

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

Mail Stop 3561

May 12, 2011

Via U.S. Mail

Mr. Gregory P. Stemm, Chief Executive Officer Odyssey Marine Exploration, Inc. 5215 W. Laurel Street Tampa, Florida 33607

Re: Odyssey Marine Exploration, Inc.

Form 10-K for the year ended December 31, 2010

Filed February 28, 2011 File No. 001-31895

Dear Mr. Stemm:

We have reviewed your filings and have the following comments. Unless otherwise indicated, we think you should revise your document in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Please respond to confirm that such comments will be complied with, or, if certain of the comments are deemed inappropriate, advise the staff of your reason. Your response should be submitted in electronic form, under the label "corresp" with a copy to the staff. Please respond within ten (10) business days.

Annual Report on Form 10-K for the year ended December 31, 2010

Item 1A. Risk Factors, page 12

1. We note your disclosure in the first paragraph of this section of "[s]ome of these risks are described below, and should be carefully considered in evaluating Odyssey or any investment decision relating to our securities. This section does not describe all risks applicable to Odyssey, its industry or its business. It is intended only as a summary of the principal risks. However, additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations." All material risks should be discussed in this section. In future filings, please revise this paragraph to clarify that you have discussed all known material risks. Please also delete the sixth sentence of the first paragraph in its entirety. If risks are not deemed material, please do not reference them.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 18

Liquidity and Capital Resources, page 24

Quantitative and Qualitative Disclosures about Market Risk, page 26

2. We note from the company's response letter dated June 19, 2009 to our prior comment 3 that additional disclosures concerning interest risk in accordance with Item 305 of Regulation S-K would be provided in future filings. However, we continue to note that the company has not provided the required disclosures with respect to the interest rate risk posed by the company's \$8 million of variable rate debt. As previously requested, please revise future filings to include a discussion of your exposure to interest rate risk related to interest rates on your long-term debt in one of the three disclosure alternatives set forth in Item 305(a) of Regulation S-K.

Item 12. Security Ownership of Certain Beneficial Owners, page 27

3. We note that the required information to be disclosed pursuant to Item 12 was to be incorporated by reference from your definitive proxy statement but we were unable to locate the disclosure required by Item 201(d) of Regulation S-K in your definitive proxy statement. Please tell us why this information was not included in your definitive proxy statement. Also, in future filings, please ensure that the required information to be disclosed pursuant to Item 12 is appropriately incorporated by reference.

Financial Statements, page 29

Notes to the Consolidated Financial Statements, page 38

Note A – Organization and Summary of Significant Accounting Policies, page 38

Revenue Recognition and Accounts Receivable, page 38

4. Please tell us and revise future filings to disclose in detail how your revenue recognition policy for expedition revenues satisfies the criteria for revenue recognition outlined in SAB Topic 13.A.1. Your response and your revised disclosures should specifically address the how the company recognizes revenue (e.g. the milestone method, after all services have been performed, etc.) and include how any contractual cancellation clauses affect the company's revenue recognition policy. We may have further comment upon receipt of your response.

Earnings Per Share, page 39

5. We note from the disclosure in the fourth paragraph on page 39 that the company uses the reverse treasury stock method for its warrants when calculating earnings per share. Given that ASC 260-10-45-35 recommends the use of the reverse treasury stock method for put options or options that require the repurchase of the company's own stock, it is unclear why the company uses this method for warrants. Please advise us of the company's basis or rationale for the treatment being used for these warrants.

Note E – Accounts Receivable, page 43

6. We note from the disclosure in Note E that the \$2 million receivable from Dorado Ocean Resources, Ltd. ("DOR") not reserved for could be offset against the subscription payable to DOR of \$1,998,800. We further note from Note J that the subscription payable can be paid either with cash or services rendered to DOR. In this regard, please tell us and revise the notes to your financial statements in future filings to explain whether the company has a contractual right of offset for the receivable from DOR against the subscription payable. If the company does not have a contractual right of offset, please tell us why the remaining \$2 million receivable from DOR was not reserved for at December 31, 2010 given the uncertainty which exists with respect to its collectability. We may have further comment upon receipt of your response.

Note J – Investment in Unconsolidated Entity, page 44

7. We note from the discussion in the first paragraph on page 45 that the company has recognized losses related to its DOR investment up to the amount of its investment which totaled \$2,447,471 at December 31, 2010. Please tell us, and revise future filings to disclose whether the company has any requirements to provide additional financial support to DOR. If so, please explain why you believe it is appropriate to limit your recognition of DOR's losses to the amount of your recorded investment.

Note N – Deferred Revenue, page 48

8. We note from the disclosure included in Note N that revenue from the sale of research is recognized upon execution of the contract and the receipt of the related cash payment from the customer. Given that research typically represents a service to be performed, please tell us why the company believes such revenue has been earned upon execution of the contract. We may have further comment upon receipt of your response.

Note R – Stockholders' Equity/(Deficit), page 51

9. We note the disclosures included in Note R indicating that the company issued shares of its common stock during 2010 in a number of transactions in which the shares were issued in exchange for shares of the company's Series D Convertible Preferred Stock or Series E Convertible Preferred Stock. Please tell us and revise future filings to indicate whether these conversions of Series D and Series E Preferred shares into common shares was done in accordance with the original terms of the Series D and Series E Preferred shares. If not, please explain how the company's accounting for these conversions complied with the guidance outlined in ASC 470-20-40-16, as applicable.

Definitive Proxy Statement on Schedule 14A

Components and Results of the 2010 Compensation Plan, page 17

10. We note your disclosure in the Setting Executive Compensation and Market Compensation Assessment section on page 16 that you use competitive market data of the identified peer group companies to make compensation decisions related to your executive officers' compensation. In future filings, please revise to discuss in greater detail how you use competitive market data and how that competitive market data affects your compensation decisions. Additionally, where you target elements of compensation to a range within the competitive market data, such as below the midpoint range for base salary and at the higher end of the range for annual incentive compensation and long-term incentives as disclosed in the first paragraph of the Base salary section on page 17, identify the element of compensation, the range and explain more specifically where your compensation fell within that range. Refer to Item 402(b)(2)(xiv) of Regulation S-K. In this regard, we note that you provided such information with respect to base salary but not with respect to your other elements of compensation.

Annual Incentive Compensation and Targets, page 17

11. We note your disclosure that "key performance indicators" are used to determine the amount of annual incentive compensation for your executive officers. We also note your disclosure of target incentive percentile ranges for each key performance indicator, the percentile achievement of certain key performance indicators, and the overall percentile achievement of all key performance indicators. In future filings, please revise to quantify

all performance goals or targets and the goals and targets actually achieved in order for your executive officers to earn their annual incentive compensation. To the extent you believe that disclosure of the goals or targets is not required because it would result in competitive harm such that the goals or targets could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide a detailed explanation for such conclusion on a supplemental basis.

Summary Compensation Table, page 20

12. We note that you have disclosed in the "Bonus" column rather than the "Non-Equity Incentive Plan Compensation" column amounts earned related to annual incentive compensation, even though you state that the annual incentive bonuses were determined on the basis of key performance indicators related to your 2010 performance. Please advise regarding your basis for disclosing these amounts in the "Bonus" column. For guidance, refer to Question 119.02 of the Regulation S-K Compliance and Disclosure Interpretations. Alternatively, in future filings, please disclose these amounts in the "Non-Equity Incentive Plan Compensation" column and, to the extent amounts are paid, in the exercise of positive discretion, over and above the amounts earned due to the achievement of any performance measures, disclose those amounts in the "Bonus" column. In future filings, please also include disclosure, as applicable, in the "Estimated Future Payouts Under Non-Equity Incentive Plan Awards" column of the "Grants of Plan-Based Awards" table.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Heather Clark at 202-551-3624 or me at 202-551-3813 if you have questions regarding comments on the financial statements and related matters. Please contact Donald Field at 202-551-3680 with any other questions.

Sincerely,

Linda Cvrkel Branch Chief