summary compensation table to reflect the tabular format of Item 402(c)(1) of Regulation S-K, and, to the extent necessary, include relevant footnote disclosure to reflect how disclosure of profit interest awards fits within the Item 402(c)(2) disclosure requirements.

Certain Relationships and Related Party Transactions

45. Please file the contribution agreement, the services agreement with PL Midstream and the registration rights agreement as exhibits with your next amendment.
46. Please revise your disclosure to fully comply with the requirements of Items 404(a) and 404(c)(1) of Regulation S-K. In particular, your disclosure should discuss the approximate dollar value of the amount of the related party transaction and disclose the names of promoters, the nature and amount of anything of value received or to be received by each promoter. In addition, please ensure that your disclosure here is consistent with the disclosure in Note 11, page F-29 of your financial statements.

Material U.S. Federal Income Tax Consequences, page 144

47. Please include relevant tax disclosure related to the sale and disposition of the partnership units, as well as liquidation and termination of the partnership. Refer to Item 12 of Industry Guide 5.

Taxation of the Partnership, page 144

48. Since the disclosure in the prospectus represents counsel's opinion, please remove the last paragraph on page 145 as it is inappropriate to assume any legal conclusion underlying counsel's opinion.

Uniformity of Units, page 154

49. It is not readily apparent why counsel is unable to opine as to the validity of the general partner's taking a position in filing the tax returns that preserve the uniformity of the units. Please explain.

Underwriters, page 160

50. With a view towards disclosure, please tell us whether the sale of the common units, not purchased by the underwriters as part of their overallotment options, to your sponsors, their affiliates, your executive officers and your employees will be conducted pursuant to a registered offering or an exemption from registration.
51. We note your disclosure on top of page 162, where you state, among other things that the underwriters' activities may create a short position in the common units for their own account. Please expand your disclosure to describe (i) what short sales are, (ii) how the underwriters will determine the method for closing out short sale positions, (iii) whether the underwriters' activities may create a "naked short position" and what the underwriters' plans are to close these naked short positions out, and (iv) what the potential effect of the underwriters' short sales and underwriters' transactions to cover these short sales may be.

Financial Statements

Balance Sheets, page F-11

52. We note from your balance sheets that you present a line item for deferred revenue. Please provide an accounting policy disclosure for these revenues and include an explanation in your document regarding why revenue recognition may be deferred.

Note 2 - Summary of Significant Accounting Policies

Cost of Sales, page F-16

53. We note your accounting policy disclosure which indicates you make chemical grade propylene and you are expecting to make polymer grade propylene following modifications to your plant. If the costs of such modifications are

expected to be material, please expand your liquidity disclosures to address the cost and source of funds for your modification plans. In addition, to the extent the economics of polymer grade propylene are different than chemical grade propylene; please expand your disclosures to explain how this will impact your business.

54. Other than to state that your cost of sales is calculated on a weighted-average cost basis, your accounting policy disclosure does not address the nature of the components of your costs of sales. Please expand your policy disclosure to provide investors with an understanding of the various types of costs that are reflected in your cost of sales.

Note 3 – Inventory, page F-20

55. We note you present a substantial amount of finished goods inventory. Based on the illustration you provide on page 92, it appears your finished goods largely leave your manufacturing facility via pipeline. Please explain to us in your document, where your finished products reside. It is unclear if these amounts represent pipeline fill or if they reside entirely at storage facilities or both. We note on page F-31, that you have a propylene storage contract. Please expand the disclosures in your document to better explain the locations of your finished goods inventory including the key terms of your storage contract and also where and when title typically passes to your customers.

Note 4 – Property Plant and Equipment, page F-20

56. We note you have disclosed a useful life for Catalysts of “3 to 25” years. Please tell us what portion of your catalyst load, if any, has an expected useful life greater than three years and is being amortized accordingly. Otherwise, please modify your amortization period disclosures.

Exhibits

57. Please tell us what consideration you have given to filing the storage agreement as an exhibit to the registrations statement. In this regard, we note your “Purchase Obligations” disclosure in Note 13, page F-31 to your financial statements. See Item 601(b)(10) of Regulation S-K.

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 Kevin Stertz, Staff Accountant, at (202) 551-3723 or John Cash, Accounting Branch Chief, at (202) 551-3768 if you have questions regarding comments on the financial statements and related matters. Please contact Era Anagnosti, Staff Attorney, at (202) 551-3369 or me at (202) 551-3760 with any other questions.

Sincerely,

/s/ Pamela A. Long

Pamela A. Long  
Assistant Director

cc: Via E-mail  
Mike Rosenwasser, Esq.  
James J. Fox, Esq.  
Vinson & Elkins L.L.P.