



DIVISION OF  
CORPORATION FINANCE

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

January 6, 2011

Mr. Fernando Ramírez Mazarredo  
Chief Financial Officer  
Paseo de la Castellana 278-280  
28046 Madrid, Spain

**Re: Repsol YPF, S.A.**  
**Form 20-F for Fiscal Year Ended December 31, 2009**  
**Filed June 29, 2010**  
**File No. 1-10220**  
**Response letters dated November 3 and 12, 2010**

Dear Mr. Ramírez Mazarredo:

We have reviewed your filing and response letters 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 within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Form 20-F for Fiscal Year Ended December 31, 2009

General

Iran, p. 36

1. We note the disclosure that in May 2010 you notified NIOC and Shell of your decision to discontinue your participation in the Persian LNG project. We note also the representation in your letter to the staff dated November 12, 2010, that during the three years ended December 31, 2009, and the nine months ended September 30, 2010, you paid approximately 3.9 billion euros and 1.2 billion euros, respectively, to entities controlled by the Iranian government for the purchase of Iranian crude oil, petroleum and petrochemical products. It appears to the staff that you should include information regarding these purchases in future reports to make clear to investors that, notwithstanding the absence of any operations in Iran, you pay sizable amounts to Iranian government-controlled entities.

2. We note your response to prior comment three from our letter dated September 29, 2010. Please clarify what is meant when you state that “Other environmental liabilities different from accidental seepage, pollution and contamination are expressly excluded,” and provide examples of the exclusions you are referring to with this statement.
3. In addition, we note your response to prior comment three from our letter dated September 29, 2010 and the proposed risk factor disclosure regarding insurance coverage. We note your response that you remain liable for cleaning up and containing pollution or contamination originated below the surface, and for costs and expenses incurred in control-of well incidents. Please include risk factor discussion of this.
4. In your response to prior comment three you state that, under YPF’s third party liability coverage, “Certain types of incidents such as seepage, pollution and contamination directly arising from the drilling of wells are expressly excluded from the coverage.” Clarify whether YPF has any insurance available for control-of-well incidents (i.e., blowouts), under YPF’s policies or Repsol’s policies. Tell us if any resources have been set aside to cover damages to third parties resulting from blowouts.
5. We note your response to prior comment four from our letter dated September 29, 2010.
  - Please quantify and explain your level of commitment, in regards to any financial obligation you may have, to the mutual aid consortia you have listed in your response.
  - Further explain, and quantify if possible, the equipment, personnel and financial resources available to you in the event of a major spill from each of the mutual aid consortia.

Legal Proceedings, page 139

6. In a press release posted by the Federation of Former Employees of YPF (“Federation”) on its website at <http://feaypf.com/en-press.htm>, the Federation claims that “YPF S.A. and Repsol YPF unlawfully sold shares owned by the former employees of YPF S.A. on the New York Stock Exchange 1997 and 2007.” Tell us what consideration you gave to including a discussion of the claims filed by these former employees in Argentine courts and any potential liabilities related to these claims.
7. It has also come to our attention that, in 2007, the Argentine Federal Court of Appeals ordered a criminal investigation into allegations of fraud relating to YPF stock offerings in 1997 and 2007. The officials from Repsol YPF S.A. were identified as subjects of this investigation. Tell us what consideration you gave in regards to disclosure related to this investigation.

Notes to the 2009 Consolidated Financial Statements

Note (2) Regulatory Framework, page F-13

Minimum Safety Stock, page F-15

8. We note your response to prior comment seven. Please clarify for us the circumstances under which you would sell your minimum safety stock and confirm you will revise your disclosures in future filings to more clearly describe the nature and amounts of safety stock you classify as inventories in your consolidated balance sheets.

Note (25) Tax Matters, F-90

Income tax expense for accounting purposes, page F-92

9. We note from your response to prior comment nine that you expect to continue receiving tax credits in respect of these deductions in the future, although it is difficult to predict the amount of such future credits. Item 303(a)(3)(ii) of Regulation S-K requires you to describe any known trends or uncertainties that have had or that you reasonably expect will have a material favorable or unfavorable impact on income from continuing operations. Given the significance of the tax credits and the uncertainty surrounding the timing and amount of such credits, please expand your disclosure within management's discussion and analysis to provide further information regarding the tax credits received for the years presented, and your expectations regarding tax credits in the future.
10. Item 303(a)(3) of Regulation S-K also requires you to "describe any other significant components of revenues or expenses that, in the registrant's judgment, should be described in order to understand the registrant's results of operations." Please tell us in further detail why you believe the disclosures currently provided in your Form 20-F provides a reader with sufficient information regarding the significant components of your taxes for the purposes of complying with Item 303(a)(3) of Regulation S-K.

Exhibit 99.1, 99.2, 99.3, 99.4 and 99.5

11. We note your response to prior comments 12, 13, 14, 15 and 16 from our letter dated September 29, 2010. Please file revised reports in an amendment.

Exhibit 99.5

12. In each instance where you refer to "generally accepted" procedures or principles, include a reference to the authority or source that acknowledges such procedures or principles as "generally accepted." Obtain necessary revisions in the revised report.

Current Report on Form 6-K filed December 10, 2010

13. YPF states that “The presence of 4.5 TCF of non-conventional gas was verified.” However, you do not define whether these volumes represent proved reserves or some less certain category of resource. Please advise. If these volumes do not qualify for disclosure in your filings with the SEC, please provide cautionary language so advising investors.

Engineering Comments

Form 20-F for Fiscal Year Ended December 31, 2009

Information on Repsol YPF, page 9

Changes in Repsol YPF’s proved undeveloped reserves during 2009, page 18

14. Your response to our prior comment 21, in part, states “We further advise the Staff that we believe that these reserves constitute “proved undeveloped reserves” in accordance with the guidance referred to by the Staff for the reasons indicated below:” and “Final investment decisions in respect of these proved undeveloped reserves are adopted on an ongoing basis for the reserves that are expected to be developed in the near term.” The answer to Question 108.01 of Compliance and Disclosure Interpretations states “If an investment decision has been made to develop only a portion of the primary, secondary or tertiary reserves, the remainder of the reserves would not be considered to be proved reserves until such time as management has made an investment decision to develop those additional reserves...”. The answer to Question 131.04 states “The mere intent to develop, without more, does not constitute “adoption” of a development plan and therefore would not, in and of itself, justify recognition of reserves. Rather, adoption requires a final investment decision.” It appears the requirement for a final investment decision is not fulfilled for all our Trinidad and Tobago PUD reserves. Please clarify the reasons that you believe these volumes comply with this requirement. Address the sunk capital costs that would be lost due to early termination of this operation. We may have additional comments.

Operations, page 21

Peru, page 32

15. Your response to our prior comment 25 is “We supplementally advise the Staff that the Perla 1X drill represents the largest gas discovery in the history of Repsol YPF based on internal estimates of the resources available in the field.” Please explain to us your method(s) in determining the reservoir parameters and ultimate liquid yield. Address how you identified productive reservoir volume and whether you flow tested this well.

Mr. Fernando Ramírez Mazarredo  
Repsol YPF, S.A.  
January 6, 2011  
Page 5

Supplementary Information on Oil and Gas Exploration and Production Activities (Unaudited Information), Page F-189

Standardized measure of discounted future net cash flows and changes therein relating to proved oil and gas reserves, page F-197

16. We note the average adjusted product prices by geographic area included in your response to our prior comment 27. Please provide us with your calculations by area of the future cash inflows line items for the 2009 standardized measure. Address the exchange rate and MMBTU/MCFG factor you used.

Closing Comments

You may contact Mark Wojciechowski at (202) 551-3759 or, in his absence, Mark Shannon, Branch Chief, at (202) 551-3299 if you have questions regarding comments on the financial statements and related matters. You may contact Ronald Winfrey, Petroleum Engineer, at (202) 551-3704 with any questions about engineering comments. Please contact Parker Morrill at (202) 551-3696 or, in his absence, Anne Nguyen Parker, Branch Chief, at (202) 551-3611 with any other questions.

Sincerely,

H. Roger Schwall  
Assistant Director