

## Alaska Oil and Gas Association

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121 W. Fireweed Lane, Suite 207  
Anchorage, Alaska 99503-2035  
Phone: (907)272-1481 Fax: (907)279-8114  
Email: [williams@aoga.org](mailto:williams@aoga.org)  
*Kate Williams, Regulatory Affairs Representative*

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Regional Supervisor, Field Operations  
Bureau of Ocean Energy Management, Regulation and Enforcement  
3801 Centerpoint Drive, Suite 500  
Anchorage, AK 99503

### **Re: Comments on the Application of Shell's Oil Discharge Prevention and Contingency Plan to Drilling in the Beaufort Sea**

Dear Regional Supervisor:

The Alaska Oil and Gas Association ("AOGA") appreciates this opportunity to submit comments on Shell Offshore Inc.'s ("Shell") Oil Discharge Prevention and Contingency Plan ("ODPCP") for its planned exploration drilling program in the Beaufort Sea during the 2011 open water season. AOGA is a private, nonprofit trade association whose member companies account for the majority of oil and gas exploration, development, production, transportation, refining and marketing activities in Alaska.

Shell's first priority in any drilling project, including its planned Sivulliq N exploration well in Camden Bay, Beaufort Sea, is oil spill prevention. Thus, Shell's ODPCP is specifically designed to aid Shell in its efforts to prevent oil spills, and in the highly unlikely event of a spill, is also designed to mitigate the impacts of a spill on the marine environment. This plan has previously been the subject of extensive public comment and was reviewed and approved by BOEM and upheld on judicial review. The plan meets and even exceeds all applicable federal and state regulatory standards.

Under either BOEM's or Shell's modeling scenarios, the modeling for the Sivulliq N exploration well shows worst-case-discharge ("WCD") volumes significantly below the volumes Shell used to develop its oil spill response capabilities. The BOEM WCD model forecasts an initial flow rate of 1,194 barrels of oil per day, while the Shell model forecasts an oil flow of 860 barrels of oil per day. Shell's oil spill response capabilities, as detailed in its approved ODPCP, were developed using the State of Alaska WCD planning standard of 5,500 barrels of oil per day.

Clearly, Shell's response capabilities are more than adequate in the highly unlikely event of an oil spill from the Sivulliq N well of cleaning up any spill volumes.

These decreased WCD flow rates are primarily due to low pressures in Alaska's OCS shallow water environment and the oil's high viscosity, all of which demonstrates stark differences between oil exploration and development in the Gulf of Mexico and Beaufort Sea. The Deepwater Horizon incident this spring was no doubt a tragic event, but by no means represents the norm in the context of offshore oil and natural gas development. Before Deepwater Horizon, over 30,000 wells had been drilled on the outer continental shelf, and billions of barrels of oil produced, without any significant oil spills. In Alaska, a total of 30 wells have been drilled in the Beaufort Sea and five wells drilled in the Chukchi Sea, all without incident. In fact, there has never been an oil spill caused by a blowout from offshore exploration or production drilling in federal or state waters off Alaska or the in the Canadian Arctic.

Deep water oil and gas drilling, like that involved in the Deepwater Horizon oil spill, is very different and more technically challenging than shallow water drilling, which is what occurs for Alaska OCS projects. For example, the well associated with the Deepwater Horizon oil spill was drilled in over 5,000 feet of water with down hole well pressures exceeding 15,000 psi. In contrast, the Sivulliq N. exploration well is located in water depths that average 102 feet across the prospect with down hole well pressures which are less than a quarter of the psi of the Deepwater Horizon well.

Shell's approved Camden Bay Exploration Plan ("EP") includes numerous measures that would apply to the Sivulliq N exploration well and provide multiple levels of protection against a blowout. For example, Shell requires its drilling supervisors, toolpushers, drillers and assistant drillers to hold an International Association of Drilling Contractors WellCap (or equivalent) certificate showing mastery of well-control procedures and policies, and its crews must participate in regular training and drills in kick control to minimize the risk of a well-control event that might lead to an oil spill. Also, the blowout preventer Shell plans to install includes redundant mechanical barriers to provide multiple means of closing in the well to prevent oil from flowing to the surface. Further, Shell has included additional policies and procedures in its EP to bolster its mitigation measures, such as an increase in the frequency of subsea blowout preventer hydrostatic tests from once every 14 days to once every 7 days (twice the regulatory requirement), and a specific relief well drilling plan for the well and designated standby/second relief well drill rig capable of responding if the original drill rig cannot itself drill the relief well.

Though Shell's ODPCP includes multiple barriers designed to prevent a blowout, in the highly unlikely event that one should occur, Shell's ODPCP also includes procedures to immediately shutdown the well and any oil spilled contained and collected. These include on-site, nearshore

and onshore procedures and pre-staged equipment. More specifically, an on-site as well as a backup remote-operated vehicle to enable subsea activation of the blowout preventer; pre-staged boats, booms, skimmers, helicopters, barges and other assets capable of responding to a spill incident in one hour or less; pre-staged additional oil spill response vessels between the drill rig and the Alaskan coast in the event any oil is not fully contained by the on-site assets; and, in the event landfall is likely, aircraft and wind and current models to help predict the locations landfall is likely, and pre-staged trained personnel and additional pre-staged oil containment booms, boats and skimmers that will intercept the oil before it reaches the coastline.

The recovery capacity of the on-site pre-staged equipment listed above is approximately 12,000 barrels of oil per day, which exceeds the State of Alaska planning standard of 5,500 barrels per day and the WCD volumes from the Sivulliq N exploration well under both BOEM's and Shell's modeled amounts. Further, an oil storage tanker will be on-site within four hours, and has the capacity to store more than 500,000 barrels of recovered oil. Shell's containment system can be deployed in two weeks or less. And, Shell has ensured that a second drill rig will be available as a backup relief well option if the original drill rig cannot drill a relief well, should a relief well be needed. This vessel could be on-site within 18 days of a well control event.

Importantly, exploratory drilling would occur only during the summer and fall open water season. Though further development and production could occur during the winter when ice is present in the Arctic, additional research, planning and environmental analysis and review consistent with the National Environmental Policy Act ("NEPA") is required to occur before the project could progress.

Development of Alaska's OCS is vital to the nation's energy independence. In the past, Alaska's oil resources accounted for 20 percent of U.S. domestic production (1980-2000). Today, that number has declined to 9 percent. According to conservative estimates, Alaska's OCS holds 25 billion barrels of oil and 122 trillion cubic feet of natural gas – one-third of the technically recoverable OCS reserves in the U.S. By comparison, the U.S. has 22 billion barrels of proved oil reserves, annual U.S. production of oil is 1.6 billion barrels and total production to date from the Alaska North Slope is approximately 16 billion barrels of oil.

With global demand for oil and natural gas expected to increase 50 percent by 2030, it is critical that access to domestic hydrocarbons be allowed. Today, the U.S. imports about 65 percent of its oil supply and nearly 20 percent of its natural gas supply. This current trend threatens to undermine the U.S. economy and national security. Clearly, Alaska's OCS has the potential to make a significant contribution to the domestic supply of oil and gas and help eliminate this threat.

Access to Alaska's OCS resources is critical to the continued operation of the Trans-Alaska Pipeline System ("TAPS"), which is currently operating at about one-third of its capacity, and could be uneconomic to operate after 2020 without additional throughput. Access is also a key component to the economic feasibility of the proposed natural gas pipeline from the North Slope to the Lower 48. Additionally, OCS oil and natural gas development would benefit the economy by providing thousands of high-paying jobs over a long-term period. A study by the University of Alaska's Institute of Social and Economic Research ("ISER") and Northern Economics found that new offshore energy production in Alaska would create an annual average of 35,000 new jobs in Alaska alone, with a total payroll of approximately \$72 billion over the 50-year life of the projects. New offshore development in Alaska would further generate thousands of new high-paying jobs throughout the country across a wide-variety of industries. These numbers do not even take into account the royalties and tax revenues directly tied to offshore oil and gas development and production that would flow to the federal government and state and local economies in Alaska.

In summary, Shell is prepared to prevent any well control event at the Sivilliqu N exploration well in the Beaufort Sea. In the highly unlikely event of a blowout, Shell is also prepared to quickly shutdown the well and contain and collect any spilled oil volumes using pre-staged assets. AOGA strongly urges BOEM to expeditiously complete review of Shell's ODPCP so Shell may complete a safe and successful 2011 exploration drilling program in the Beaufort Sea, the development of which, along with other proposed projects in Alaska's OCS, are of critical importance to the U.S. economy and energy independence.

If you have any questions on these comments, please do not hesitate to contact me.

Sincerely,



KATE WILLIAMS  
Regulatory Affairs Representative