

DUCK ISLAND UNIT

**APPLICATION FOR THE FORMATION OF THE
EIDER PARTICIPATING AREA**

**Decision and Findings of the Commissioner
Alaska Department of Natural Resources**

September 28, 1998

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I. INTRODUCTION AND BACKGROUND

BP Exploration (Alaska), Inc., (BP) as Unit Operator, applied to form the Eider Participating Area (Eider PA) to be located within the current boundary of the Duck Island Unit (DIU). The Department of Natural Resources (DNR) approved the Duck Island Unit Agreement (The Agreement) on August 21, 1978. The DIU is located on the North Slope, offshore, and northeast of the Prudhoe Bay Unit. The Unit Area is comprised of ten oil and gas leases with an area of approximately 17,545.69 acres. The Eider PA is the third participating area proposed for the DIU. Production is already allocated to the Endicott and Sag Delta North Participating Areas approved effective February 22, 1985 and August 12, 1991 respectively.

An oil and gas "unit" is comprised of a group of leases that cover all or part of one or more potential or known reservoirs and which are subject to a "unit agreement." The "unit agreement" is the instrument that is typically executed by those with an interest in the leases, including the royalty owner, and which specifies how unit operations will be conducted, and how costs and benefits will be allocated among the various leases. A second agreement called a "unit operating agreement" controls the relationship between the parties that share the costs of unit development. Unitization generally allows the unit owners to explore, develop and produce potential or known reservoirs more efficiently than on a lease by lease basis.

A participating area (PA) is that part of the unit area designated for the purpose of allocating hydrocarbon production from a reservoir. The state regulations governing unitization allow for the expansion or contraction of a participating area as more wells are drilled and more data is obtained. Only parties who own an interest within a PA share in the costs of production and revenues from the sale of oil or gas from the participating area.

II. APPLICATION FOR THE FORMATION OF THE EIDER PARTICIPATING AREA

11 AAC 83.351(a) provides that the unit operator shall submit an application to form a participating area at least 90 days before sustained unit production from a reservoir. On June 29, 1998, BP submitted an *Application to Form the Eider Participating Area within the Duck Island Unit* (The Application) pursuant to 11 AAC 83.351 and Section 11 of The Agreement. The acreage BP proposes including in the Eider PA overlies an oil reservoir known as the Eider Field. The Eider Field is reasonably estimated to be capable of producing or contributing to the production of hydrocarbons in paying quantities. 11 AAC 83.351(a). The Application included Exhibits C, D, E and F to the Agreement and supporting geological and geophysical data. Exhibit C is a schedule that sets forth the percentage of unitized substances and costs to be allocated to each tract in the Eider PA.

Exhibit D is a map of the Eider PA area boundary. Exhibit E is the Plan of Development for the Eider PA. Exhibit F is a map of the reservoir limits of the Eider Field.

DNR staff met with representatives from BP on July 22, 1998, and requested additional technical information and a revised Plan of Development. BP submitted supplemental information on August 26, 1998, including an amended Plan of Development, a top Ivishak structure map, an Eider structure map, an Eider seismic section and, a description of the current structural mapping. On September 1, 1998, DNR requested technical information to show how the Eider Field relates to the Sag Delta 8 Well to the north. BP responded by submitting additional seismic information on September 21, 1998.

DNR also questioned whether the Eider Field extended beyond the proposed PA boundary and requested information about how the interests of the working interest owners will be protected if BP determines that adjacent leases and the Prudhoe Bay Unit (PBU) cover portions of the Eider reservoir. On September 15, 1998, BP sent a letter to the PBU Owners requesting comments on the proposed PA.

The proposed Eider PA is entirely located on one lease, ADL 34634. DNR issued ADL 34634 effective April 1, 1967. The entire lease, 2560 acres, was committed to the PBU effective April 1, 1977. Effective February 22, 1985, ADL 34634 was eliminated from the PBU and committed in its entirety as Tract 12 of the DIU. DNR approved the formation of the Endicott Participating Area in the DIU effective February 22, 1985. A portion of ADL 34634, 1280 acres, was included in the Endicott Participating Area when it was formed. On February 1, 1986, the portion of ADL 34634 in the Endicott Participating Area contracted down to 1000 acres, the DIU boundary contracted, and the portion of the lease contracted out of the DIU was committed to the PBU. Tract 33 in the PBU (ADL 34634) is allocated production from the Lisburne and Niakuk Participating Areas. Only a portion of Tract 12 in the DIU, Section 27 in T. 12N., R. 16E., Umiat Meridian, (640 acres) is proposed for inclusion in the Eider PA. ADL 34634 reserves a 12.5% royalty share to the state. BP owns 100% of the working interest in the lease. All hydrocarbon production and costs for the Eider PA will be allocated to ADL 34634.

III. DISCUSSION OF THE PARTICIPATING AREA DECISION CRITERIA

11 AAC 83.351(a) provides that a PA may include "only land reasonably known to be underlain by hydrocarbons and known or reasonably estimated through use of geological, geophysical, or engineering data to be capable of producing or contributing to the production of hydrocarbons in paying quantities." "Paying quantities" means:

quantities sufficient to yield a return in excess of operating costs, even if drilling and equipment costs may never be repaid and the undertaking as a whole may ultimately result in a loss; quantities are insufficient to yield a return in excess of operating costs unless those quantities, not considering the costs of transportation and marketing, will produce sufficient revenue to induce a prudent operator to produce those quantities.

11 AAC 83.395(4). A PA application must be evaluated under these standards, as well as those of 11 AAC 83.303.

Under 11 AAC 83.303, a proposed PA will be approved if the commissioner finds that the PA is necessary or advisable to protect the public interest. To make such a finding, the commissioner must determine that the proposed PA will: 1) conserve natural resources, 2) prevent economic and physical waste; and 3) protect all parties of interest, including the state.

In evaluating the above criteria, the commissioner will consider: 1) the environmental costs and benefits, 2) the geological and engineering characteristics of the potential hydrocarbon accumulation or reservoir proposed for inclusion in the PA, 3) prior exploration activities in the proposed PA, 4) the applicant's plans for exploration or development of the proposed PA, 5) the economic costs and benefits to the state, and 6) any other relevant factors (including mitigation measures) the commissioner determines necessary or advisable to protect the public interest. The following evaluates the Eider PA under these criteria and considerations.

A. Conservation of Natural Resources

The formation of oil and gas units and PAs within unit areas to develop hydrocarbon-bearing reservoirs generally conserves hydrocarbons. A single PA will provide for efficient, integrated development of the Eider Field. A comprehensive operating agreement and plan of development governing that production will help avoid duplicative development efforts on and beneath the surface.

In February 1998, the DIU owners approved the *Agreement for Use of Endicott Area Equipment for Tract Operations* through the DIU Ballot Agreement 98-55 (Endicott Facility Sharing Agreement). DNR received a copy of the Endicott Facility Sharing Agreement, on March 26, 1998. The Endicott Facility Sharing Agreement allows the Eider PA access and use of Endicott Area Equipment including:

a) operation and maintenance of Tract Equipment; b) access to and use of Main Production Island pad and drillsite; c) physical connections to Endicott production facilities, including electrical lines, gas lift gas supply lines, fuel gas lines, common lines, gas injection lines and produced water lines; d) use of Endicott Area Equipment for purposes of producing Tract wells and processing of Tract produced fluids consistent with current Endicott Area Operations; and e) activities associated with such operations.

The production of hydrocarbon liquids from the Eider PA through the existing production and processing facilities within the DIU reduces the environmental impact of the additional production. Formation of the Eider PA provides the most practical method for maximizing oil and gas recovery from the unit area while at the same time minimizing negative impacts on other resources.

B. Prevention of Economic and Physical Waste

Generally, forming a PA facilitates the equitable division of costs and allocation of hydrocarbon shares, and provides for a diligent development plan that maximizes physical and economic benefit from a reservoir. The Eider PA prevents economic and physical waste by eliminating redundant expenditures for a given level of production, and avoids the loss of ultimate recovery by adopting a unified reservoir management strategy. All Eider PA wells have been, or will be, drilled from the Endicott Main Production Island (MPI). BP used available drilling slots in the MPI to eliminate the need to construct an additional drilling island, which would have promoted both economic and physical waste.

The Eider PA oil and gas resources can be produced through a single facility infrastructure system. The Endicott Facility Sharing Agreement allows Eider production to be processed through the Endicott PA facilities. Facility consolidation saves capital and promotes better reservoir management for all working interest owners through pressure maintenance and secondary recovery procedures. The Eider PA will improve the efficiency of developing the Eider Field. In combination, these factors allow less profitable areas of a reservoir to be developed and produced while preventing economic and physical waste.

C. Protection of All Parties

Forming participating areas seeks to protect the economic interests of all working interest owners of the reservoir as well as the royalty owner. By combining interests and operating under the terms of a unit agreement and unit operating agreement the owners may be assured that costs and revenues will be fairly allocated.

The Eider PA will maximize hydrocarbon recovery and additional production-based revenue from Eider PA production will promote the state's economic interest. However, additional recovery of hydrocarbons, in and of itself may not always determine the state's best interest. Production must occur under suitable terms and conditions to assure that the economic interests of both the working interest owners and the state, as the royalty owner, are protected.

In addition to protecting the interests of the DIU owners and the state, DNR is also interested in protecting the interests of owners adjacent to the Eider PA. The proposed Eider PA is defined as one section within the DIU that abuts the PBU, and DNR is concerned about protecting the rights of the PBU Owners. Under the Alaska Oil and Gas Conservation Commission's (AOGCC) statewide well spacing rules, the Eider well is not currently draining hydrocarbons from the PBU. BP's Plan of Development will determine if the field extends into the PBU.

In reviewing the above criteria, the following factors were considered:

1. The Environmental Costs and Benefits

Producing hydrocarbon from the Eider Field through the Endicott PA facilities will reduce the environmental impact of development. The use of unit facilities eliminates duplication of surface activities and results in a significant reduction in the amount of surface area altered by oil and gas development. This reduction in surface impacts serves to protect wildlife habitats and reduces impacts to wetlands. BP's development of the Eider Field will not alter the existing configuration of the Endicott causeway and islands, and no additional impacts to nearshore habitat or biological resources will occur due to the additional production. The Eider PA promotes efficient development of the state's resources, while minimizing impacts to the region's cultural, biological, and environmental resources.

2. The Geological and Engineering Characteristics of the Reservoir and Prior Exploration and Development Activities

The Eider Participating Area (PA) is surrounded by producing fields and known oil accumulations. Exploratory drilling in the area began when BP drilled the Sag Delta No. 1 well in 1976, about one mile southwest of the proposed Eider PA. This was a test of the Lisburne Group in direct contact with the Lower Cretaceous Unconformity (LCU). This formation tested a maximum rate of 7,877 barrels of oil per day after acid stimulation at a depth of about -9,200 feet. DNR approved the formation of the Lisburne PA in the PBU effective December 1, 1986. This portion of the Lisburne Oil Pool is being developed from the Niakuk facilities at Heald Point. The Ivishak Formation, the reservoir rock at Eider, is absent because of erosion by the LCU.

In 1978 BP drilled the Sag Delta No. 4 well about three miles to the east of the Sag Delta No. 1 well. This well discovered oil in the Mississippian Kekiktuk Conglomerate, lying just below the LCU, at about -9,800 feet. DNR approved the formation of the Endicott PA in the DIU effective February 22, 1985, and production began in 1987. The Endicott PA has produced over 350 million barrels of oil so far and is currently producing approximately 55,000 barrels of oil per day from about 50 wells. The Endicott Field is defined on three sides by major normal faults thus setting the stage for satellite accumulations like Eider and Sag Delta North.

In 1981/82, BP ventured north of the Niakuk fault with the Sag Delta No. 8 and No. 9 wells. The Niakuk fault is a down-to-the-north, normal fault that marks the northern boundary of the Endicott Field. Both wells found oil accumulations but in different formations. The Sag Delta No. 9 well encountered Sadlerochit and Lisburne Group rocks saturated with oil. The Sag Delta No. 9 well started production in 1989 under an approved tract operation. Several Sag Delta wells were drilled in 1990 to further deplete the reservoir. DNR approved the formation of the Sag Delta North PA (SDNPA) effective August 12, 1991. As it turned out, the Lisburne Group contributed little to production, possibly because of reservoir continuity problems. Most of the seven million

barrels of oil produced from four wells in the SDNPA was from the Ivishak Formation (Sadlerochit Group).

The bottom-hole location of the Sag Delta No. 8 well is only a few hundred feet from the north line of the Duck Island Unit and the proposed Eider PA. The well found thick, oil saturated Kuparuk sands at -9,600 feet with an oil-water contact no lower than -9,681 feet. Kuparuk sands of this type are generally deposited on the down-thrown side of faults active in middle Neocomian time, about 120 million years ago. A test in this interval produced 1,846 barrels of oil per day with a water cut of about 15%. The Sag River Sandstone was encountered just beneath the Kuparuk sands at -9,865 feet and flowed 351 barrels of oil per day with less than 1% water. The Ivishak Formation and Lisburne Group tested only water in this well. These oil accumulations have not been developed; however, BP recently drilled two wells into this area from Heald Point.

The last development activity in the vicinity was in the Niakuk Field (Kuparuk Sands) in the PBU. Two producing wells were drilled from Heald Point to bottom-hole locations about one mile to the west of the proposed Eider PA in 1994. The Kuparuk Sands in these wells were deposited on the down-thrown side of the Niakuk fault and are probably contemporaneous with Kuparuk Sands deposition in the Sag Delta No. 8 well. However, these two reservoirs have different oil-water contacts and, therefore, are not in communication.

On February 17, 1998, BP submitted an application for approval of a tract operation within the DIU (Eider Tract Operation). The Eider oil and gas accumulation lies adjacent to the Endicott Field in the northeast corner of the Duck Island Unit. The geology for the Eider oil and gas accumulation is similar to that of the Sag Delta North accumulation to the east and can be considered a satellite accumulation to the Endicott field. The Eider pool is situated in the Triassic Ivishak Formation, which was saved from erosion during lower Cretaceous time in a down-thrown fault block north of the Niakuk fault. The primary and secondary objectives of the Eider Tract Operation were to test the Ivishak and Lisburne formations. BP planned to drill the 2-56/BG-01 well from the MPI to a bottom-hole location on ADL 34634. The well name was later changed to BP DIU 2-56/Eider.

DNR conditionally approved BP's plans for the Eider Tract Operation on March 9, 1998. The approval was for 120 on-line days of testing, evaluation, and pilot production. DNR allowed BP to commingle Eider production fluids with other DIU fluids through the Endicott facilities during the test period. DNR requested a copy of the ballot agreement that allowed the Eider Tract Operation to use Endicott facilities, a status report by the 90th day of testing, and monthly well test data. As a final condition for approval of the tract operation, the working interest owners were not allowed to deduct any field costs from the state's royalty share of production associated with testing the Eider Tract Operation.

BP drilled a pilot hole and three sidetracks under the approved tract operation. The first well, No. 2-56/Eider, was completed on March 20, 1998, to a total depth of 10,027 feet

true vertical depth. This well was plugged and abandoned. BP completed a sidetrack of the No. 2-56/Eider well on May 28, 1998, to a total depth of 10,006 feet true vertical depth. AOGCC classified one zone in this well as an oil well. Test production from the 2-56A/EI-01 well began on June 1, 1998.

3. The Applicant's Plan for Exploration or Development of the Participating Area

BP's Initial Plan of development (Initial POD) for the Eider PA includes the following:

- monitoring oil, gas and water production levels and trends from the 2-56A/EI-01 well;
- performing reservoir and PVT analysis to provide rock and fluid properties for reservoir simulation;
- reinterpretation of 3D seismic data;
- reservoir simulation; and
- designing and planning additional wells that BP determines are feasible to drill in the field.

The above work will be performed through the end of 1998.

BP will evaluate the data acquired during 1998 and submit a new plan of development 90 days before the Initial POD expires. 11 AAC 83.343(c).

BP did not submit a long-range development and production plan with the Eider PA application. Only one development well has been drilled to date and production and reservoir data are very limited at this point in time. It is anticipated that only a few (and maybe no) additional wells will be needed to deplete the reservoir. Given that only one well has been drilled, it is not unreasonable to produce the well on primary production for the first 12 months to collect data and develop a long-range plan. Considerably more information will be available when BP submits its Second Plan of Development. BP must then submit a more detailed drilling and reservoir management plan and its interpretation of the boundaries of the reservoir. Because the initial Eider PA now covers only one lease it is not necessary to discuss or evaluate equity or tract allocation issues. Those issues will be addressed if and when this PA is expanded.

4. The Economic Costs and Benefits to the State

Increased production and revenues, in and of themselves and without consideration of other relevant factors, may not always be in the state's best interest. Here, however, the gains in economic benefits outweigh any perceived costs to the state. The state's economy will benefit from the production-based revenue, oil and gas related jobs, and service industry activity.

As required by 11 AAC 83.371, BP submitted an allocation of production and cost for the leases in the proposed Eider PA (Exhibits C). All Eider PA production and costs are allocated 100% to Tract 12, ADL 34634.

BP as owner of 100% working interest in the lease will be responsible for the payment of royalties to the state on Eider PA production. BP's royalty payments are subject to the State of Alaska/BPXA 1991 ANS Royalty Litigation Settlement Agreement (oil valuation) and the 1995 ANS Royalty Settlement Agreement (gas valuation), as amended.

DNR approved Exhibit G to The Agreement, *Settlement of Cleaning, Dehydration and Transportation Charges Applicable to Royalty Hydrocarbon Liquids Taken from the Endicott Participating Area, Duck Island Unit*, as applicable to the Endicott and Sag Delta North PAs. It is not appropriate for Exhibit G to apply to the Eider PA. As provided by the lease provisions in ADL 34634, no field cost deductions will be allowed from the state's royalty share, for hydrocarbons produced from the Eider PA.

AOGCC has authorized the flare of a specific amount of gas for safety purposes. Royalty is due to the state for any flare gas above the amount authorized by AOGCC. Gas that is flared for any reason other than safety purposes as directed by the AOGCC is not considered to be unavoidably lost for royalty accounting purposes.

The use of royalty free gas for DIU operations (fuel and flare) must be proportion between the three participating areas within the unit. The basis of proportionality for the fuel gas used in unit operations during a month shall be each PA's fraction of the total hydrocarbon liquids produced through the Endicott Production Facilities that month. The basis of proportionality for flare gas in any month shall be each participating area's fraction of the total produced gas processed through the Endicott Production Facilities that month.

Under the Endicott Facility Sharing Agreement "Any Tract Gas not consumed as Tract fuel gas, flared gas, lost gas or reduced through shrinkage, taken in kind or reinjected into the Tract Reservoir shall be disposed of by the Endicott Owners at no additional cost to the Tract Owner. Any Tract Gas injected into the Endicott Reservoir shall be considered indigenous to the Endicott Reservoir and, when produced, will be allocated to Endicott Owners in accordance with their respective Area Participations." BP must submit a monthly gas disposition and gas reserve debit report to properly account for the gas disposition between the Endicott, Sag Delta North and Eider PA.

5. Any Other Relevant Factors (Including Mitigation Measures) the Commissioner Determines Necessary or Advisable to Protect the Public Interest

The geological and geophysical data submitted with the Eider PA application indicate that the Eider Field may extend into the PBU. The bottom-hole location of the sidetrack, 2-56A/EI-01, is only 225 feet east of the PBU boundary. However, the available data is

insufficient to determine the size of the reservoir at this time. DNR requested assurance that the PBU owners would not oppose the formation of the Eider PA in the DIU.

DNR has considered the factors provided in the regulations to determine if formation of the Eider PA within the DIU is necessary or advisable to protect the public interest. DNR finds that it is appropriate to form the Eider PA within the DIU because the wells will be drilled from the MPI, production will be processed through the Endicott facilities, and the known extent of the Eider Field is within the DIU.

If additional information confirms that the Eider Field extends to the west, BP shall submit an application to expand the Eider PA and the DIU. DNR recognizes that the expanded Eider Field may overlie the Niakuk and Lisburne PAs in the PBU. DNR will entertain an application for an expansion of the DIU and simultaneous contraction of the PBU, with depth restrictions if appropriate. BP wrote to the PBU owners on September 15, 1998, requesting a response if they thought their interests would be harmed by such an expansion and contraction of the two units. DNR reserves the right to take appropriate action if the PBU Owners believe their interests are harmed.

BP submitted a well test methodology with the application to form the Eider PA. The proposed well test allocation methodology is acceptable and satisfactory for allocating hydrocarbon production between the three participating areas within the DIU for royalty purposes.

DNR understands that the meter allocation factor for the Eider PA will be fixed at 1.0, i.e., the Eider PA production volume will be determined using well test data, and not subsequently adjusted using a meter allocation factor. BP must submit monthly production reports and well test data for the Eider PA wells.

IV. FINDINGS AND DECISION

Considering the facts discussed in this document and the administrative record, I hereby make findings and impose conditions as follows:

1. The proposed Eider Participating Area meets the requirements of 11 AAC 83.303 and is necessary and advisable to protect the public interest.
2. The available geological and engineering data submitted demonstrate that a paying quantities certification is appropriate for the wells in the Eider Field. The acreage is known to be underlain by hydrocarbons and known or reasonably estimated to be capable of production or contributing to production in sufficient quantities to justify the formation of the Eider PA within the Duck Island Unit.
3. The geological and engineering data supporting the Eider PA justify the inclusion of the proposed tract at this time. The entire Eider PA is within the boundaries of the

current Duck Island Unit. Under the terms of the applicable regulations governing formation and operation of oil and gas units (11 AAC 83.301 – 11 AAC 83.395) and the terms and conditions of the lease agreements, the following lands are included in the Eider PA:

T. 12N., R. 16E., Umiat Meridian, Section 27 all, 640 acres.

4. The Duck Island Unit Agreement and the Alaska statutes and regulations governing oil and gas units provide for further expansions or contractions of a PA as warranted by additional information and findings. Therefore, the public interest and the correlative rights of all parties, including the state, are protected.
5. The production of Eider PA hydrocarbon liquids through the Endicott PA facilities reduces environmental impacts. Utilization of existing facilities will avoid unnecessary duplication of development efforts on and beneath the surface. The Endicott Facility Sharing Agreement is approved for tract operations on Unit Tracts 12, 13, 14 and 15 and any Participating Area subsequently formed, including the Eider PA.
6. The Initial POD is designed to maximize physical and economic recovery from the Eider Field. The Unit Operator will diligently explore and delineate the Eider Field underlying the Eider PA under the Initial POD. The Initial POD is approved from June 1, 1998 through June 1, 1999. BP will submit the Second Plan of Development for the Eider PA by March 3, 1999, 90 days before the Initial POD expires.
7. Formation of the Eider PA equitably divides costs and allocates produced hydrocarbons. Pursuant to 11 AAC 83.351(a) and 11 AAC 83.371(a), DNR approves the tract allocation schedule for the Eider PA as presented on the Exhibit C to the DIU Agreement. DNR assigned account code DIEI to the Eider PA for royalty accounting purposes. BP shall reference this account code on the monthly royalty reports.
8. BP's royalty payments are subject to the State of Alaska/BPXA 1991 ANS Royalty Litigation Settlement Agreement (oil valuation) and the 1995 ANS Royalty Settlement Agreement (gas valuation), as amended.
9. As provided by the lease provisions in ADL 34634, no field cost deductions will be allowed from the state's royalty share, for hydrocarbons produced from the Eider PA.
10. BP, as Unit Operator, shall provide DNR with the monthly production allocation reports and well test data for the Eider wells by the 20th of the following month. The monthly allocation report shall include the volume of oil, gas, and water produced from each well; and specific well test data for all tests that have been

conducted. DNR reserves the right to request any information it deems pertinent to the review of those reports. Moreover, this approval of the allocation methodology is conditioned upon the operator's agreement to reply promptly and fully to any such requests.

11. DNR reserves the right to review the well test allocations to insure compliance with the methodology prescribed in this decision. Such review may include, but is not limited to, inspection of facilities, equipment, and well test data.
12. The Eider PA is retroactively approved to the start of test production, June 1, 1998.

For these reasons and subject to the conditions and limitations noted, I hereby approve the Eider Participating Area within the Duck Island Unit.

Kenneth A. Boyd, Director
Division of Oil and Gas

Date

For: John Shively, Commissioner
Alaska Department of Natural Resources

Attachment: Delegation of Authority

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For these reasons and subject to the conditions and limitations noted, I hereby approve the Eider Participating Area within the Duck Island Unit.



Kenneth A. Boyd, Director
Division of Oil and Gas

9/28/98
Date

For: John Shively, Commissioner
Alaska Department of Natural Resources

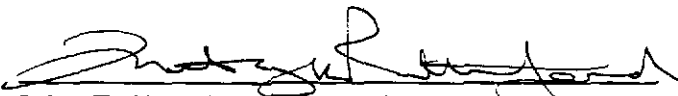
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DELEGATION OF AUTHORITY

Eider Participating Area, Duck Island Unit

I hereby delegate to the Director of the Division of Oil and Gas, my authority under AS 38.05.180(p), 11 AAC 83.351 and .371 to approve the Eider Participating Area in the Duck Island Unit.


John T. Shively, Commissioner
Alaska Department of Natural Resources

9/22/98
Date