

March 19, 2003

Mr. Theodore Rockwell  
U.S. Environmental Protection Agency  
Alaska Operations Office  
222 W. 7th Avenue #19  
Anchorage, Alaska 99513-7588

Subject: Feasibility of separating the CFP and CWP (RFI No. 18)  
ExxonMobil Development Company  
Point Thomson Gas Cycling Project

Dear Mr. Rockwell:

ExxonMobil Development Company (ExxonMobil) is pleased to provide a technical analysis of the feasibility of separating the facilities to be located on the Central Processing Facility (CPF) pad from injection wells on the Central Well Pad (CWP). This information is being provided to the EPA and the EIS Contractor (CH2M Hill) in support of the proposed Point Thomson Gas Cycling Project. This report addresses the request for information (RFI) regarding the potential to separate the CPF and CWP.

A table is included that identifies affected facility components, the related technical and/or design impacts, practicability, operations and safety impacts, and potential environmental and human impacts. Relative costs are summarized for each facility component. It is anticipated that separating the CPF from the CWP by one mile will cost in excess of \$50 million.

In addition to the attached hardcopy report, an electronic copy of the report will be provided to CH2M Hill. ExxonMobil developed this report to satisfy RFI No. 18 as presented in the CH2M Hill memorandum dated February 4, 2003.

Sincerely,

Larry D. Harms  
Regulatory Manager

Attachment

cc: Al Maki, ExxonMobil  
Randy Buckley, ExxonMobil  
Gar Carothers, CH2M Hill  
Dick LeFebvre, ADNR

**Point Thomson Gas Cycling Project**  
**Response to EIS Data Information Needs**

**RFI-18: Can the CPF and CWP be separated?**

Separating the Central Process Facilities (CPF) and Central Well Pad (CWP) is not a practical alternative that should be considered based on surface facility impacts. The major driver are the high pressure injection lines that take the 10,000 psi gas from the process facilities to the injection wells located on the Central Well Pad. One of the basic design criteria for these lines has been to minimize the length of these lines because of safety, technical and cost issues. Moving the CPF inland would also impact the manifolding of the injection lines, gravel road from the CPF to CWP, some facility modifications and logistics. The cost increase (from project described in Project Description) to move the CPF pad 1 mile inland from the CWP is in excess of \$50 million. A more detailed comparison of the impacts to surface facilities based on moving the CPF approximately one mile south of the CWP is included in the attached table entitled " Separate CPF from CWP - Facility Impacts".

**ExxonMobil Point Thomson Gas Cycling Project  
Separate CPF from CWP (move 1 mile south)  
Facilities Impacts**

No.	Description (Impacts)	Technical/Design Impacts	Practicability (see Note 1)	Operational/Safety Impacts	Potential Environmental and Human Impacts (see Note 2)	Relative Cost (see Note 3)	
						Capital	O & M
A	Injection Lines (1000 foot to 6000 foot in length)Process Plant	<ul style="list-style-type: none"> <li>Pressure drop from Process Facilities to Wells presently 200 to 250 psi.</li> <li>In order to continue to maintain gas rate which affect condensate production, additional injection lines would be required.</li> <li>Increase in number of injection lines from 8 - 8" injection lines to 20 - 8" injection lines.</li> <li>Technical issues related to manufacture of pipe and welding make increasing line diameter technically unattractive for 10, 000 psi lines for these design parameters.</li> </ul>	<ul style="list-style-type: none"> <li>Additional lines could be constructed but would require more time or resources (equipment and material) to complete.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in length and number of injection lines presents a significant safety impact.</li> <li>Objective of project has been to minimize the length of the injection lines in order to minimize safety risks.</li> <li>Increasing the length of the lines increases the volume of 10,000 psi gas that might be released in event of a mishap (more stored energy with a greater chance of injury or catastrophic event).</li> <li>Increasing length of lines also increases exposure and probability of release.</li> <li>Consideration of routing of lines away from higher speed road between CPF and CWP would need to be assessed to minimize likelihood of vehicle damage.</li> </ul>	<ul style="list-style-type: none"> <li>Greater potential impact to Humans due to higher level exposure due to increase in number of lines because of an inadvertent release of gas</li> <li>Potential impact to caribou movement with a large number of injection lines (20) running North and South from CPF to CWP above ground.</li> <li>It is not technically feasible to bury these lines to minimize affects to caribou movement due to high temperature, high pressure and concerns regarding external corrosion.</li> </ul>	\$45 MM	Higher
B	Manifolding - Require additions to manifolds to accommodate more injection lines.	<ul style="list-style-type: none"> <li>Technically Feasible.</li> </ul>	<ul style="list-style-type: none"> <li>Additional manifold connections would require more time or resources (equipment and material) to complete.</li> </ul>	<ul style="list-style-type: none"> <li>Increased risk of release due to more valves and connections.</li> </ul>	<ul style="list-style-type: none"> <li>Greater potential safety impact to Humans due to higher level exposure because of an increase in number of lines and length.</li> </ul>	\$ 5 MM	Slightly higher
C	Gravel Roads - Construct wider Gravel Road from CWP to CPF (approx. 5000 ft.)	<ul style="list-style-type: none"> <li>Widen gravel road from dock to CPF to</li> </ul>	<ul style="list-style-type: none"> <li>Can be done.</li> </ul>	<ul style="list-style-type: none"> <li>Increased road traffic to CWP from</li> </ul>	<ul style="list-style-type: none"> <li>Some increase in gravel footprint in order</li> </ul>	\$.35 MM (road width increase)	Slightly Higher

**ExxonMobil Point Thomson Gas Cycling Project  
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Facilities Impacts**

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						Capital	O & M
		handle 6000 ton Sealift Modules. <ul style="list-style-type: none"> <li>May require bridge structure if crossing of stream is required.</li> </ul>		CPF.	to handle 6000 ton modules (approx. 15 foot wider).	Another \$1.0 MM if bridge req'd.	
D	Facility	<ul style="list-style-type: none"> <li>Require some addition or changes in facilities to accommodate longer injection lines (larger volume of gas to relief systems, blow down systems etc.)</li> <li>Further evaluation of the safety systems would be required.</li> </ul>	<ul style="list-style-type: none"> <li>Unknown without further work to assess the technical issues.</li> </ul>	<ul style="list-style-type: none"> <li>Concerns over depressurizing the injection due to a larger volume of 10,000 psi gas would have to be evaluated to ensure it could be done safely.</li> </ul>	<ul style="list-style-type: none"> <li>Moving facilities inland would reduce noise on coast and impacts to wildlife on the coast.</li> </ul>	Higher	Similar
E.	Logistics/Transportation	<ul style="list-style-type: none"> <li>Module movement for process facilities and related infrastructure would be further from dock.</li> <li>Transportation from dock to infrastructure location (warehouse, camps, and storage areas) would be longer. More traffic over a road.</li> <li>Camps would be closer to airport reducing travel time to the airport for personnel and cargo transported by air.</li> </ul>	<ul style="list-style-type: none"> <li>Increases schedule risk of major sealift due to longer transportation of modules on-shore.</li> </ul>	<ul style="list-style-type: none"> <li>Increased road traffic of major movements of materials and equipment from dock to CPF may increase risk of accidents on road.</li> </ul>	<ul style="list-style-type: none"> <li>Higher road traffic south of the CWP may affect wildlife movement (caribou).</li> </ul>	N/A	Higher
Notes: 1) Includes potential permitting, construction and schedule impacts. 2) Includes wildlife, tundra/surface drainage, long term mitigation and restoration, subsistence and public access impacts. 3) Relative cost to the proposed development described in Project Description Rev. A							