Request for Clarification - Additional Information, December 18, 2012

City staff has compiled the following questions and requests for information to assist the City in processing the project application and preparing the Initial Study. We have also have engaged in preliminary consultation with staff at State Lands Commission and Coastal Commission. Several of the questions reference specific sections or pages of the Project Application or the materials submitted along with it. Others are questions about the project in general. We will also want to discuss the approximate timeframe for providing responses and the number of copies that should be provided, which will be influenced in part by the nature and volume of the material.

Oil and Gas Operations:

1. Supply a detailed Field Development Plan describing the geologic and engineering basis for developing the City's resources. The plan should explain the reservoir depletion plan, well placement rationale, estimated well depths, oil-water contact information, estimated reservoir pressures and reserves, H_2S history and expected recovery. Please include a figure/map showing bottom-hole placement for the 34 wells.

2. Supply the estimated oil and gas production volumes, by year, over the life of the project. Include maximum daily rates for oil and gas to calculate potential air emissions for the project to verify compliance with SCAQMD permits.

3. Provide the projected revenue stream and royalty payments to the City of Hermosa Beach, including identification of that portion attributable to the Tidelands. Provide the expected sum over the life of the project based upon current and projected prices and required royalty rates.

4. The Application does not provide sufficient information on the drilling program for the initial well(s). Provide the type and size of blowout preventer (BOP) selected, type and amount of drilling mud, directional survey program, and well testing procedures. Provide a detailed well diagram for a typical production and injection well, include casing size and depths for each string of casing along with the formations which they will penetrate. Provide reservoir pressures expected to be encountered during the drilling and production operations.

5. The Application does not identify the formation the treated produced water will be injected into. Please identify any fresh water aquifers in the area along with the producing/injecting zone. Please verify that no produced water will be injected into any fresh water aquifers. In addition provide evidence that re-injection of the produced water will not harm the producing formation or have a negative impact on the reservoir.

6. Section 3.2 of the Application (page 44) states that a pump system will be installed in the production wells. It is not clear what method of artificial lift (pump system) the applicant is proposing for this project; please provide additional information describing the pump system.

7. The conceptual drawing(s) of the drilling and production site provided in the Application do not show a visual approximation of either the proposed drilling rig or production rig for Phase 2 and Phase 4 of the project. Provide a figure(s) similar to your drawing(s) in Appendix A that show this, or a reference in the Application (Section 5.2) where they can be found in the appendix.

PROJECT DESCRIPTION

Parking and Circulation (see also Completion Letter):

1. On Tables 3, 7, 11 and 15, will any vehicles, other than those footnoted, be parked only at the project site, or would they require parking at a nearby parking area?

2. The aerial indicates that perhaps 20 spaces could be accommodated on the adjacent parking area. The Traffic Impact Assessment (page 19-21) indicates the project will involve 25 cars or pickup trucks at peak activity in Phase 2, 55 cars or pickup trucks at peak activity in Phase 3, and 32 cars or pickup trucks in Phase 4, with 8 cars or pickups trucks during permanent operations. (This is in addition to equipment parked onsite and possible other equipment to be used onsite as needed.)
   Tables 5. 9. 13 & 17: When activities overlap, does number of employees indicated in these tables identify employees only for one activity at a time? For example, Table 17 shows there will be 4 employees for permanent operations. Are the 14 employees identified in addition to the 4 employees conducting routine maintenance and operations? Table 17 indicates 20 employees will be involved in major maintenance (workover rig up to 90 days per year) and the text indicates there will also be needs for other occasional services. Thus what would the peak activity be during major maintenance? Figures 24 and 25 show no onsite parking spaces; therefore, where will employees park during permanent operations?

3. Would an internal connection between the adjacent parking area (NE corner of Cypress/6th) and project site be available to provide employees direct pedestrian access to the site, at least until all construction is completed.

4. Signage must be provided consistent with City requirements informing the public of parking locations and restrictions.

5. Page 12, Section 2.6, Truck Routes, Inbound Trucks: Should item number 4 in the second list be "Left on to southbound Valley Drive" rather than "Right"?

Landscaping:

1. To gain a better understanding of visual impacts over the course of each phase, provide a conceptual view within one month of plantings and estimated time to maturity for each phase, based on species types and container sizes (Figures 14, 22 and 27). To assist in gauging visual effects, a timeline (such as Table 1) indicating the point at which the perimeter and landscaping will be completed, and when landscape will reach maturity as shown in the conceptual landscape plans for each phase would be useful.

2. Figure 15: Is it envisioned the project will need to replant the 'Existing Planting Area' and redo irrigation adjacent to reconfigured improvements (compliant with current City landscape requirements).

Other Topics in Project Description:

1. Page 44: In the 3rd paragraph, what offsite locations are available to dispose of drilling mud and other wastes in Phase 2? Same comment throughout studies with regard to all

references to offsite disposal facilities (e.g., Hydrology and Water Quality Study, Part 1, page 20 last sentence).

2. Page 71, Figure 24, Phase 4: The visual simulations appear to show that guys will be used in connection with the workover rig. If so, please be clear about this element, and provide information allowing assessment of how would they affect or constraint use of the site? What is the height of the workover rig?

3. Pages 77-78: What permits, approvals or entitlements are known to be required from each permitting authority listed, and what is the relationship to each project phase?

4. Figure 10, Phase 1 Site Preparation Conceptual Grading Plan: Will the 'new retaining wall' match the future extension in its materials (split face block)?

5. Is the additional fire hydrant referenced on page 63 of the Project Description (Safety Systems) in response to specific standards or requirements?

Table 12:

1. How can grading onsite be balanced if 9,000 cubic yards of contaminated soil are removed? It would seem that substantial grading will be necessary, if only to replace excavated material with competent compacted fill.

2. When Phase 3 construction begins and 3 test wells are sealed, does this process constitute a 'temporary abandonment'? What is the actual procedure and what specific steps does this entail?

3. How does phasing/staging for Phase 3 work -will excavation of contaminated soils concurrent with other activities, or precedes them?

4. Have potential staging areas been identified for construction of oil and gas pipelines?

Intersection Improvements:
Page 23, last paragraph: Does E&B have rights to alter the City Beach Self Storage driveway?

Site Clearance:
Page 35, 3ra paragraph: What will be the construction material of the temporary sound walls?

Well Cellar:
Page 36, 5th paragraph: Will runoff and/or spillage be removed from the well cellar via a sump pump and how will it be stored and/or disposed of?

Water Injection Pipeline:
Page 44, 2"a paragraph: where (approximately) will the pipeline for reclaimed water connect to the pipeline in Veteran's Parkway and where will it cross Valley Drive?

Gas Combustor:

Page 44, last paragraph: How does the gas combustor dispose of the gas? If it is flared off, how are air quality standards maintained? Since up to 250,000 cu.ft./day may be produced, can it be used productively instead (e.g. for cogeneration of electricity)?

Grading Plan:

1. Fig. 18: The well pad appears to be 9' above the existing grade of the adjacent property to the west. Is this to accommodate the well cellars? The Phase 3 grading plan should show the horizontal extent and invert elevations of the well cellars and the existing elevations of the adjacent properties to the west and north.

2. Fig. 18: It appears that the eastern half of the site will be lowered by about 7' and surrounded by a retaining wall. Is this to provide a containment area for possible spills from the oil processing unit and tank farm?

Personnel:

Please identify employees versus contractors; for example, will tank truck operators be employees or contractors. Please provide an overview of permanent staffing at the site: number of full-time employees, their roles, the chain of supervision and oversight, including the role of offsite supervisors.

Water Use:

Why is potable water (and not recycled water) used for construction activities during Phase 1?

Hs:

1. Please cite sources and provide basis for assumptions on levels of H2S expected to be encountered during drilling, testing and production phases.
2. Why is treatment of H2S proposed onsite? Are levels of H2S in excess of 40 ppm anticipated?
3. Is there a viable project alternative that conforms to the previous project considered by Coastal Commission that does not propose to treat H2S onsite, but shuts down any well that exceeds 40 ppm?

Attachment B

Page B-5: Underground power lines: Typo (Overhead).

APPENDICES

Traffic Analysis:

Page 21: During permanent operations 8 cars or pickup trucks would be generated during routine maintenance. Per Table 17, 20 employees will be involved in major maintenance (workover rig up to 90 days); thus what would the peak activity be during major maintenance?

Preliminary Quantitative Risk Analysis:

1. Does E&B plan to share this study in its entirety? If so, when might that occur?

2. With the report being in summary form, it is not clear how the risks were determined. It would be useful to provide this information to our EIR consultant.

Noise Impact Analysis:

1. Please provide sources for the sound power levels assigned to pieces of equipment in Tables 7-4, 7-5, 7-8 and 7-10?

2. Please provide additional information on the design specifications (including acoustic properties) of the three-sided acoustical shroud that will enclose the rig mast.

3. The EIR must evaluate potential noise and vibration associated with methods employed to avoid impacts associated with foundation loading and/or seismic settlement of any landfill material that is left in place. For this reason, the method chosen from among the ground improvement and deep foundation options must be known. Because the limits, depths and material distribution of the landfill must be more clearly defined to implement any of the ground improvement or stabilization methods, additional exploration (as described in the geotechnical report, NMG, page 23) is warranted prior to initiation of the EIR.

Hydrology & Water Quality Study:

1. Page 23: "Prior to trucking activities, the trucking company and the operator in coordination with local response officials would develop a response plan." Basic elements of this response plan must be available as part of the project application in order to enable the EIR and the Cost Benefit study to analyze the adequacy of the local response officials to respond appropriately and the potential need to augment their capabilities. (See also Completion Letter.)

2. Page 25: "The storm water would be processed as part of the oil and gas production process and would be combined with the produced water from wells, and injected into the oil-producing reservoir below the oil water contact." Please provide information on the manner in which water is processed. What constituents are removed and what standards would be applied to ensure that processed water is suitable for injection?

3. Is all produced water to be reinjected, or will some be disposed of by other means?

Geotechnical Study:

Did the geotechnical study (NMG) perform the evaluation of the structural condition of existing pavement on local streets, referred to in Condition 10 of Section 6 of the CUP?

Visual Analysis:

Please provide a description of the methodology used to produce visual simulations.

Plant Safety and Control Systems Report, Appendix B:

1. In order for the EIR to be able to provide a risk assessment, the project description must be clear which specific requirements and recommendations for offshore oil production the project will implement (as distinct from those the project 'might' or 'can' implement).

2. The City does not have access to API recommendations cited in the Plant Safety and Control Systems Report. A compendium of all API standards cited in the project's Plant Safety and Control Systems report, along with other applicable standards and regulations of DOGGR, the ASME, CCR, NFPA and CFC, BACT and BAST standards and performance standards and requirements defined in CFR, Part 250 which the project proposes to implement, would be useful to enable the City (and EIR consultant) to evaluate the project. While the City has some

sources for compiling the content of these references, assistance from the applicant would be appreciated.

Valve Box & Gas Metering Station:

1. Identify the site requirements, dimensions and a general description of the valve box associated with the oil pipeline. What is the facility's function? What are the access requirements? Is it at grade or partially below grade? Are there security requirements? Does it require routine maintenance or service? How often will it be visited after construction?

2. The City requests more information on the three optional sites considered for a new valve box, such as ownership, current land use, zoning, etc. Would this occur concurrently with or after completion of pipeline construction? What does construction of a valve box entail, in terms of steps, equipment, staging, personnel, etc. A breakdown of construction-related activities similar to that provided in Tables 10, 11 and 12 would be useful.

3. Please provide similar information for the proposed gas metering station.

Contamination of Proposed Production Site:

In order to describe baseline site conditions, the EIR preparers must have at their disposal more definitive information on the extent of the landfill and its contaminants. Among the critically important unknowns are (1) whether or not contaminated soils extend offsite (and, if so, the areal extent and depth of contamination), and (2) whether or not the underlying groundwater has been contaminated. Because the landfill represents a major site constraint, its treatment and the project's proposed methods for mitigating the various potential adverse effects it presents, fundamentally affect the project description and environmental impacts analysis.

Proposed Remedial Action Plan, In Situ Soil Vapor Extraction:

1. Supply a more complete description of the vapor extraction system, its process, equipment, location and site requirements.

2. Why does the Proposed Remedial Action Plan not address an alternative to excavate all lead and TPH contaminated soil, along with an alternative to remediate prior to any site activity? The project's EIR may have to consider these alternatives.

3. Are truck trips associated with the landfill remediation included in the traffic (and noise and air quality) study?

OTHER TOPICS

1. Site Plans: What physical location is provided for solid waste facilities (other than 'solids removal')?

2. Will any materials be stored off-site (staging)? If so, provide information on location, timing and duration, and any physical changes to accommodate the use.

3. Provide will-serve letters and similar documentation obtained to date. For example, West Basin MWD (water for drilling, landscaping and other allowable activities), Cal Water Service Company, SCE, etc.

4. When will the oil pipeline and valve box options be selected?