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1. My name is Chandler T. Wilhelm. I have first-hand experience with, and personal knowledge of, the facts and matters discussed in this declaration.

2. I am the Alaska Exploration Manager for Shell Exploration & Production Company ("SEPCo"). SEPCo's principal office is in Houston, Texas. SEPCo and Shell Offshore Inc. ("SOI"), the legal entity holding state and federal oil and gas leases in Alaska, have a new and rapidly expanding presence in Alaska, which includes an office in Anchorage. SEPCo and SOI are wholly owned subsidiaries of Shell Oil Company ("Shell").

3. I am a professional petroleum geologist with approximately 25 years of experience working in the oil and gas exploration and production industry. I hold the following degrees: B.A., 1979, Geology, Pomona College; M.S., 1983, Geological Sciences, University of Colorado; Certificate of Completion, 1997, Global Finance Program, University of Texas Graduate School of Business. I have been employed by Shell or its affiliates since 1983.

4. As Alaska Exploration Manager for SEPCo, I direct execution of SOI's Alaska exploration program. I manage and oversee administration of SOI's Alaska oil and gas lease portfolio, participate in decisions on investments in new oil and gas leases, and oversee execution of seismic and drilling operations. I have a staff of approximately 40 technical professionals in Houston and Anchorage who work as a part of my team. In addition, I work closely with Government and External Affairs staff in Anchorage, Houston, and Washington, D.C., to ensure that SOI conducts its business in Alaska with

appropriate attention to stakeholder issues and in compliance with all applicable local, state and federal laws, as well as Shell standards.

5. I make this declaration in support of SOI's request to intervene in the above-captioned appeal. SOI has substantial interests that are directly and significantly affected by this appeal, as I discuss further below. No other party to this appeal represents SOI or SOI's interests in this case. SOI desires to participate in this appeal as a party to protect its interests. I believe that SOI's participation will be helpful and beneficial to the Board and the process generally, and that SOI's participation will aid in the development of a more complete record in this case. If SOI is denied intervention, SOI will have no other means of protecting its interests in this matter. SOI's motion to intervene is not brought for purpose of delay or any other improper purpose.

6. We believe Alaska has significant untapped hydrocarbon potential that can play an important role in meeting the nation's energy demands and improving the lives and livelihoods of all citizens. Today, SOI holds interests in 130 federal oil and gas leases located in the Beaufort Sea off the North Slope of Alaska. In March 2005, SOI participated in the federal outer continental shelf ("OCS") Lease Sale 195 and was awarded 84 leases in the Beaufort Sea. In the March 2005 lease sale, SOI paid a total of \$44 million dollars to acquire these 84 leases in competitive bidding. In September 2005, SOI also acquired from EnCana an additional 19 leases in the western Beaufort. In October 2006, Shell entered into a Joint Venture Agreement with Eni Petroleum whereby it acquired an equity in an additional 27 leases. In addition to our lease interests in the Beaufort Sea, in October 2005, we acquired 33 blocks in the Alaska Peninsula Lease

Sale, onshore/near shore on Alaska state lands. Shell Gulf of Mexico Inc.'s ("SGOMI") (a subsidiary of Shell and an affiliate of SOI) recent participation in the Beaufort Sea OCS Lease Sale 202 is an additional indication of Shell's commitment to Alaska. SGOMI was the high bidder on 49 tracts with a total bid value of \$39.3 million dollars. SOI currently pays rental payments to the United States on all its federal leases in the Beaufort Sea in the amount of approximately \$900,000 per year.

7. Shell, through certain of its subsidiaries, has a long history of oil and gas exploration in Alaska, including in the Beaufort and Chukchi Seas. Beginning almost 50 years ago, various Shell subsidiaries operated continuously in Alaska until 1998. Shell was one of the most prominent explorers in all of the frontier offshore basins of Alaska, as well as being an operator and major producer in Cook Inlet. In particular, during the 1980s Shell was a partner in nine exploration wells drilled offshore in the Beaufort Sea. During this period Shell also drilled four of five exploration wells in the Chukchi Sea.

8. In addition to its activities in the Alaskan Arctic, The Shell Group (of which Shell and its subsidiaries are a part) also has extensive experience with Arctic and near-Arctic projects in Russia, Canada's Mackenzie Delta and Norway.

9. SEPCo plans to conduct exploratory drilling, site clearance, and seismic activities on certain of SOI's leases in the Beaufort Sea in 2007. Because of the limited summer drilling season, SEPCo began mobilizing equipment and crews from locations around the world to the North Slope in May 2007. To carry out these activities, SOI is required by law to obtain a number of different governmental approvals from various agencies of the federal government and State of Alaska. These include: (1) approval of

SOI's Plan of Exploration, (2) an air permit, (3) Coastal Zone Management Act ("CZMA") certification, (4) Incidental Take Authorizations under the Marine Mammal Protection Act ("MMPA") and (5) an Oil Discharge Prevention and Contingency Plan ("ODPCP" or "C-Plan").

10. **Exploration Plan.** An Exploration Plan ("EP") and its supporting information must be submitted for approval to MMS before an operator may begin exploratory drilling on a lease. 30 C.F.R. § 250.211-228. The EP describes all exploration activities planned by the operator for a specific lease or leases, the timing of these activities, information concerning drilling vessels, the location of each well and other relevant information. The EP is then subjected to exacting scrutiny by the MMS and other agencies.

11. In January 2007, SOI submitted an EP covering three years of proposed exploration activities designed to evaluate the oil and gas potential of certain of SOI's Beaufort Sea leases. In support of its proposed EP, SOI submitted an Environmental Report pursuant to 30 C.F.R. § 250.227, a C-Plan Plan pursuant to 30 C.F.R. 254 Subpart B, and additional information required by OCS Lease Sale 195 lease stipulations. Consistent with Council on Environmental Quality Regulations, 40 C.F.R. §§ 1501.3 and 1508.9, the MMS prepared an Environmental Assessment ("EA") to evaluate SOI's proposed EP. Because MMS previously completed an Environmental Impact Statement (EIS") supporting the decision to lease in the Beaufort Sea, the purpose of the EA was to determine whether SOI's planned activities would have any significant environmental impacts not already addressed in the EIS.

12. Overall, SOI's 2007 exploration program consists of two parts: a drilling program (which is the subject of the EP) and a seismic program. The 2007 Beaufort Sea drilling program will consist of a two-rig program utilizing the Kulluk, a semi-submersible rig designed and built to operate in the Beaufort Sea, and the Frontier Discoverer, a turret-moored drill ship currently located in Singapore. The Kulluk will be supported by an icebreaker, the Vladimir Ignatjuk, and an Arctic-class anchor handler, the Viking Tor. The Discoverer will be supported by an icebreaker, the Kapitan Dranitsyn, and an Arctic-class anchor handler, the Fennica. The planning schedule for each rig is as follows:

13. The Kulluk is currently in McKinley Bay, Northwest Territory, undergoing refurbishment. The Vladimir Ignatjuk and the Fennica were mobilized from the North Sea earlier this month and are traveling to Alaska via the Panama Canal and then to McKinley Bay to extract the Kulluk from McKinley Bay in July 2007. The Kulluk will be towed to a location near Tuktoyaktuk, Northwest Territory, to complete refurbishment, commission drilling systems, and drilling equipment load-out. The vessel will be towed to the Beaufort Sea drilling location, and will spud a deep exploratory well on or about August 15. At the conclusion of the drilling season, the Kulluk will be towed back to McKinley Bay and cold stacked for the winter.

14. The Frontier Discoverer was converted in Singapore for Arctic operations and will mobilize to Dutch Harbor on or about July 1 after completion of sea trial and drilling equipment load-out. At a location along the west coast of Alaska, yet to be determined, the Discoverer, its support vessels, and the Oil Spill Response vessel will meet up and

follow the Kapitan Dranitsyn to the Discoverer's first drilling location in the Beaufort Sea. The first well is currently expected to spud on or about August 3. The Discoverer will drill two relatively shallow exploratory wells. The Discoverer, its support vessels and the Oil Spill Response vessel will demobilize around Barrow upon completion of the second well.

15. Shallow hazard site clearance surveys are planned for future drilling locations. The shallow hazard survey will use multi-beam bathymetry sonar, single-beam sonar, side scan sonar, shallow bottom profiler, medium-penetration sub-bottom profiler, high-resolution multi-channel deep profiler, and GPS to collect seabed and sub-seabed data. These data include bathymetry, ice and strudel scours, potential biological resources and underwater obstructions.

16. For its seismic program, SOI has contracted for the services of the WesternGeco seismic vessel, the M/V Gilavar. The Gilavar will mobilize in Dutch Harbor on or about July 15. The Gilavar will be supported by a chase and re-supply vessel, the M/V Gulf Provider. The Gilavar will transit to the Chukchi Sea and then spend several days deploying the towed recording streamer cables. Assuming favorable ice conditions, the Gilavar will commence acquiring seismic data about July 25. The vessel will record 3-D seismic data in the Chukchi until about mid-September. Assuming favorable ice conditions, the Gilavar and the Gulf Provider will transit into the Beaufort Sea at the conclusion of the Chukchi program. The work area will likely be either in eastern Harrison Bay or western Camden Bay. The seismic activity will continue until ice conditions require the vessels to depart the Beaufort Sea.

17. On February 15, 2007, the MMS conditionally approved SOI's EP, authorizing the drilling of up to four wells this summer and fall, and additional wells in 2008 and 2009. Based on the analysis of the agency's EA, including analysis of the multi-sale EIS and the Sale 195 EA, MMS determined that SOI's proposed operations would not significantly affect the quality of the human environment and will not cause undue or serious harm or damage to the human, marine, or coastal environment. Accordingly, MMS determined that preparation of an EIS was not necessary.

18. **Oil Discharge Prevention and Contingency Plan.** In connection with its exploration drilling program, SOI has developed a comprehensive ODPCP that details the many proactive measures that will be implemented to prevent a spill during exploratory operations and, in the unlikely event of a spill, minimize any potential impacts from that spill. SOI's C-Plan was conditionally approved by the MMS on February 15, 2007. The first step in an oil spill response plan is preventing a spill in the first instance. To avoid any spill during its drilling operations, SOI will use the best available drilling and well control procedures and technologies. SOI will also draw upon its extensive experience with Arctic and near-Arctic drilling, both onshore and offshore, in Alaska and abroad. In the unlikely event of a spill, response personnel and equipment, which will be stationed in immediate vicinity of operations 24 hours a day 7 days a week from the start of operations, will respond to any event that may impact the environment or the residents of the region. SOI will employ a newly built 305' ice-class response vessel specifically designed for Alaskan Arctic service. SOI will have additional Arctic barges to deploy oil spill containment booms, skimmers, work boats and other equipment and a 500,000

barrel capacity Arctic tanker for recovered oil. In total, SOI has committed in excess of \$100 million to develop a robust spill response capacity (including vessels, equipment and personnel).

19. **Coastal Zone Management Act.** In addition to review of the EP by the MMS, the EP must also be reviewed and approved by the State of Alaska under the federal CZMA. The CZMA consistency review process requires the State to issue a determination that the conditionally approved EP is consistent with the standards of the State's approved coastal zone management program. As of the date of this Declaration, the State's consistency review of the EP is on-going.

20. **Incidental Take Authorization.** SOI has requested an Incidental Harassment Authorization ("IHA") from the National Marine Fisheries Service ("NMFS") for whales and pinnipeds and a Letter of Authorization ("LOA") from the U.S. Fish and Wildlife Service ("USFWS") for polar bears and walrus. Among other factors, such approvals are premised upon the determination that the subject activity will have only a negligible impact on a covered species or stock and will not have an unmitigable adverse impact on the availability of species or stocks for taking for subsistence uses. As of the date of this Declaration, review of SOI's IHA and LOA applications is on-going.

21. **Air Permit.** Pursuant to OCSLA, 40 C.F.R. pt. 55, SOI has submitted to Environmental Protection Agency ("EPA") Region 10 Preconstruction Permit applications for the Kulluk and Frontier Discoverer drilling units for the 2007 to 2009 Beaufort Sea Drilling Program. SOI expended significant resources to analyze air emissions-related issues and to work with EPA to develop appropriate provisions for

these permits. SOI's efforts culminated in EPA issuing its preliminary decision to approve air emissions from SOI's exploration activities in the Beaufort Sea pursuant to two Air Quality Control Minor Permits/Approvals to Construct.

22. Because the open-water season in the Beaufort Sea is extremely short, the logistical preparation and upfront investment in exploratory drilling and support activities is substantial. In terms of cost, SOI has committed hundreds of millions of dollars on its current three-year EP. The estimated costs for SOI's activities in 2007 alone exceed \$200 million.

23. SOI's EP is based on several years of background research, data acquisition and analysis, including seismic and/or shallow hazards data acquisition in the Beaufort and Chukchi Seas during the 2006 open-water season. Like the effort made for developing its EP, SOI expended significant human and other resources in not only planning the 2006 seismic data acquisition program and securing the equipment and resources necessary to complete the program, but also in obtaining the authorizations and approvals from the United States Government that are required for these types of activities.¹ SOI successfully conducted its 2006 open-water exploration operations without incident.

24. As noted, SOI has committed substantial financial and human resources to planning, permitting and carrying out its 2007 open-water exploration drilling and seismic programs. From the outset, SOI committed to employing the best available drill

¹ In all, I estimate that SOI spent in excess of \$30 million in preparing for and conducting its 2006 seismic data acquisition program, including costs associated with safety and environmental monitoring and mitigation.

ship technology to safely drill in the Arctic. To that end, SOI spent in excess of \$175 million to acquire and upgrade the Kulluk (which is 100 percent Shell owned). SOI also spent substantial sums to secure and upgrade the vessel Discoverer, owned and operated by Frontier Drilling. SOI has spent, and will continue to spend substantial sums – millions of dollars, in fact – to outfit, operate and maintain the Kulluk and Discoverer. SOI has conducted numerous geological and geophysical analyses of its leases and available technical data to determine the areas most prospective for hydrocarbons and where to drill its planned exploration wells. SOI has completed numerous other technical studies in order to engineer each well. These specialized studies required the efforts of some 40 technical experts, including petroleum engineers, geologists and geophysicists, and countless man-hours of work.

25. In addition, SOI secured a contractor (WesternGeco) and vessel (M/V Gilavar) to conduct its seismic operations. SOI has expended, and will continue to expend, additional millions of dollars to retain, outfit and operate the M/V Gilavar.

26. In this action, the plaintiffs seek to invalidate MMS' approval of the EP and to require MMS to conduct additional environmental review of SOI's Beaufort Sea exploration program. Appellants also have requested that IBLA stay the effect of MMS' approval of SOI's EP. If such action occurs, SOI will be prevented from carrying out its 2007 exploration drilling and seismic data acquisition programs. Such result will have a severe impact on SOI and its plans to complete exploratory activities on its leases. To begin with, SOI will have lost the literally hundreds of millions of dollars in investments

it has made to plan, permit and carry out its exploration drilling and seismic data acquisition programs during the brief 2007 Arctic open-water season.

27. In addition, because SOI currently plans to conduct future exploration drilling in the Beaufort Sea based on the analysis of the data acquired in 2007, SOI's inability to complete that data acquisition may delay the schedule for drilling future exploration wells. In this context, it is significant to note that SOI's Beaufort Sea leases have only a ten year primary term. Given that Arctic exploration and development involves extended planning horizons, the loss of even a single season can jeopardize SOI's ability to evaluate and, ideally, bring its leases into production within the primary term of the leases, which in turn threatens the substantial investment made by SOI in acquiring and exploring the leases. Moreover, due to the short Arctic open-water season, any delay of SOI's project threatens SOI's ability to conduct a safe and effective data acquisition program. Thus, it is critical that there not be any delay in SOI's approved exploration program. Similarly, even if a stay was not granted, but IBLA were subsequently to invalidate MMS' approval of SOI's EP, the result would be complete disruption of SOI's multi-year exploration effort. In that event, SOI would have to cease its activities and demobilize vessels, equipment, facilities and personnel pending future MMS action on the EP at substantial cost to SOI. Therefore, SOI would have crucial interest in the outcome of this appeal even if Appellants were not seeking to prevent exploration pending the outcome of the appeal.

28. Great potential still exists for new oil and gas discoveries in Alaska. Advances in technology such as 3-D seismic and new drilling, completion, development and

production techniques have greatly improved our industry's ability to find and extract oil and gas using environmentally sensitive methodology. In addition, leases that were considered to have limited potential in the past may now be technically and economically feasible for development using today's new technology. These same advances in technology have increased industry's ability to develop these resources with minimal impact on the environment. With respect to SOI's anticipated activities in the ice-prone waters of the Beaufort, SOI sees new technology as a critical aspect of successful Arctic exploration and development.

29. SOI is dedicated to reducing the impacts and risks associated with its exploration and development activities. To this end, SOI spends approximately \$15 million annually in Arctic research and development, with most of the money being directed to projects that reduce the footprint of Arctic exploration and development activities. Recent SOI Arctic research and development projects for Alaska include a 2006 investigation of the use of unmanned aerial vehicles for marine mammal monitoring and a 2007 investigation of the feasibility of acquiring 3-D seismic data during the winter in the shallow water areas of the Beaufort Sea.

30. It is critical for SOI, in planning its long-term investments in Alaska, to know that the federal government's considered policy commitments will not be subject to arbitrary, last minute changes and delays. SOI believes that all the assumptions upon which our detailed plans were made are based on carefully considered regulatory decisions that took place over a period of time lasting many years involving every conceivable interested party in the review, comment and evaluation process. For the

reasons set forth above, SOI has a vital interest in any appeal that would seek to overturn any of those regulatory decisions, including the present challenge to MMS' approval of our EP.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 22, 2007.


Chandler T. Wilhelm