



Shell Exploration & Production

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JUN 07 2012

Regional Director, Alaska OCS
Bureau of Ocean Energy Management
Anchorage, Alaska

U.S. Department of Interior
Bureau of Ocean Energy Management,
Alaska Outer Continental Shelf Region
Attn: David Johnston, Regional Supervisor, Leasing and Plans
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Email Susan.Childs@Shell.com
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June 6, 2012

Re: Fulfillment of Condition #11 of the Revised Outer Continental Shelf Lease Exploration Plan, Camden Bay, Alaska (Revised Camden Bay EP) Conditional Approval

Dear Mr. Johnston:

Shell Offshore Inc. (Shell) hereby submits the following document as fulfillment of condition #11 that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE; now Bureau of Ocean Energy Management [BOEM]) conditioned approval of Shell's revised Camden Bay EP.

- Condition #11 Shell provides a revised attachment where the revised Camden Bay EP is cited in the *Supplemental Explanation of Shell's Alaska Fuel Transfer Procedures*.

Shell asks that BOEM provide confirmation that condition #11 has been fulfilled.

If you have any questions regarding this submission, please contact me at (907) 646-7112 or Susan.Childs@Shell.com, or Pauline Ruddy at (907) 771-7243 or Pauline.Ruddy@Shell.com.

Thank you,

Susan Childs
Alaska Venture Support Integrator, Manager

Attachments:

Condition #11:

- a) *Supplemental Explanation of Shell's Alaska Fuel Transfer Procedures (revised)*

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JUN 07 2015

Bureau of Ocean Energy Management
Regional Director Alaska OCS
Anchorage, Alaska

Alaska Department of Natural Resources
Division of Geological and Geophysical Surveys

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Supplemental Explanation of Shell's Alaska Fuel Transfer Procedures April 2012

All fuel transfers between vessels will be conducted as per the *Alaska Fuel Transfer Procedure* (April 2011; Appendix M of the revised Camden Bay Exploration Plan). This document captures the US Coast Guard CFR requirements 33 CFR 155 and 156 including the Declaration of Inspection (checklist). This procedure is mandatory and includes the type of equipment, environmental parameters, personnel required and the specific activities to conduct the transfer safely and efficiently. The procedure covers all fuel transfers conducted by vessels employed by Shell Alaska.

In relation to the containment boom deployment the Shell procedures capture the 'in port' scenario as well as offshore operation where one vessel may be anchored. In relation to offshore operations the vessels will not be completely encircled by the containment boom. When offshore vessels are subject to variable wind direction and weather conditions, although the operation is managed in accordance with the procedures limiting the conditions in which the operation can be conducted, the presence of a containment boom completely encircling both vessels will restrict the vessels ability to maneuver, and would not be fully effective. The boom has a tendency to float close to the vessel side and would not be ideally placed to capture a spill. Any containment boom that is floating 'free' has the potential for entanglement with thrusters and propellers with the potential for damage. This could severely impact the vessels propulsion system and impair the vessels ability to maneuver out of danger. Damage to the containment boom and associated equipment (ropes, etc.) could occur.

In order to deploy the containment boom effectively the Shell procedures detail two configurations offshore (see Configurations 1 and 2 of the *Alaska Fuel Transfer Procedure* [April 2011; Appendix M of the revised Camden Bay Exploration Plan]) either the insertion of boom between the vessels or the deployment of small boats controlling a deployed boom held in a 'J' configuration.

The placement of boom between the vessels has the following advantages:

- Any spill is captured in the small area between the vessels
- The short sections of boom are relatively quicker to deploy and can be effectively retained in position and managed during the operation.

The 'J' configuration has the following advantages:

- The boom is actively positioned aligned close down stream of the potential spillage
- The use of small vessels to position the boom and the associated team are on immediate standby to intervene and commence recovery
- No danger of entanglement with propellers and or thrusters which would impair the vessels ability to maneuver.
- Due to the variable direction of the vessels heading the boom/containment is more effective by being kept at a distance of 20ft minimum from the vessels.