

Responses to CAP Comments on the 2013 Annual Drilling Plan and Mid-Zone Supplement

<u>Comment Letter</u>	<u>Page</u>
Culver City.....	1
RWQCB.....	17
John Kuechle.....	21
Yvonne Ellett.....	25



CAROL A. SCHWAB
City Attorney

OFFICE OF THE CITY ATTORNEY

CITY OF CULVER CITY

9770 CULVER BOULEVARD, CULVER CITY, CALIFORNIA 90232-0507

(310) 253-5660

FAX (310) 253-5664

October 1, 2012

VIA EMAIL

Richard Bruckner, Director
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

COMMENTS ON PXP'S 2013 DRILLING, REDRILLING, WELL ABANDONMENT, AND WELL PAD RESTORATION PLAN AND MID-ZONE SUPPLEMENT DATED AUGUST, 2013

Dear Mr. Bruckner:

The City of Culver City has reviewed the 2013 Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan (the "Drilling Plan") and the Drilling Plan Mid-Zone Supplement (the "Mid-Zone Supplement") submitted by PXP in August, 2012. Attached to this letter are the City's Comments on the 2013 Drilling Plan and Mid-Zone Supplement. For ease of reference, the comments follow the headings contained in each document.

Thank you for your review and consideration of our comments.

Sincerely,

CAROL A. SCHWAB
City Attorney
City of Culver City

Attachment: City of Culver City Comments on PXP's 2013 Drilling, Redrilling, Well Abandonment, And Well Pad Restoration Plan And Mid-Zone Supplement Dated August, 2013

Copy: Mayor Weissman and Members of the City Council, Culver City
John Nachbar, City Manager
Rena Rambara, County of Los Angeles
Karly Katona, Supervisor Mark Ridley-Thomas, LA County
Elaine Lemke, County Counsel, County of Los Angeles
David McNeill, Baldwin Hills Conservancy
Robert Garcia, The City Project
Damon Nagami, Natural Resources Defense Council
Lark Galloway Gilliam, Community Health Councils
Ken Kutcher, Community Health Councils/NRDC

CITY OF CULVER CITY

COMMENTS ON PXP'S 2013 DRILLING, REDRILLING, WELL ABANDONMENT, AND WELL PAD RESTORATION PLAN AND MID-ZONE SUPPLEMENT, DATED AUGUST, 2013

INTRODUCTION

Community Standards District

No comments.

Settlement Agreement

- The Drilling Plan should clarify that petitioners the City of Culver City, Community Health Councils, Inc., Natural Resources Defense Council, Mark Salkin, Citizens Coalition for a Safe Community and Concerned Citizens of South Central Los Angeles also entered into the Settlement Agreement. 1
- Plains Exploration and Production Company's ("PXP") October 10, 2011 request to the Director of Los Angeles Department of Regional Planning (the "Director") to allow for an increase in the number of wells that may be drilled or re-drilled and the Director's December 12, 2011 response, should be included as attachments to the Drilling Plan. 2
- The Drilling Plan acknowledges that Section 2 (Noise) of the Settlement Agreement "pertains directly to the preparation and implementation of the Annual Plan." However, Section 2 is not reproduced as a "relevant verbatim excerpt." Section 2 should also be included. 3

2013 PLAN

Plan Overview

- The Drilling Plan states that the Settlement Agreement defines deep zone wells as "wells that target the Nodular Shale and Sentous zones." Section 1.a. of the Settlement Agreement actually defines the deep zone as "the Nodular Shale and Sentous zones and any other zones approximately 8,000 feet or deeper." (emphasis added) The Drilling Plan should be revised to provide the correct definition. 4

- The Drilling Plan states that mid-zone wells are defined “as wells that target the Rubel, Moynier, Bradna and City of Inglewood zones.” Section 1.b. of the Settlement Agreement actually defines the mid-zone as “approximately 3,500 to 7,999 feet deep, presently identified as the Rubel, Moynier, Bradna and City of Inglewood zones.” (emphasis added) The Drilling Plan should be revised to provide the correct definition. 5

- The Drilling Plan states that shallow wells are defined “as wells that target all zones shallower than the Rubel zone, including the Vickers and Rindge zones.” Section 1.c. of the Settlement Agreement actually defines the shallow zone as wells where the “Bottom Hole is less than approximately 3,500 feet deep.” (emphasis added) The Settlement Agreement does not even reference the Vickers and Rindge zones. The Drilling Plan should be revised to provide the correct definition. 6

CSD Plan Requirements

i. The Maximum Number of Wells Proposed to be Drilled or Redrilled

- The Drilling Plan should clarify that under Section 4.d. of the Settlement Agreement the “18 Bonus Wells” that can be drilled must be located “outside the 800-foot zone.” 7

- The Drilling Plan states that “[t]hrough the locations and respective schedule reflect geologic targets based on the best geologic and reservoir data available, new well performance data, economic conditions, company plans and relocation of budgets may significantly alter the schedule and number of wells drilled in 2013.” The Drilling Plan should confirm that no more than the maximum of 47 wells proposed to be drilled in the Drilling Plan will be drilled in 2013, irrespective of changing conditions. 8

ii. Approximate Location of All Wells Proposed to be Drilled or Redrilled

No comments.

iii. The Production Zones Proposed for Development

- The Drilling Plan states that the “Vickers-Rindge production zone ranges in depth from 1,000 to 4,045 feet, and is considered a shallow depth zone for purposes of the Settlement Agreement.”
 - Contrary to the Drilling Plan, the Settlement Agreement does not characterize whether a well is considered a shallow well based solely on which production zone it is located in. Section 1.c. defines a shallow well as the “Drilling of wells where the Bottom Hole is less than approximately 3,500 feet deep.” Similarly, Section 1.b. of the Settlement Agreement defines the mid-zone as “approximately 3,500 to 7,999 feet deep.” To the extent that the Bottom Hole (i.e., the underground location at which drilling terminates) of any wells located in the Vickers-Rindge production zone are between 3,500 to 4,045 feet, they would be a mid-zone well under the Settlement Agreement.
 - For any proposed well where the Bottom Hole is between 3,500 to 4,045 feet, irrespective of the production zone, and the Top Hole (i.e., the surface location from where drilling is commenced) is closer than 800 feet to a Sensitive Developed Area, a Mid-Zone Supplement needs to be prepared for that well pursuant to Section 1.b. of the Settlement Agreement.
- The Drilling Plan states that the only well for which a Mid-Zone Supplement is required is Stocker 3468. However, a Mid-Zone Supplement is also required for LAI1 133RD2 and TVIC 275.
 - LAI 133RD2: According to Table 2 of the Drilling Plan, the Bottom Hole of this well will be 3,546 feet deep and the Top Hole is located within 800 feet of a sensitive developed area. Pursuant to Section 1.b. of the Settlement Agreement, a Mid-Zone Supplement is required for this well.
 - TVIC 275: According to Table 2 of the Drilling Plan, the Bottom Hole of this well will be 3,837 feet deep and the Top Hole is located within 800 feet of a sensitive developed area. Pursuant to Section 1.b. of the Settlement Agreement, a Mid-Zone Supplement is required for this well.

9

10

- If a proposed well is within 800 feet of a sensitive developed area, Table 2 should identify the sensitive area impacted or there should be another table that states which sensitive developed areas will be located within 800 feet of a well. 11

- The Drilling Plan should explain what the acronym “SHL” in Table 2 means. We assume it means “Surface Hole Location.” 12

iv. Approximate Location of All New Well Pads, Including Size and Dimensions

No comments.

v. Estimated Target Depth of All Proposed Wells and Their Estimated Bottom Hole Locations

No comments.

vi. Discussion of the Steps that Have Been Taken to Maximize Use of Existing Well Pads, Maximize Use of Redrilled Wells, and Maximize the Consolidation of Wells

- In Table 3, what does the title “Offset Idle Well(s)” mean? Are all wells listed in Table 3 offset idle wells? In Table 3, the acronyms “KOP” and “MD” should be defined. 13

- In the discussion of the criteria evaluated to identify the suitability of an idle well for a redrill candidate, the Drilling Plan states in criteria number 6:

“In some cases, it is more economically feasible to drill a new well rather than redrill an existing idle well. Idle wells with potential mechanical integrity issues could experience problems during the redrilling process, rendering the well uneconomical or dramatically increasing the drilling time associated with the well.” 14

- The Drilling Plan should explain/elaborate on what is meant by “rendering the well uneconomical” and “dramatically increasing the drilling time.”

- In the discussion of the criteria evaluated to identify the suitability of an idle well for a redrill candidate, the Drilling Plan states in criteria number 7: 15

“The path or route of the well to be drilled from the idle well candidate must navigate around existing production and injection wells. It may be technically or economically unfeasible to reach the target location if these obstructions cannot be avoided.”

- The Drilling Plan should explain/elaborate on what is meant by “economically unfeasible.” For example, what criteria did PXP use to determine that something is economically infeasible?

vii. Location of All Proposed Well Abandonments, if known, in accordance with DOGGR Integrity Testing Program of Idle Wells

- The following discussion in the Drilling Plan is unclear:

“Table 5 identifies that 18 ‘Bonus wells’ have been generated from inception of the CSD to June 30, 2012 to apply towards future drilling activities. Five Bonus Wells were used in the 2011 Drilling Plan Year; PXP needs to request four bonus well credits from the County; leaving eleven Bonus Well credits to apply towards future drilling activities.”

16

- If there were only eighteen bonus wells earned, and PXP has used five and will be requesting four, that only leaves nine Bonus Well credits to apply towards future drilling, not eleven as stated in the Drilling Plan.

viii. Location of All Well Pads Proposed to be Abandoned and Restored

- The Drilling Plan states that the third criteria for well pad abandonment is that “the pad would not be useful in the future for potential new wells.” What time period is meant by “in the future?” For example, is it within one year, five years, etc.?

17

ix. A Proposed Schedule and Phasing of the Drilling, Redrilling, Well Abandonment, Well Pad Abandonment and Restoration Activities

- Although to some extent the schedule is subject to the timing of issuance of permits and other approvals, the community should still be informed of the schedule for drilling or redrilling, well abandonment and restoration activities, for each well, as soon as that schedule is determined. PXP should also provide a rough timeline as to when it anticipates seeking approvals for drilling new wells, redrilling, well abandonment, well pad abandonment and restoration activities and the phasing of such approvals. The Drilling Plan needs to provide more information as to when these activities will take place.

18

x. A Discussion of the Latest Equipment and Techniques that are Proposed for Use as Part of the Drilling and Redrilling Program to Reduce Environmental Impacts

- The Drilling Plan's discussion of electric drilling rigs makes it seem that PXP will never consider them feasible. The Drilling Plan should discuss under what circumstances use of electric drill rigs would be considered feasible.

19

- The Drilling Plan's discussion of Diesel - Electric Drilling Rigs states "Due to the larger location required to accommodate these types of rigs and the taller masts associated with the rig, PXP believes the use of this type of technology would create more, not less, undesirable impacts on the surrounding community...the use of these rigs do not pose a measurable air quality benefit as opposed to the rig PXP currently uses given the fact that diesel engines are still integral to operation."

- The Drilling Plan needs more of a discussion of why these conclusions were reached.

20

- What is considered a "measurable air quality benefit?"

- Did PXP conduct any assessment to determine what the air quality benefit would be from using the diesel-electric drilling rigs?

- How was it determined that it would not create a measurable air quality benefit?

- With respect to the use of a natural gas-electric drilling rig, the Drilling Plan states that "[a]ir emissions benefits gained by using the natural gas - electric rig are negligible as compared to using the conventional rigs when the CSD mandated mitigation and control technologies are implemented."

21

- What is considered a "negligible" air emissions benefit?

- Did PXP conduct any assessment to determine the air emissions benefit from using the natural gas - electric drilling rig?

- With respect to the use of a natural gas-electric drilling rig, the Drilling Plan states that "PXP believes at this time that use of a natural gas - electric drilling rig is not feasible or advisable for use in the shallow Vickers Rindge development program which comprises the majority of the wells proposed for the 2013 drilling program."

22

- Did PXP consider the feasibility of the use of a natural gas-electric drilling rig for the other areas?
- Not all of the wells proposed to be drilled in the Vickers Rindge area are considered in the “shallow zone” as defined by Section 1.c. of the Settlement Agreement.
- Section 6 of the Settlement Agreement requires the Drilling Plan to discuss the use of natural gas drilling rigs for all operations. The Drilling Plan appears to limit its discussion to the use of the natural gas drilling rig for just the operations in the shallow zone.

22 con't

xi. A Topographic Vertical Profile Showing Proposed Location of New Wells that Reflects Local Terrain Conditions and that Addresses the Potential Visibility of Existing and Proposed Well and Other Production Facilities from Residential and Recreation Areas

- The discussion of the visual representation is confusing. This section of the Drilling Plan should be revised to be made clearer.
- The Drilling Plan breaks down the areas impacted according to wells in each well viewshed analysis. In addition, the Drilling Plan should provide one well viewshed analysis that shows every area that will be impacted by any well. This will enable the public to understand the extent of the visual impact from the oil field in one viewshed analysis.

23

24

Missing Attachments:

The following attachments are referenced, but are missing from the Drilling Plan:

- Attachment 1: 2013 Drilling, Re-Drilling, and Well Abandonment Plan - Location Map - it is unclear whether the attachment at the end of the Drilling Plan is supposed to be this location map because it is out of order (e.g., coming after the visual representations) and not identified as Attachment 1.
- Attachment 2: Sensitive Developed Areas for 2013 Drill Plan Supplement Determination - it is unclear whether the attachment at the end of the Drilling Plan is supposed to be this determination because it is out of order (e.g., coming after the visual representations) and not identified as Attachment 2.

25

26

- Attachment 3: CSD Plugged and Abandoned Wells as of June 30, 2012 - it is unclear whether the attachment at the end of the Drilling Plan is supposed to be this document because it is out of order (e.g., coming after the visual representations), not identified as Attachment 3 and is labeled "CSD Plugged & Abandoned Wells November 27, 2008 - June 1, 2012." The attachment description states that it is supposed to represent plugging and abandonments through June 30, 2012. 27
 - Attachment 4: Well Viewshed Analysis - it is unclear whether this is supposed to be a separate attachment. 28
 - Photo Location 3 C 29
- Also, all attachments should be clearly identified by attachment number. 30

COMMENTS TO THE MID-ZONE SUPPLEMENT

1. INTRODUCTION

Community Standards District

No comments.

Settlement Agreement

- The Mid-Zone Supplement should clarify that petitioners the City of Culver City, Community Health Councils, Inc., Natural Resources Defense Council, Mark Salkin, Citizens Coalition for a Safe Community and Concerned Citizens of South Central Los Angeles also entered into the Settlement Agreement. 31

2013 PLAN - MID-ZONE SUPPLEMENT

Overview

- The Mid-Zone Supplement states that the Settlement Agreement defines mid-zone wells "as wells that target the Rubel, Moynier, Bradna and City of Inglewood zones." Section 1.b. of the Settlement Agreement actually defines the mid-zone as "approximately 3,500 to 7,999 feet deep, presently identified as the Rubel, Moynier, Bradna and City of Inglewood zones." (emphasis added) The Mid-Zone Supplement should be revised to provide the correct definition. 32

- As discussed above, a Mid-Zone supplement is also required for wells LAI1 133RD2 and TVIC 275. 33

Mid-Zone Supplements

- The Mid-Zone Supplement references evaluating two different pads for relocation of the surface location. A diagram or figure should be included to identify the locations of these well pads. 34
- A diagram or figure should be included to show the location of Stocker 3468, including its distance to Sensitive Developed Areas. 35
- The Mid-Zone Supplement only states that it is commercially unreasonable because dismantling would equate to a loss of over 5,000 barrels of oil. However, it does not explain how that figure was reached. The Mid-Zone Supplement should specify how long it would take to dismantle all surface equipment and piping to allow room for the drilling rig to operate, how many workers would be required and whether it would be possible to dismantle all surface equipment and piping quicker. There are no figures stating what is the actual cost causing the economic impact. What are the criteria used to make the determination that it is “commercially unreasonable”? 36

**Responses to Culver City Comments on 2013 Annual Drilling Plan
and Mid-Zone Supplement**

1. The text in Section 1.2 of the 2013 Annual Drilling Plan ("Annual Plan") should be modified to clearly state who entered into the Settlement Agreement.
2. Section 2.2 of the 2013 Annual Drilling Plan discusses the approval by the County of Los Angeles of the well increase per Section 4 of the Settlement Agreement that occurred on December 12, 2011. A copy of the County approval letter for the well increase can be found at the following website. ([http://www.inglewoodoilfield.com/res/docs/Well Increase Approval Letter.pdf](http://www.inglewoodoilfield.com/res/docs/Well%20Increase%20Approval%20Letter.pdf)). There is no need to include this approval letter as an attachment to the 2013 Annual Drilling Plan. This is not a specific requirement of the Settlement Agreement.
3. The exact language of Section 2-Noise of the Settlement Agreement should be added to Section 1.2 of the Annual Drilling Plan.
4. Section 1.2 of the Annual Plan provides the exact language of the Settlement Agreement as it relates to Deep Zone wells. Section 2.1 of the Annual Drilling Plan states that "deep zone wells are defined as wells that target the Nodular Shale and Sentous zones." This text should be modified to include language that states "... and any other zones approximately 8,000 feet or deeper."
5. Section 1.2 of the Annual Plan provides the exact language of the Settlement Agreement as it relates to Mid- Zone wells. Section 2.1 of the Annual Plan should be updated to reflect the exact language of the Settlement Agreement and to include the approximate depths.
6. Section 1.2 of the Annual Plan provides the exact language of the Settlement Agreement as it relates to shallow wells. Section 1.c of the Settlement Agreement states the shallow wells "are approximately 3,500 feet deep and above the zones identified in 1(b) as mid-zones". Both the Vickers and Rindge Zones are above the Rubel zone, which is identified in the Settlement Agreement as a mid-zone, and would therefore be considered Shallow Wells. The text in Section 2.1 of the Annual Plan should be modified to state that the shallow wells include the zones that are above the mid- zones identified in 1(b) of the Settlement Agreement, which would include the Vickers-Rindge Zone and should include the approximate depths.
7. Language should be added to the end of the first paragraph in Section 2.2i of the Annual Plan that states all bonus wells must be located outside the 800-foot zone.
8. Language should be added to the end of this paragraph in Section 2.2i of the Annual Plan that states, "In no case will the number of well drilled in 2013 exceed 47 wells unless an amended Drilling Plan is approved by the County.
9. The Settlement Agreement states that for shallow well, "Drilling of wells where the Bottom Hole is less than approximately 3,500 feet deep (hereinafter "Shallow Wells") **and above the zones identified in 1(b) as mid-zone**, shall be located away from Developed Areas (as defined in the CSD) and shall be identified in the Annual Drilling Plan." The zones that are

**Responses to Culver City Comments on 2013 Annual Drilling Plan
and Mid-Zone Supplement**

above the mid-zones identified in 1(b) of the Settlement Agreement include the Vickers and Rindge Zones.

The geology of the various production zones at the Inglewood Oil Field are not straight lines, and their depths vary slightly over the oil field. During the Settlement Agreement negotiations the word “approximately” was added to the text for all the bottom hole depths to account for this variation in zone depth over the oil field. The language in the Settlement Agreement for the Deep and Mid-Zone Wells clearly identifies what production zones are included, and provides the approximate overall depth of these zones.

Based upon the language in the Settlement Agreement, Shallow Wells would include the production zones that are above the production zones listed for Mid-Zone wells, which would include the Vickers-Rindge. This production zone has an approximate depth of 3,500 feet. In some locations on the oil field the Vickers-Rindge production zone, which is located above the production zones listed in the Settlement Agreement for Mid-Zones, is at a maximum depth of 4,045 feet, which would be considered approximately 3,500 feet. Therefore, wells drilled in the Vickers-Rindge would be considered Shallow Wells since this is a production zone that is above the zones listed in the Settlement Agreement for Mid-Zone wells.

10. The Bottom hole of both LAI1 133RD2 and TVIC 275 are located in the Vickers-Rindge production zone, and therefore would be considered Shallow Wells since the Vickers-Rindge is located above the zones identified in the Settlement Agreement for Mid-Zone Wells. Therefore, these wells do not require a Mid-Zone Supplement. See Response to comment 9 above.
11. The CSD does not require that the Annual Drilling Plan identify what sensitive areas are impacted for all wells within 800 feet of a sensitive developed area. The CSD does require that the top hole and bottom hole location of all wells be provided. The map that is included in the Annual Plan shows the location of all the top and bottom hole locations for all the wells. This map can be used to determine what sensitive areas the various proposed wells are close to.
12. A footnote should be added to Table 2 to define SHL, which is surface hole location.
13. In Table 3 the column labeled “Offset Idle Well (s)” is the idle well that is within approximately 300 feet of the proposed well. The title of this column should be changed to “Idle Well (s) within 300 feet”. KOP stands for kick-off point, and MD stands for measured depth. Notes should be added to the end of the Table providing definitions for these acronyms.
14. Uneconomical means that the cost to drill the well is so high that the well would not be drilled since it would not provide an adequate return on investment
15. Uneconomical means that the cost to drill the well is so high that the well would not be drilled since it would not provide an adequate return on investment

**Responses to Culver City Comments on 2013 Annual Drilling Plan
and Mid-Zone Supplement**

16. In Table 5 the last two abandoned wells (LAI1-Stocker-4 and Vickers 2-24) have been abandoned, but the County has not approved bonus well credits yet. Therefore, the entry in the bonus well earned column of the table should be zero for these two wells. This would make the total bonus wells earned total 14. With five used, the remaining available bonus wells would be nine. The table should be modified to reflect this change. A footnote should be added to the Table to make it clear that wells LAI1-Stocker-4 and Vickers 2-24 have been abandoned but that PXP has not yet applied to the County for bonus well credit for these two wells.
17. There is no specific time frame associated with this criterion. The potential future use of a well pad is based upon long range planning for the oil field. The CSD requires that the Annual Plan only specify the location of well pads to be abandoned and restored.
18. The CSD requirements for the Annual Plan do not require that PXP discuss the timing for obtaining permits. The estimated schedule provided in the 2013 Annual Drilling Plan is based upon when PXP thinks they will obtain the necessary permits for each well and will begin drilling operations. Drilling activities are routinely discussed at CAP meetings, and PXP updates the Annual Plan well location map each month to show what wells have been completed and abandoned, and what wells will be drilled in the next few months.
19. The CSD requires that PXP provide a discussion of the latest equipment and techniques that are proposed for use as part of the drilling and redrilling program to reduce environmental impacts. It does not require that the plan determine when something would be considered feasible.
20. PXP did conduct an assessment of the use of diesel-electric drilling rigs and determined that they would not result in a reduction of environmental impacts over what is currently being used at the oil field. This section of the Annual Plan provides information on the equipment and engine sizes for these types of rigs. The 5,400 hp for these rigs compares with the 3,200 hp for the current rig that is used at the oil field. Both of these rigs use similar diesel engines and therefore, the air emissions would be similar for both rig types. The Annual Plan should include more information on the comparison of the air emissions for this type of rig and the current rig being used at the oil field.
21. PXP did conduct an assessment of the use of natural gas-electric drilling rigs and determined that they would not result in a reduction of environmental impacts over what is currently being used at the oil field. This section of the Annual Plan provides information on the equipment and engine sizes for these types of rigs. The 9,500 hp for these rigs compares with the 3,200 hp for the current rig that is used at the oil field. The Annual Plan should include more information on the comparison of the air emissions for this type of rig and the current rig being used at the oil field.

**Responses to Culver City Comments on 2013 Annual Drilling Plan
and Mid-Zone Supplement**

22. PXP did conduct an assessment of the use of natural gas-electric drilling rigs for all the wells covered by the Annual Plan and determined that they would not result in a reduction of environmental impacts over what is currently being used at the oil field. This section of the Annual Drilling Plan provides information on the equipment and engine sizes for these types of rigs. The current rig is rated to a depth of 10,000 feet. As such, all of the wells in the Annual Plan can be drilled with the current rig. Use of the larger natural gas-electric rig would increase visual impacts and require substantially more grading to accommodate the larger rig. At well depths greater than 10,000 feet, the use of a natural gas-electric drill offers environmental advantages over a larger diesel rig. The Annual Plan should be revised to address the current depth limits of the existing rig and at what depth a natural gas-electric rig might be environmentally preferred to a larger diesel rig.
23. The County has reviewed the viewshed analysis in a number of Annual Plans and finds that the analysis is accurate and meets the requirements of the CSD.
24. Combining the viewsheds for all the wells into one figure would not provide an accurate reflection of the areas impacted since the one-mile radius changes with each well. The County has determined that providing the viewshed analysis for each well meets the requirements of the CSD.
25. In the printed version of the Annual Plan, the Location Map is the first large map after the document text. This maps title should be updated to be consistent with the title in the list of Attachments, and should be labeled Attachment 1 in the Title box.
26. In the printed version of the Annual Plan the Sensitive Developed Areas Map is the second large map after the document text. This maps title should be updated to be consistent with the title in the list of Attachments, and should be labeled Attachment 2 in the Title box.
27. In the printed version of the Annual Plan the Plugged and Abandoned Well Map is the third large map after the document text. This maps title should be updated to be consistent with the title in the list of Attachments, and should be labeled Attachment 3 in the Title box.
28. The Viewshed Analysis is a separate attachment and should be labeled.
29. Photo Location 3C is missing from the document and should be added, or if not needed, removed from the List of Attachments.
30. All Attachments should be labeled.
31. The text in Section 1.2 of the Mid-Zone Supplement should be modified to clearly state who entered into the Settlement Agreement.
32. Section 1.2 provides the exact language of the Settlement Agreement as it relates to Mid-Zone wells. Section 2.1 should be updated to reflect the exact language of the Settlement Agreement.

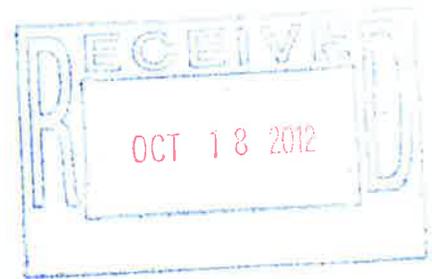
**Responses to Culver City Comments on 2013 Annual Drilling Plan
and Mid-Zone Supplement**

33. The Bottom hole of both LAI1, 133RD2, and TVIC 275 are located in the Vickers-Rindge production zone, and therefore would be considered Shallow Wells since the Vickers-Rindge is located above the zones indentified in the Settlement Agreement for Mid-Zone Wells. Therefore, these wells do not require a Mid-Zone Supplement. See Response to comment 9 above.
34. The Mid-Zone Supplement should have a figure that shows the location of these two pads.
35. The Mid Zone Supplement should have a figure that shows the location and it's distance to Sensitive Developed Areas.
36. The issue here is not just the time to dismantle the equipment, but also the time to drill the well and then to reassemble the equipment and get production back up and running. This section of the Supplement states that the production would be lost for a total of 35 days. The schedule in the Annual Plan shows that STOCKER 3468 would take about 12 day to drill. This means that dismantling, drill site preparation and setup, drill rig breakdown, and reassembly would take 23 days. The County review of this data indicated that this was a reasonable timeframe for these operations. The actual cost of the economic impact is the loss of oil production that would occur for the 35 days that the dismantled wells are not in production along with the cost of dismantling and reassembling the production equipment. The County will be making the determination of what is commercially unreasonable as part of the review of the Mid-Zone Supplement.

Los Angeles Regional Water Quality Control Board

October 17, 2012

Ms. Rena Kambara
Los Angeles County Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012



COMMENTS ON THE PROPOSED 2013 DRILLING PLAN FOR INGLEWOOD OIL FIELD SUBMITTED BY PLAINS EXPLORATION COMPANY (PXP) FOR THE BALDWIN HILLS CSD, BALDWIN HILLS, CALIFORNIA

Dear Ms. Kambara:

The Los Angeles Regional Water Quality Control; Board (Regional Board) has reviewed the proposed *2013 Drilling, Redrilling Well Abandonment, and Well Pad Restoration Plan, Inglewood Oil Field (2013 Drilling Plan)* developed as part of Condition E.26.c for the Baldwin Hills Community Standards District (CSD), as adopted on November 28, 2008 by the Los Angeles County Regional Planning Department. Plains Exploration Company (PXP) operates Inglewood Oil Field and is required to submit reports and proposed activity plans, such as the subject report:

Regional Board staff has the following comments that are relevant to our agency's regulatory oversight authority:

- Item 1.1 indicates that the goal of the CSD is to ensure that oil-field operations are conducted in a "safe manner" and are compatible with the surrounding areas. However, there is no *Health and Safety Plan* specific to the *2013 Drilling Plan* or attached as a supplement appendix. The *Health and Safety Plan* should address the people's concerns of health and safety for the site and in the surrounding areas. 1
- Regional Board staff recommends the installation of an up-gradient groundwater quality monitoring well (or network) that can establish water quality conditions at the perimeter of the field or up-gradient to the field. Background inorganic and organic chemical concentration profiles should be established order to determine whether subsurface fluids have degraded water quality. 2

- In Section 1.2, sub-section 10, PXP proposes to increase the California Department of Conservation's Department of Oil, Gas and Geothermal (DOGGR) minimum requirement of a 25-foot cement plug to a more protective 150-foot well plug, when abandoning a well. Though this approach protects the shallow groundwater or aquifers, hundreds of wells have been drilled and re-drilled that do not have 150-foot well plugs from abandoned wells and there may be some failed casings or bad cement jobs in the history of the Inglewood Oil Field. PXP should provide information on the number of wells abandoned or having failed casings. 3
- Section 2.2, item vi; old injector wells, such as those mentioned in Table 3, pose a risk for possible casing failure(s) in wells used for injection or waste disposal. Further, item vii indicates that 8 wells are targeted for abandonment (Table 4). Old wells and others of similar age should be considered as candidates for integrity testing or identified as risky enough to be considered for abandonment. 4
- The *2013 Drilling Plan* provides visual impact photographs for the proposed pumping units for the 2013 generation wells which include plan-view and side-view photographs. Unfortunately, all of the exhibits were poorly labeled and difficult to understand why the selected views were chosen. No orientation labeling or index maps were provided. 5

We appreciate the opportunity to comment on the *2013 Drilling Plan*. If you have any questions regarding this matter, please call Mr. Dixon Oriola at (213) 576-6747. You may also reach him through his e-mail address: doriola@waterboards.ca.gov.

Sincerely,


Samuel Unger, P.E.
Executive Officer

cc: Mr. Damon Nagami, Natural Resources Defense Council (NRDC)
Mr. Ray Mullins, Indigo Fakir Consulting, Inc.
Ms. Karly Katona, Los Angeles County Board of Supervisors, Second District

**Responses to RWQCB Comments on 2013 Annual Drilling Plan
and Mid-Zone Supplement**

1. PXP has developed a Health and Safety Plan for the Inglewood Oil Field that all employees and contractors are required to follow. This Health and Safety Plan covers all the activities at the oil field including drilling. The CSD has more than 100 conditions that address health and safety concerns for the site and the surrounding areas, and implementation of these conditions is covered in the Health and Safety Plan. This plan is separate from the Annual Drilling Plan.

The County adopted The Baldwin Hills CSD to provide a means of implementing regulations, safeguards, and controls for activities related to drilling for and production of oil and gas within the oil field located in the Baldwin Hills area of the County of Los Angeles. The purpose of CSD is to ensure that oil field operations are conducted in harmony with adjacent land uses to minimize the potential adverse impacts of such operations, to regulate such operations so they are compatible with surrounding land uses, and to enhance the requirements. These standards were implemented to protect the comfort, health, safety, and general welfare of people living, working, and recreating in the surrounding areas.

2. Condition E.19 of the CSD required PXP to install a number of down gradient groundwater monitoring wells at the site, which PXP has done. The condition states:

"The operator shall develop, implement, and carry out a groundwater quality monitoring program for the oil field that is acceptable to the director and consistent with all requirements of the Regional Water Quality Control Board. Pursuant to the approved program, the operator shall install and maintain groundwater monitoring wells in the vicinity of each surface water retention basin, which is permitted by the Regional Water Quality Control Board. Such monitoring wells shall be completed to the base of the permeable, potentially water-bearing, alluvium, Lakewood Formation, and San Pedro Formation, and to the top of the underlying, non-water bearing Pico Formation, as determined by a California-certified professional geologist. The Regional Water Quality Control Board and the Director of Regional Planning (Director) shall be regularly advised of the results of such monitoring and shall be immediately advised if such monitoring indicates a potential problem."

This CSD condition was developed in consultation with RWQCB staff, and the RWQCB approved the design and installation of the wells. In addition, RWQCB is sent the quarterly groundwater monitoring reports.

3. Condition E.26.c of the CSD, which addresses the requirements of the Annual Plan, does not require that the Annual Plan contain information on number of wells abandoned or having failed casings. The use of 150-foot well plugs for newly abandoned wells was a requirement of the Settlement Agreement reached between the County, PXP, and petitioners who filed lawsuits challenging the County's 2008 approval of the CSD and exceeds the requirements of the Department of Oil, Gas and Geothermal (DOGGR). The County is pre-empted under State law in regulating abandonment and re-abandonment of oil wells. However, Condition E.30 requires PXP to submit an annual Well and Production Report that must provide the number and mapped location of abandoned wells, including the date each well was abandoned or re-abandoned. Condition E.32 of the CSD, which covers abandoned well testing, requires

**Responses to RWQCB Comments on 2013 Annual Drilling Plan
and Mid-Zone Supplement**

PXP to conduct annual hydrocarbon vapor testing of areas within the oil field that contain abandoned wells. The testing shall be performed using a soil gas vapor probe, or another method approved by the Director. The results of the testing shall be submitted to the Director and DOGGR on an annual basis. Abandoned wells that are found to be leaking hydrocarbons that could affect health and safety shall be reported to the Director of the Department of Regional Planning and DOGGR within 24 hours of the abandoned well test. If directed by DOGGR, the operator shall re-abandon the well in accordance with DOGGR rules and regulations. If the test results for an abandoned well area are at or below the background levels for two consecutive years, that area shall thereafter be tested every five years.

In addition, DOGGR has been conducting extensive Area of Review (AOR) studies at the oil field that looks at the integrity of abandoned wells throughout the field. As a result of the AORs, DOGGR required the re-abandonment of a number of wells. This program has been discussed at a number of MACC meetings, where RWQCB staff was present.

4. Condition E.26.c of the CSD, which addresses the requirements of the Annual Plan, does not require that the Annual Plan contain information on the integrity of idled wells at the oil field. The County is pre-empted under State law in regulating the idled wells. However, Condition E.31 of the CSD, which covers idled well testing and maintenance, requires that PXP comply with Title 14 of the California Code of Regulations Section 1723.9, regarding testing and maintenance of idle wells, or subsequently enacted state regulations regarding testing and maintenance of idle wells. The operator shall carry out all additional tests, remedial operations, and mitigation measures required by DOGGR if any idle wells do not meet the test standards.
5. The County agrees with this comment. The photo simulations should have better titles in terms of their location and the document should have a map that shows the location of the simulation. These will be added to the updated 2013 Annual Plan.

John M. Kuechle

10733 Ranch Road
Culver City, California 90230
(310) 838-8940
jmk@post.harvard.edu

September 28, 2012

Ms. Rena Kambara
County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

Re: Baldwin Hills Oil Field, Amended 2013 Annual Drilling Plan
and Mid-Zone Supplement

Dear Rena,

This letter sets forth my comments to the proposed 2013 Annual Drilling Plan and the Mid-Zone Supplement thereto.

Stocker 3468 Well. The Settlement Agreement requires PXP to “use commercially reasonable efforts to locate new mid-zone wells and well pads away from Sensitive Developed Areas”

In attempting to explain why it would be commercially unreasonable to move the well pad for Stocker 3468 away from the desired location, Section 2.2 (i) of the Mid-Zone Supplement first points out that moving the pad to the north, south or east would actually place it closer to Sensitive Developed Areas. However, PXP then makes an unjustified leap by concluding that “the only remaining option examined was to move the surface location to an acceptable existing well pad to the west.”

1

Nothing in the Settlement Agreement suggests that the only potential locations that must be considered are ones on which well pads currently exist. To the contrary, the Agreement requires that well pads be relocated to any spot that is farther away from a Sensitive Developed Area, whether or not a well pad currently exists thereon.

1 con't

PXP must therefore expand its analysis and consider other potential relocation sites.

A second problem with PXP's analysis concerns its interpretation of the term "commercially unreasonable."

PXP states that relocating the well to one of the existing pads would require disrupting operations of other wells and losing production of 5,000 barrels of oil. Based solely on this claim, PXP asserts that it would be commercially unreasonable to use the second existing pad.

This analysis is flawed in several respects. First, PXP is not "losing" anything. The 5,000 barrels of oil will not disappear - there will simply be a delay in getting them out of the ground. More significantly, PXP provides no basis for its implied assumption that a "loss" (or deferral) of 5,000 barrels of oil is enough, by itself, to make it commercially unreasonable to relocate the well. What is more, PXP provides no indication whatsoever as to where the line should be drawn between reasonable and unreasonable.

2

While \$500,000 would obviously be a lot of money to a normal person, this is not the test. Similarly, it cannot be the test that PXP would be better off if it did not have to spend the extra money - for that would mean that even a single dollar of additional cost could defeat the obligation imposed by the Settlement Agreement. There must be a clear test for determining the line between reasonable and unreasonable.

The only rational test of commercial reasonability is whether a business person would spend the applicable amount to drill the proposed well if his only alternative option were to not drill any well at all. Obviously, such a business person would prefer it if he did not have to incur any additional costs, but the test set forth in the Settlement Agreement is not one of preference. It should be considered commercially unreasonable to move a well to a safer location only if the cost of drilling at that site will be so high that a reasonable business person would conclude he will be better off with no well at all.

Ms. Rena Kambara
September 28, 2012
Page 3

PXP must either agree to relocate Stocker 3468, or revise its analysis to show that the actual cost (the true cost, not merely the amount of deferred income) of moving the well to a safer site (considering all of the available possibilities, not merely two existing well pads) would be so great that a reasonable person would conclude he would be better off without the well than paying the anticipated cost.

Sincerely yours,

A handwritten signature in black ink on a light-colored rectangular background. The signature reads "John Kuechle" in a cursive script.

John M. Kuechle

cc: Culver Crest Neighborhood Association
Ken Kutcher, Esq.
Mr. John Peirson
Robert Garcia, Esq.
Mr. David McNeill
Ms. Karly Kartona
Ms. Lark Galloway-Gilliam
Carol Schwab, Esq.
Mr. Damon Nagami

**Responses to John Kuechle Comments on 2013 Annual Drilling Plan
and Mid-Zone Supplement**

1. The 2013 well that required a Mid-Zone Supplement is an injection well (STOCKER 3468) that would be located in the southeast corner of the oil field. This well would be used to inject produced water back into the Rubel - Moynier (RM) formation. The design objective of the well is to provide waterflood support for six existing RM production wells. For this well to meet its design objective the offset from the top hole to the bottom hole cannot be greater than 600 feet. At distance greater than 600 feet the well would not be able to penetrate the full depth of the RM, and would not be able to meet the design objective of the well. The area that is proposed for the well is heavily developed and there are no undeveloped areas within 600 feet of the proposed location that are large enough to support a new pad.

While the 5,000 barrels would not “disappear”, PXP would lose the revenue associated with the production, and this revenue could not be recovered. Once the wells are brought back on line they should produce at the same rate. The production from these wells cannot be increased to recover the lost revenue. As with most wells, over time the wells will see a decrease in production, which will not allow PXP to recover the lost revenue.

2. The mid-zone well pad assessment will be reviewed by the County. The County shall approve the mid-zone well locations as part of its review of the Mid-Zone Supplement if consistent with the Settlement Agreement, which states that PXP shall use commercially reasonable efforts to locate new mid-zone wells and well pads away from Sensitive Developed Areas in order to further mitigate impacts to such Areas. Commercially reasonable does not mean the same thing as economically infeasible. A well would be economically infeasible if the cost of drilling at that site will be so high that a reasonable business person would conclude he will be better off with no well at all.

Commercially reasonable efforts is a term incapable of a precise definition and will vary depending on the context in which it is used. It is based upon a standard of reasonableness, which is a subjective test of what a reasonable person would do in the individual circumstance, taking all factors into account. Commercially reasonable efforts refer to efforts which use a standard of reasonableness defined by what a similar person would do as judged by the standards of the applicable business community.

In reviewing the request of a Mid-Zone Supplement well the County will take into account a number of factors that would include technical feasibility, type and location of the well, potential for lost income, increased costs, and environmental factors. These various factors will be weighed to determine if locating the well further away from developed areas is commercially reasonable.

John Peirson

From: Rena Kambara [rkambara@planning.lacounty.gov]
Sent: Monday, October 01, 2012 5:41 PM
To: Salway, Candace; Paillet, Lisa; John Peirson; Luis Perez
Cc: Timothy Stapleton; Larry Jaramillo
Subject: FW: PXP 2013 Drilling Plan Comments

COMMENT 2/3

From: Yvonne Ellett [mailto:fashunchik@gmail.com]
Sent: Monday, October 01, 2012 12:54 AM
To: Rena Kambara
Subject: PXP 2013 Drilling Plan Comments

Dear Rena -- Please find my comments regarding PXP's 2013 Drilling plan as follows:

As a resident of the City of Los Angeles, I've seen a great many environmental changes over the decades. Los Angeles used to have grossly disgusting air for the majority of the year, a place where visibility was less than a mile on any given day. Stronger regulations were enforced and became 'the way to do business'. Los Angeles now has one of the best air qualities of any major city in the U.S. That didn't come voluntarily. Industry didn't decide to filter emissions on its own. In fact, some industry doesn't exist in Southern California anymore.

But the Inglewood Oil Fields are stationary, and so is PXP until it forks the deed to another corporation. What PXP can do on its own, however, is look into alternative uses for the Oil Fields. Is it really necessary to remove every drop of oil from the land now? PXP could initiate conservation measures in the fields to ensure there will still be something to extract in the decades to come. And, in the meantime, use the land for alternate sources of energy other than natural gas or fossil fuels.

Most of the fields face South. How about Imagineering a complex series of solar panels? There is always a breeze. While the acreage isn't vast enough for Tehachapi-sized turbines, and migrating birds need to be considered, how about the creation of turbines that would fit within the confines of the fields/habitat? "Exploration" may be the center of the corporate name, but in regards to the Inglewood Oil Fields there has been little vision beyond continued toxic and earth-shifting extraction.

The residents living in the greater Baldwin Hills and the entirety of Los Angeles need to be considered in PXP's business practices. While the windows in West Hollywood may not be rattling during Midnight drilling, what happens here does affect the entire City. It's not good enough for PXP to keep doing what it wants to do with an apology at the ready if something doesn't quite work out. A modern Corporation can't continue to just pay high dividends or reparations, it needs to be forward-thinking and environmentally conscious. Utilizing 150 foot cement plugs on abandoned wells speaks to this potential, but only if wells are actually abandoned. Abandonment is hardly formal when a well's location is merely moved and two more wells replace it.

PXP purchased the Inglewood Oil Fields to make money, so to demand the Corporation cease drilling isn't a fiscal possibility. That "the oil fields have been here longer than the houses" may be true, but the fact remains Baldwin Hills residents have been here longer than PXP. Good neighbors make compromises to the benefits of both parties. PXP isn't showing a willingness to compromise and will frack, slant drill, drill 'bonus' wells, and generally extrude its acreage until total depletion. PXP will move on when it's done. But about the neighborhoods it will leave behind?

Every additional well, every additional foot, every additional chemical that's being used may help PXP extend the Inglewood Oil Fields one more year beyond depletion. But just because it's possible, should it be allowed to continue at an ever-accelerating pace? This is where PXP is failing as a neighbor.

I examined the drilling maps. Not every well will affect me directly, but I recognize the street names that will be affected. When PXP isn't being just a faceless Corporate entity, it will fly a couple of guys in from Texas to attend a special CAP meeting. They think Product when they review a black circle with a red star at its apex. Within those black circles, I can recall faces of the residents that I meet at neighborhood meetings, area gatherings, HOA meetings. Some of these streets belong to my Facebook Friends. These streets contain the residents that make up my entire community a mile radius at a stretch.

For the included maps, I fall within the mile radius for these wells:

Stocker 7811	BC6761	BC6784	BC6642
BC201RD1	Stocker3168	BC6522	BC6654
BC425RD1	Stocker 3568	BC6533	

For one, single-family dwelling, 11 wells equal a little over 30% (of 35 wells). If I lived closer, the impact would be greater! Some of my neighbors do live closer, within the 50% or higher range. In Culver City the proximity to drill sites is even greater!

The 2013 Drilling Plan is incomplete as submitted. This year-by-year plan doesn't tell the whole story. What about 5 years from now? In the next 10 or 20? When the price of oil or natural gas soars again, how much longer will my *entire* community be forced to deal with its noisy, inconsiderate neighbor? And what price will we pay with depressed property values or health when additional chemical extraction wizardry is invented or someone determines how to drill even deeper or horizontally farther?

I am requesting that PXP not be allowed to drill additional wells in 2013. There should be zero 'bonus' wells, and a moratorium on all slant and high-pressure drilling. PXP should not be allowed to 'carry over' the number of wells it can drill from one year into the next. While I disagree with the expanded number of 35 wells, for sure I feel 53 wells is not in the spirit of the CSD. PXP must also take responsibility for property damage that's been occurring within any one mile radius of its many drill site locations.

The Department of Regional Planning must do its duty. DRP isn't just the entity to watch over PXP's land practices, it must also be the entity that demands respect from PXP for the entire Region.

Respectfully,

Yvonne Ellett
4406 Don Cota Place
Los Angeles, CA 90008

Responses to Yvonne Ellett Comments on 2013 Annual Drilling Plan

Condition E.26.c of the CSD, addresses the specific requirements of the Annual Drilling Plan. This condition lays out the specific requirements that must be addressed in the annual plan. None of the comments deal directly with the requirements of the Annual Drilling Plan.

The County adopted The Baldwin Hills CSD to provide a means of implementing regulations, safeguards, and controls for activities related to drilling for and production of oil and gas within the oil field located in the Baldwin Hills area of the County of Los Angeles. The purpose of CSD is to ensure that oil field operations are conducted in harmony with adjacent land uses to minimize the potential adverse impacts of such operations, to regulate such operations so they are compatible with surrounding land uses, and to enhance the requirements. These standards were implemented to protect the comfort, health, safety, and general welfare of people living, working, and recreating in the surrounding areas.