SB

156

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Dept. Affected: Natural Resources
Title: Best Interest Finding under the Alaska Lands Act
BRU: Oil & Gas Development
Component: Oil & Gas Development
Sponsor: Senate Resources
Requester: Senate Resources
Component Number: 439

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)						
1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2001) cost: none

Check this box (X) if funding for this bill is included in the Governor's FY2002 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

This bill clarifies that a best interest finding is not required after the initial disposal phase.

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Date/Time 27-Mar-01
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Date 28-Mar-01
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SENATE RESOURCES COMMITTEE

Sponsor Statement

SB 156
Best Interest Finding Under Alaska Land Act

SB 156 amends the Alaska Land Act to clarify the requirement that the Department of Natural Resources prepare a single, written Best Interest Finding for multiphased development projects. In 1994, the Legislature passed SB 308 to amend the Alaska Land Act in response to several unfavorable Alaska Supreme Court decisions that threatened the state's leasing program. The legislation explicitly allowed project phasing and precisely defined the scope of the best interest finding determination. Since its passage, recent court decisions have continued to threaten the program and have concluded that the Department is "obliged, at each phase of development, to issue a best interests finding...relating to that phase before the proposed development may proceed."

Under SB 308, the original legislation, the Legislature intended that a Best Interest Finding would be prepared for the first phase, the disposal, and subsequent phases would be subject to the "Department's approval" and to separate reviews by extensive permitting processes that include public input and scrutiny of other agencies. The Legislature did not intend "approval" to be defined as a best interest finding determination as the Courts' have misinterpreted. The Legislature intended the Department to exercise their discretion to impose conditions in the best interest finding determination, issued for the disposal, that would minimize future impacts. Preparation of a Best Interest Finding determination for every phase would be a very costly, and time consuming process.

SB 156 elaborates the legislative findings for phasing under the Alaska Land Act and amends AS 38.05.035 so that it is clear that the Department of Natural Resources is required to issue a single written best interest finding for the disposal of state land. It also ensures the public that the opportunity to comment at each phase of the project will be provided. By clarifying the Legislature's original intent, SB 156 will overturn the Courts' erroneous interpretation. SB 156 provides clear guidance to the Courts regarding the legislature's policy and will result in the avoidance of protracted litigation and associated delays or disruptions of the state's leasing program and development of already leased acreage.

C. Governmental Powers to Regulate Oil and Gas Exploration, Development, Production, and Transportation

All post-lease sale activities, exploration, development, production, and transportation are subject to numerous federal, state, and local laws, regulations, policies, and ordinances. Each successful bidder awarded a lease in a state oil and gas lease sale is obligated to comply with all federal, state, and local laws. A sample lease contract is contained in Appendix C. This section does not provide an exhaustive description of all laws and regulations that may be applicable to such activities. However, it does provide a sufficient illustration of the broad powers of various government agencies to prohibit, regulate, and condition any activities related to oil and gas which may ultimately occur on sale leases. A list of important laws and regulations applicable to oil and gas activities is included in Appendix B. Each of the regulatory agencies, (state, federal, and local) has a different role in the oversight and regulation of post-lease sale activities.

Each lease issued as a result of the sale will grant the lessee exclusive rights to subsurface mineral interests. However, as discussed in the previous section, a lease does not authorize subsequent activities. The lessee's rights are subject to the terms of the sale and the provisions of the lease (including the mitigation measures contained in Chapter Seven), all applicable state and federal laws and regulations, and may allow the lease holder to drill for, extract, remove, clean, process, and dispose of any oil, gas, or associated substances that may underlie the lands described by the lease.

Permits and approvals that each agency requires are presented below, with additional information on the review process (see Table 1.1). There is, however, no "typical" project. Actual processes, terms and conditions will vary with time-certain, site-specific operations. Each agency has field monitors assigned to ensure that operations are conducted as approved. The appropriate statutes and regulations should be consulted when specifics are required as agency procedure will change from time to time.

1. Alaska Coastal Management Plan Review

Permit applications for post-lease sale activities must be as detailed as necessary for a comprehensive agency review. If an activity affects or occurs within a coastal area, an ACMP review of the permit application will be conducted to determine whether the activity is consistent with the ACMP standards. Following the review, each agency will approve or disapprove the permit and determine whether any additional protective stipulations or permit terms are required prior to approval.

The public is provided the opportunity to participate in ACMP reviews. For example, most permits needed for exploratory wells require public notice. The ACMP permitting process goes through a 50-day agency review, and if approvals are needed by many agencies, the review is coordinated by Division of Governmental Coordination (DGC). This process provides for coordinated agency reviews, public input, and insures consistency with the ACMP and local coastal district plans. The coastal district plan applicable to this sale is the NSBCMP.

Application packages are distributed to affected coastal resource districts and permitting agencies by the lessee or designated operator, and DGC. Consistency review is initiated, and additional information must be requested within 25 days. Public and agency review of comments are due on or before day 34, and a consistency finding is issued on or before day 44. Requests for additional review must be received on or before

day 49, and the Final Consistency Determination is issued (unless elevated)[4] on day 50. If the determination is elevated, a director's determination is issued by day 65. A citizen may petition for Coastal Policy Council review of the consistency determination after the elevation of issues.

Agencies may authorize some activities using either the A or B lists.

"A list" activities are considered "categorically consistent" and do not result in significant impacts to coastal resources and they do not require a consistency determination review. On-pad placement of light poles, railings, electrical towers/poles, modules and associated oil and gas buildings are examples of A list activities. A Coastal Project Questionnaire (CPQ) application is required for all projects on the A list.

"B list" reviews are classified as General Concurrences and the activities are considered routine with standard conditions. B list activities are consistent with the ACMP. Individual ACMP consistency reviews are not necessary for activities on the B list. However, a Coastal Project Questionnaire (CPQ) application is required for all projects on the B list.

The resource agency(s) will check the CPQ and plan of operations to ensure that the project qualifies for the A or B list. The coordinating agency will also review the standard stipulations and any applicable procedures against the plan of operations submitted.

Activities not on the A or B lists constitute the "C List." These reviews are classified as Individual Project Reviews and are subject to the review process described at the beginning of this section.

2. Alaska Department of Natural Resources

ADNR, through the Divisions of Oil & Gas, and Mining, Land and Water Management, reviews, coordinates, conditions, and approves plans of operations or development and other permits as required before on-site activities take place. The department also monitors activities through field inspection once they have begun. Each plan of operations is site-specific and must be tailored to the activity requiring the permit. A plan of operations must identify the specific measures, design criteria, and construction methods and standards to be employed to comply with the terms of the lease. It must also comply with coastal zone consistency review standards and procedures established under 6 AAC 50 and 80. Applications for other state or federal agency authorizations or permits must be submitted with the plan of operations.

a. Lease Operations Plan of Approval

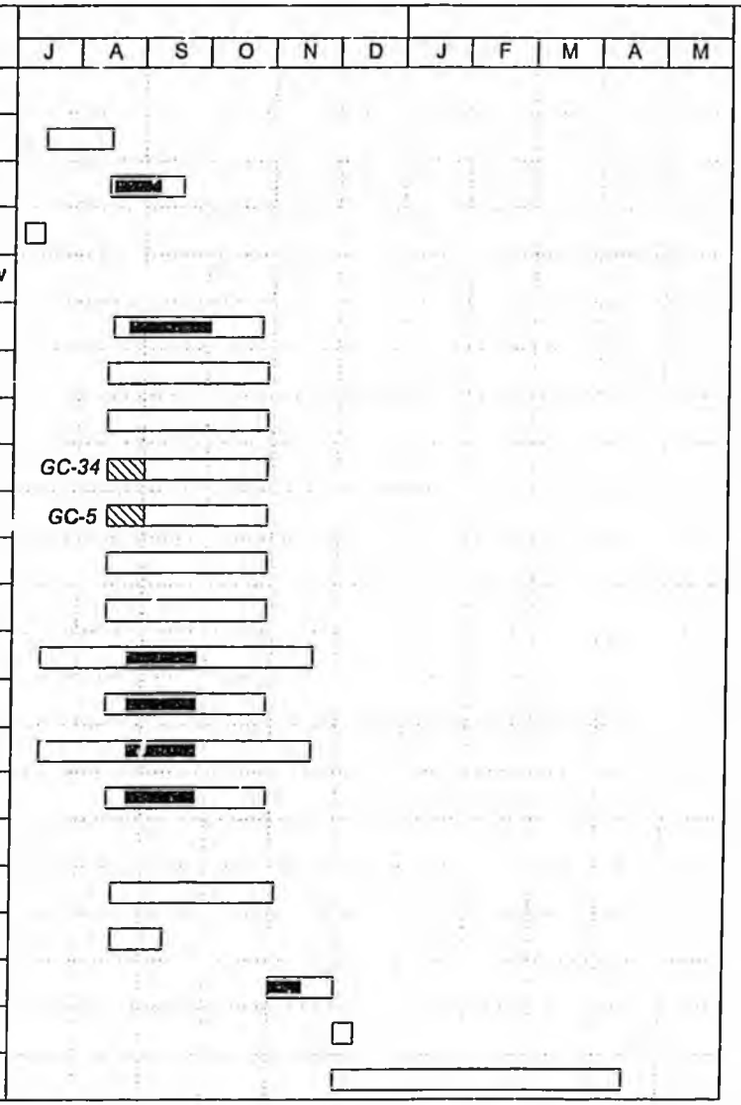
Land use activities on state oil and gas leases are regulated under 11 AAC 83.158 and paragraphs 9 and 10 of the lease contract. These require the lessee to prepare plans of operations and development that must be approved by ADNR through DO&G and by any other interest holder, if ownership is shared, before the lessee may commence any activities on the lease. Except for equipment uses exempted under 11 AAC 96.020, the lessee must prepare a plan of operations and obtain all required approvals and permits for each phase of exploration, development, or production prior to implementation of that activity. All permit applications and plans are available for public review.

An application for approval of a plan of operations must contain sufficient information, based on data reasonably available at the time the plan is submitted in order for the commissioner to determine the surface

[4] An elevation is an appeal process which allows further review by division directors and commissioners of the state resource agencies. A resource agency, local coastal district or the applicant can appeal a proposed consistency determination. The appeal goes first to the division directors. If the division directors are unable to resolve the conflict, it goes to the commissioners. A citizen may petition for Coastal Policy Council review of a proposed consistency determination if they commented on district policies.

Table 1.1: Permit Process: North Slope Onshore Exploration Well

ID	Task Name
1	**Exploration Well - Permitting and Drilling**
2	DNR Parks - Cultural Resource Survey
3	North Slope Borough Development Permit
4	ACMP Pre-application Conference
5	**Permits that may also be Subject to ACMP Coridinated Individual Project Review**
6	ACMP Consistency Determination - AS 46.40
7	DNR DO&G - Plan of Operation Review
8	DNR DO&G - Geophysical Exploration Permit
9	DNR DL - Cross Country Travel or Ice Road Land Use Permit
10	ADFG - Fish Habitat Permit, Water Sources and Stream Crossings
11	DNR DW - Temporary Water Use Permit
12	DEC - Authorization for Temporary Storage of Drilling Wastes
13	DEC - Oil Spill Discharge and Contingency Plan
14	DEC - Solid Waste Disposal Permit
15	DEC - Air Quality Control Permit to Operate (Title V)
16	DEC - Wastewater Disposal Permit
17	**Other Permits**
18	EPA - NPDES Coverage Under General North Slope Permit for Wastes
19	USFWS - LOA for Incidental Take of Polar Bears
20	AOGCC - Conservation Order
21	AOGCC - Permit to Drill
22	**Ice Construction - Drilling - Demobilization**



Project: North Slope | Task | Public Notice/Comment

ADNR, DO&G 1/01

use requirements and effects directly associated with the proposed operations. An application must include statements and maps or drawings setting out the following:

(1) the sequence and schedule of the operations to be conducted on the leased area, including the date operations are proposed to begin and their proposed duration;
(2) projected use requirements directly associated with the proposed operations, including but not limited to the location and design of well sites, material sites, water supplies, solid waste sites, buildings, roads, utilities, airstrips, and all other facilities and equipment necessary to conduct the proposed operations;
(3) plans for rehabilitation of the affected lease area after completion of operations or phases of those operations; and
(4) a description of operating procedures designed to prevent or minimize adverse effects on other natural resources and other uses of the leased area and adjacent areas, including fish and wildlife habitats, historic and archeological sites, and public use areas. 11 AAC 83.158(d).

ADNR may require other stipulations, in addition to the mitigation measures developed at the time of preparation of the best interest finding when it considers the plan of operations. These will address site-specific concerns directly associated with the proposed project. The lease stipulations and the terms and conditions of the lease are attached to the plan of operations approval and are binding on the lessee. Lease activities are field-monitored by ADNR, ADEC, ADF&G, and AOGCC to ensure compliance with each agency's respective permit terms. Paragraph 16 of the lease contract requires that the lessee keep the lease area open for inspection by authorized state officials. The lessee must post a $500,000 statewide bond to cover a drill site. Lease operations approvals are generally granted for three years.

b. Geophysical Exploration Permit

The geophysical exploration permit is a specific type of land use permit issued by DO&G (11 AAC 96.010). Seismic surveys are the most common activity authorized by this permit. The purpose of the permit is to minimize adverse effects on lands and resources while making important geological information available to the state. Under AS 38.05.035(a)(9)(c), the geological and geophysical data that are made available to the state are held confidential at the request of the permittee.

Seismic surveys using Vibrosis vehicles on the North Slope during winter have been found to be consistent with the ACMP, provided certain conditions are adhered to. Seismic surveys in any other area of the state are subject to individual 30-day ACMP reviews. If the survey is part of an exploration program, the permit will be reviewed as part of the exploration well permit package.

The application must contain sufficient detail to allow evaluation of the activities' effects on the lands and resources. A map showing the general location and routes of travel, and a description of the activity and equipment that will be used must be included. Maps showing the precise location of the survey lines must also be provided, though this information is usually held confidential. A $100,000 bond is required.

The permit will contain measures to protect the land and resources of the area. The permit is usually issued for one year or less, but may be extended. If the permit is extended, the director may modify existing terms or add new ones. The permit is also revocable.

c. Pipeline Right-of-Way

Most transportation facilities within the lease area or beyond the boundaries of the lease area must be authorized by ADNR under the Right-of-Way Leasing Act, AS 38.35. This act gives the commissioner broad authority to oversee and regulate the transportation of oil and gas by pipelines, which are in whole or in part

located on state land, to ensure that the state's interests are protected. The Right-of-Way Leasing Act permits are administered by the Joint Pipeline Office.

d. Temporary Water Use Permit

Under 11 AAC 93.210-220, Temporary Water Use permits are issued by the Division of Mining, Land and Water Management and may be required for exploration activities. An application for a temporary water use permit must be made if the amount of water to be used is a significant amount as defined by 11 AAC 93.970(14), the use continues for less than five consecutive years, and the water applied for is not otherwise appropriated. The permit may be extended one time for good cause for a period of time not exceeding five years. The application must include: (1) the application fee; (2) a map indicating the location of the property, take point, and point of use; (3) the quantity of water to be used; (4) the nature of the water use; (5) the time period during which the water is to be used; and (6) the type and size of equipment to be used to withdraw the water. At the discretion of the commissioner, a temporary water use permit will be subject to conditions, including suspension and termination in order to protect the water rights of other persons or the public interest.

e. Permit and Certificate to Appropriate Water

Industrial or commercial use of water requires a Permit to Appropriate Water (11 AAC 93.120). The permit is issued for a period of time (not to exceed five years for industrial or commercial uses) consistent with the public interest and adequate to finish construction and establish full use of water. The commissioner will, in his discretion, issue a permit subject to conditions he considers necessary to protect the public interest. The conditions include, but are not limited to, conditions that reserve a sufficient quantity of water to achieve any of the following purposes: protection of fish and wildlife habitat, recreation, navigation, sanitation and water quality, protection of prior appropriations and for any other substantial public purpose.

A Certificate of Appropriation (11 AAC 93.130) will be issued if (1) the permit holder has shown that the means necessary for the taking of water have been developed; (2) the permit holder is beneficially using the amount of water to be certified; and (3) the permit holder has substantially complied with all permit conditions. Again, the commissioner will, in his or her discretion issue a certificate subject to conditions necessary to protect the public interest. For example, the applicant may be required to maintain a specific quantity of water at a given point on a stream or waterbody, or in a specified stretch of stream, throughout the year or for specified times of the year in order to protect fish and wildlife habitat, recreation, navigation or prior appropriations. 11 AAC 93.130(c)(1).

f. Land Use Permits

11 AAC 96.010-.140. Land use permits are issued by the Division of Mining, Land and Water Management and may be required for exploration, development and production activities. Permits have a term of one year. All land use activities are subject to the following provisions:

(1) Activities employing wheeled or tracked vehicles shall be conducted in such a manner as to minimize surface damage;
(2) Existing roads and trails shall be used whenever possible. Trail widths shall be kept to the minimum necessary. Trail surface may be cleared of timber, stumps, and snags. Due care shall be used to avoid excessive scarring or removal of ground vegetative cover;
(3) All activities shall be conducted in a manner that will minimize disturbance of drainage systems, changing the character, polluting, or silting of streams, lakes, ponds, waterholes, seeps, and marshes, or disturbance of fish and wildlife resources. Cuts, fills, and other activities causing any of the above disturbances, if not repaired immediately, are subject to such corrective action as may be required by the director;

(4) The director may prohibit the disturbance of vegetation within 300 feet of any waters located in specially designated areas as prescribed in 11 AAC 96.010(2) except at designated stream crossings;
(5) The director may prohibit the use of explosives within one-fourth mile of designated fishery waters as prescribed in 11 AAC 96.010(2);
(6) Trails and campsites shall be kept clean. All garbage and foreign debris shall be eliminated by removal, burning, or burial, unless otherwise authorized;
(7) All survey monuments, witness corners, reference monuments, mining claim posts, and bearing trees shall be protected against destruction, obliteration, or damage. Any damaged or obliterated markers shall be reestablished in accordance with accepted survey practice of the division;
(8) Every reasonable effort shall be made to prevent, control, or suppress any fire in the operating area. Uncontrolled fires shall be immediately reported;
(9) Holes, pits, and excavations shall be filled, plugged, or repaired to the satisfaction of the director. Holes, pits, and excavations necessary to verify discovery on prospecting sites, mining claims, and mining leasehold locations may be left open but shall be maintained as required by the director;
(10) No person may engage in mineral exploratory activity on land, the surface of which has been granted or leased by the state of Alaska, or on land for which the state has received the reserved interest of the United States until good faith attempts have been made to agree with the surface owner or lessee on settlement for damages which may be caused by such activity. If agreement cannot be reached, or lease or surface owner cannot be found within a reasonable time, operations may be commenced on the land only with specific approval of the director, and after making adequate provision for full payment of any damages which the owner may suffer;
(11) Entry on all lands under mineral permit, lease, or claim, by other than the holder of the permit, lease, or claim or his authorized representative, shall be made in a manner which will prevent unnecessary or unreasonable interference with the rights of the permittee, lessee, or claimant. Additional stipulations may be imposed.

g. Material Sale Contract

A material sale contract must include, if applicable, (1) a description of the sale area, (2) the volume of material to be removed, (3) the method of payment, (4) the method of removal of the material, (5) the bonds and deposits required of the purchaser, (6) the purchaser's liability under the contract, (7) the improvements to and occupancy of the sale area required of the purchaser, (8) and the reservation of material within the sale area to the division, (9) the purchasers site-specific operation requirements including erosion control and protection of water; fire prevention and control; roads; sale area supervision; protection of fish, wildlife and recreational values; sale area access and public safety. A contract must state the date upon which the severance or extraction of material is to be completed. The director at his discretion may grant an extension not to exceed one year. When determined by the director that a delay in completing the contract is due to causes beyond the purchaser's control, the contract will be extended for a time period equal to the delay.

The director, in his discretion, will require a purchaser to provide a performance bond based on the total value of the sale. The performance bond must remain in effect for the duration of the contract unless released in writing by the director.

3. Alaska Department of Environmental Conservation

ADEC has statutory responsibility for preventing air, land, and water pollution. Oil and gas activities, such as the disposal of drilling mud and cuttings, the flaring of hydrocarbon gases, and the discharge of wastewater, are regulated by this agency as well as AOGCC if the activity involves a class II injection well. Several separate written permits are required before activity can begin. Before solid waste disposal, wastewater or air quality permits are issued, two public notices and an opportunity for public comment (and a public hearing, if requested) are required.

a. Oil Discharge Prevention and Contingency Plan

Lessees must comply with the requirements of AS 46.04.010-.900, Oil and Hazardous Substance Pollution Control. This requirement includes the preparation and approval by ADEC of an Oil Discharge Prevention and Contingency Plan (C-Plan). AS 46.04.030; 18 AAC 75.445. Details on the contents of the plan are in Chapter Six.

Prior to receiving a permit to drill, the lessee must demonstrate in the plan of operations the ability to promptly detect, contain, and cleanup any lease-related hydrocarbon spill before the spill affects fish and wildlife populations or their habitats. This includes the capability to drill a relief well in the event of a loss of well control. ADEC has authority under AS 46.04 over both onshore and offshore activities for the purpose of preventing and cleaning up oil spills.

If transportation by water is planned, AS 46.04.030 requires that the lessee obtain the approval of ADEC for detailed oil spill contingency plans prior to the commencement of each aspect of the operation, including individual wells, drilling pads or platforms, pipelines, storage facilities, loading facilities, and individual tankers or barges.

b. Wastewater Disposal

Domestic greywater must be disposed of properly at the surface and a Wastewater Disposal Permit is required (18 AAC 72). Typically, waste is processed through an on-site plant and disinfected before discharge. ADEC sets fluid volume limitations and threshold concentrations for biochemical oxygen demand (BOD), suspended solids, pH, oil and grease, fecal coliform and chlorine residual. Monitoring records must be available for inspection and a written report may be required upon completion of operations.

c. Annular Injection

If fluid is to be injected into a well annulus, a permit is required. ADEC considers the volume, depth and other physical and chemical characteristics of the formation designated to receive the waste. Injection is not permitted into water-bearing zones where dissolved solids or salinity concentrations fall below predetermined threshold limits. Waste not generated from a hydrocarbon reservoir cannot be injected into a reservoir.

d. Solid Waste Disposal Permit

Recent industry practice is to use methods other than surface reserve pits for disposal of drilling muds, such as injection wells, where possible. In addition, the majority of muds utilized today are water-based. When a well is drilled, muds and cuttings are initially either temporarily stored on a gravel pad or collected in a reserve pit pending final disposal by injection. Drilling muds and cuttings discharged into a reserve pit require pre-approval and a written permit. The permit addresses design, operation and closure concerns to ensure that unacceptable environmental effects are avoided.

Solid waste storage, treatment, transportation and disposal are regulated under 18 AAC 60. For all solid waste disposal facilities, a comprehensive disposal plan is required, which must include engineering design criteria and drawings, specifications, calculations and a discussion demonstrating how the various design features (liners, berms, dikes) will ensure compliance with regulations.

Before approval, solid waste disposal permit applications are reviewed for compliance with air and water quality standards, wastewater disposal and drinking water standards, as well as for their consistency with the ACMP and Alaska Historic Preservation Act. 18 AAC 60.215. The application for a waste disposal permit must include a map or aerial photograph (indicating relevant topographical, geological, hydrological,

biological and archeological features), with a cover letter describing type, estimated quantity and source of the waste as well as the type of facility proposed. Roads, drinking water systems and airports within a two mile radius of the site must be identified, along with all residential drinking water wells within 1/2-mile. There must also be a site plan with cross-sectional drawings that indicate the location of existing and proposed containment structures, material storage areas, monitoring devices, area improvements and on-site equipment. An evaluation of the potential for generating leachate must be presented as well. For above-grade disposal options, baseline water-quality data may be needed to establish the physical and chemical characteristics of the site before installing a containment cell.

Non-drilling related solid waste must be disposed of in an approved municipal solid waste landfill (MSWL). MSWL's are regulated under 18 AAC 60.300-.397. All other solid waste (except for hazardous materials) must be disposed of in an approved monofill. 18 AAC 60.400-.495. A monofill is a landfill or drilling waste disposal facility that receives primarily one type of solid waste and is not an inactive reserve pit. 18 AAC 60.990(81). An inactive reserve pit is a drilling waste disposal area, containment structure, or group of containment structures where drilling waste has been disposed of which the owner or operator does not plan to continue disposing of drilling waste. 18 AAC 60.990(61). Closure of inactive reserve pits is regulated under 18 AAC 60.440.

Drilling waste disposal is specifically regulated under 18 AAC 60.430. Design and monitoring requirements for drilling waste disposal facilities are identified in 18 AAC 60.430(c) and (d), respectively. Under 18 AAC 60.430(c)(1), "the design must take into account the location of the seasonal high groundwater table, surface water, and continuous permafrost, as well as proximity to human population and to public water systems, with the goal of avoiding any adverse effect on these resources." The facility must be designed to prevent the escape of drilling waste and leachate, prevent contamination of groundwater, and be of sufficient volume and integrity to prevent leakage due to erosion, precipitation, wind and wave action, and changing permafrost conditions. The plans for the proposed design and construction of the drilling waste disposal facility and the fluid management plan must be approved and signed and sealed by a registered engineer. 18 AAC 60.430(c)(5).

Today, on the North Slope, drilling fluids are disposed of by reinjection deep into the ground, however, limited discharge of waste streams may be authorized by EPA and ADEC under the NPDES permit system. All produced waters must be re-injected or treated to meet Alaska Water Quality Standards prior to discharge. Discharge of muds and cuttings is prohibited between the shore and the 5-meter isobath. (EPA, 1995[5]). In the past, muds and cuttings were disposed of using surface disposal methods (reserve pits). Reserve pits must still be constructed for every well. Before a well may be permitted under 20 AAC 25.005, a proper and appropriate reserve pit must be constructed, or appropriate tankage installed for the reception and confinement of drilling fluids and cuttings, to facilitate the safety of the drilling operation, and to prevent contamination of ground water and damage to the surface environment. 20 AAC 25.047.

Typically, a reserve pit is a containment cell, lined with an impermeable barrier compatible with both hydrocarbons and drilling mud. Typical dimensions may be approximately 130 feet wide by 150 feet long by 12 feet deep, although specific configurations vary by site. The cell may receive only drilling and production wastes associated with the exploration, development or production of crude oil, natural gas or hydrocarbon contaminated solids. The disposal of hazardous or other waste in a containment cell is prohibited. After the well is deepened, the residue in the reserve pit is often dewatered and the fluids are injected into the well annulus. An inventory of injection operations, including volume, date, type and source of material injected is maintained by requirement. Following completion of well activities, the material remaining in the pit is permanently encapsulated in the impermeable liner. Fill and organic soil is placed over it and proper drainage

[5] EPA 1995, NPDES General Permit: Final Arctic Permit. U.S. EPA, Seattle, WA, Permit No. AKG 2 84200, April 12.

is reestablished. Surface impoundment's within 1,500 feet are sampled on a periodic basis and analyzed. In addition, groundwater monitoring wells are drilled and sampled on a regular basis. If there are uncontained releases during operations, or if water samples indicate an increase in the compounds being monitored, additional observation may be required.

Substances proposed for disposal classified as "hazardous" undergo a more rigorous and thorough permitting and review process by both ADEC (18 AAC 62 and 63) and EPA.

e. Air Quality Control Permit to Operate

The federal Prevention of Significant Deterioration (PSD) program, which is administered by ADEC, establishes threshold amounts for the release of byproducts into the atmosphere. Oil and gas exploration and production operations with emissions below predetermined threshold amounts must still comply with state regulations designed to control emissions at these lower levels (18 AAC 50). Activities which exceed pre-determined PSD threshold amounts are subject to a more rigorous application and review process. Such activities include the operation of turbines and gas flares.

For oil and gas activities, these requirements translate into the requirement for a permit to flare gas during well testing (a safety measure) or when operating smoke-generating equipment such as diesel-powered generators. Permit conditions will induce additional scrutiny if a black smoke incident exceeds 20 percent opacity for more than 3 minutes in any 1-hour period.

The burning of produced fluids is prohibited unless failures or seasonal constraints preclude storage in tanks, backhauling or reinjection. If liquids are to be incinerated, they must be burned in smokeless flares. The open burning of produced liquids is prohibited except under emergency conditions.

Gas produced as a by-product of oil production is usually re-injected into the producing formation to maintain pressure, which supports further production. Flaring is not an approved method of disposal, however, as a safety measure and backup for standard gas handling systems production facilities, which separate gas from oil, are capable of flaring large volumes of gas. Flaring occurs when the oil and gas separation process is interrupted, or when an unplanned event requires an immediate release from pressure increases. Pilot flares are an operational necessity; they are subject to permit requirements as well.

f. 401 Certification

Under 18 AAC 15.120, a person who conducts an operation that results in the disposal of wastewater into the water of the state need not apply for a permit from ADEC if the disposal is permitted under an NPDES permit. When an NPDES permit is issued under Section 401 (33 U.S.C. § 1341) of the Clean Water Act, ADEC does not require a separate permit, but participates by certifying that the discharge meets state and federal water quality standards.

When an application is made, a duplicate must be filed with the department and public notice of the certification application is published jointly by EPA and ADEC. 18 AAC 15.140 and 40 C.F.R. § 125.32. As a result, the state and federal reviews run concurrently. Public comment is sought and a hearing can be requested.

Following an EPA determination, but within 30 days, the department must provide the applicant, EPA, and all persons who submitted timely comments with a copy of the certification. The decision may impose stipulations and conditions (such as monitoring and/or mixing zone requirements), and any person disagreeing with the decision may request an adjudicatory hearing. 18 AAC 15.200-.920. Once activity begins, both EPA and the department have the responsibility to monitor the project for compliance with the terms of the permit.

The Corps of Engineers 404 permit program (see Corps of Engineers) also requires certification under section 401 of the Clean Water Act and it is processed in a similar manner. The ADEC certification is termed a Certificate of Reasonable Assurance.

g. Review Process

Following receipt of an application for a solid waste disposal, wastewater, or air quality permit, ADEC must publish two consecutive notices in a newspaper of general circulation in the area affected by the proposed operation, as well as through other appropriate media.

Comments must be submitted in writing within 30 days after the second publication and a public hearing may be requested. A hearing will be scheduled if good cause exists. Notice of a public hearing is handled in a manner similar to that of the initial application. Permits issued by the departmen may be subject to review for consistency with the Alaska Coastal Zone Management Program.

A decision on an application includes (1) the permit, (2) a summary of the basis for the decision and (3) provisions for an opportunity for an adjudicatory hearing. 18 AAC 15. The decision, as conditioned, is sent to the applicant as well as each person, or entity, who submitted timely comments or testified at a public hearing. Permits may be valid for up to five years. Renewals are treated the same as the original application, but they do not receive public notice.

4. Alaska Department of Fish and Game

ADF&G analyzes the effect of any activity on fish and wildlife, the users of those resources, and the protection of habitat. ADF&G requires permits for any activity in state game refuges, sanctuaries, critical habitat areas, and streams that contain anadromous fish, as well as other areas the agency believes might be threatened by development. Management plans control activities within many legislatively designated areas. By statute these areas are jointly managed with ADNR. Permits are conditioned to mitigate impacts. For example, timing restrictions are used to limit the impact on transitory wildlife. Public notice of ADF&G permit actions is not required.

a. Fish Habitat Permit

Title 16 gives ADF&G permitting authority over activities affecting anadromous fish streams that could block fish passage. A fish habitat permit must be obtained from ADF&G prior to using, diverting, obstructing, polluting, or changing the natural flow or bed of anadromous streams. AS 16.05.870. If the proposed activity obstructs fish passage, a fishway and device for the safe passage of downstream migrants may be required under AS 16.05.840.

Additionally under the ACMP, wetlands and tidelands must be managed to assure adequate water flow, avoid adverse effects on natural drainage patterns, and the destruction of important habitat. 6 AAC 80.130(c)(3). Rivers, streams, and lakes must be managed to protect natural vegetation, water quality, important fish or wildlife habitat, and natural water flow. 6 AAC 80.130(c)(7). To further protect fish and wildlife habitat, 6 AAC 80.070(b)(3) requires that facilities be consolidated, to the extent feasible and prudent.

b. ADF&G Special Area Permit

For activities in a legislatively designated area (such as a game refuge, a game sanctuary or critical habitat area), a Special Area Permit is required. AS 16.20 and 5 AAC 95. Currently there are no such areas on the North Slope.

c. Review Process

A fish habitat permit issued by the department is subject to the ACMP consistency review process. General permits, with standard stipulations, may be issued when it is determined that the impact of frequent and recurring activities meet pre-determined criteria. Applications, including the Coastal Zone Questionnaire, are submitted to the department's Habitat and Restoration Division.

Most permit actions subject to ADF&G require a 30-day review unless surface occupancy issues or other related permits require additional time. An informal review is conducted with the Departments of Natural Resources and Environmental Conservation as well as any affected coastal districts. Public notice of ADF&G permit actions is not required.

Decisions are based upon suggestions provided by area staff, the commenting agencies and coastal districts. For permits issued for activities in anadromous streams, an applicant may appeal a rejection or stipulation through procedures described in the Administrative Procedures Act.

5. Alaska Oil and Gas Conservation Commission

AOGCC administers the Alaska Oil and Gas Conservation Act under Title 31. The AOGCC may investigate to determine whether waste of oil and gas resources exists or is imminent. It is also responsible for ensuring that accurate metering and measuring of oil and gas production takes place.

The commission maintains programs to ensure that the drilling, casing and plugging of a well occurs in a manner that prevents (1) escapement from one stratum into another, (2) the intrusion of water into an oil or gas horizon, (3) the pollution of fresh water supplies, and (4) blowouts, cavings, seepage and fires. For conservation purposes, the commission regulates certain aspects of the drilling, production, and plugging of wells in addition to well spacing, the disposal of salt water and oil field waste and the contamination of underground water.

Reports, well logs, drilling logs and other information must be filed with the commission for each well drilled. The information is confidential for two years. However, if the data are considered especially important for the evaluation of nearby unleased land, they may be held confidential for an extended period.

a. Permit to Drill

Before drilling, a Permit to Drill, valid for 24 months, must be obtained from the commission. AS 31.05; 20 AAC 25. The permit application informs the commission of a proposed operator's engineering and safety plans designed to ensure the structural and mechanical ability of the well to contain fluids and gases that could be encountered at various depths and under varying pressure.

With the application, a diagram of the proposed blowout prevention (BOP) equipment (used for secondary well control) must be included with an analysis of expected downhole pressures. A BOP, along with related well-control equipment, must be installed, used, maintained and tested as necessary to assure control over the well and conform to the latest technology and accepted industry practice.

Casing, cementing, and drilling fluid programs are also designed to ensure primary well control. A drilling fluid monitoring program must be in place to detect gases entrained in the drilling fluid and detect hydrogen sulfide, a poisonous gas.

For exploration wells, a well-site survey is conducted using seismic techniques. The data from the seismic survey are analyzed to detect shallow gas in near-surface strata to a depth of 2,000 feet and the depths

of suspected overpressured strata are predicted. For offshore wells, an analysis of seafloor conditions is required.

If climatic conditions and operational or environmental concerns become apparent, or if unplanned-for circumstances prevent the continuation of an approved program, an operator can secure a well and apply for an operational shut down. When a well is abandoned, plans for setting plugs, mudding, cementing, shooting, testing and removing the casing must be submitted to AOGCC for approval. Abandoned or suspended wells may remain that way for long periods of time. Until final plans are made, the commission seeks to prevent the movement of fluids into or between freshwater and/or hydrocarbon sources.

Before beginning to drill, an operator must post a bond for $100,000 in favor of the state for a single well, or $200,000 for a blanket bond covering more than one well. The purpose of the bond is to ensure that a well is properly completed or abandoned.

After abandonment, a location clearance is required. For onshore locations, materials, supplies, structures, and installations must be removed, debris properly disposed of, and the reserve pit filled and graded. The location must be left uncontaminated, in a clean condition acceptable to state inspectors. Off-shore locations must have all casing, wellhead equipment, pilings, and other structures removed to a depth of 15 feet below the mud line.

b. Disposal of Wastes

AOGCC must also review and approve proposals for the underground disposal of water and oil field waste. 20 AAC 25.252. Before receiving an approval, an operator must demonstrate that the movement of fluids into freshwater sources will not occur. Disposal must be into a well with equipment designed to ensure a controlled release. A plat is required showing the location of other wells within a quarter-mile that penetrate the same disposal zone, and surface owners (located within one quarter-mile) must be provided with a copy of the application.

Included with a description of the fluid to be injected (with its composition, source, daily amount and disposal pressures), the application must contain the name, description, depth, thickness, lithologic description and geological data of the disposal formation and adjacent confining zones. There must be evidence presented that the disposal well will not initiate or propagate fractures through the confining zones that would allow fluids to migrate, a laboratory analysis is required. Under certain circumstances, however, a fresh water aquifer exemption may be granted. 20 AAC 25.440.

Following approval, liquid waste from drilling operations may be pumped into a well drill pipe, casing or annulus. The pumping of drilling mud from reserve pits (not runoff) into exploration or stratigraphic test wells or into the annuli of a well approved in accordance with 20 AAC 25.080 is an operation incidental to drilling of the well, and is not a disposal operation subject to regulation as a Class II well under EPA regulations.

c. Review Process

Actions by the commission that have statewide application (such as adopting regulations) are conducted in accordance with the Administrative Procedures Act. Major actions, resulting in conservation orders that apply to a single well or field, receive public notice by publication in a newspaper. 20 AAC 25.540. In addition, a mailing list is maintained for the purpose of sending notices, orders or publications to those who request them. There are different lists for different purposes.

6. U.S. Environmental Protection Agency

a. NPDES Permit

The federal Clean Water Act requires a NPDES permit to release pollutants into the waters and wetlands of Alaska. The permitting system is designed to ensure that discharges do not violate state and federal water quality standards by identifying control technologies, setting effluent limitations, and gathering information through reporting and inspection.

Typically, approved discharges are covered by a general permit developed through a public review process after the specific location of a proposed discharge has been identified by the EPA in an Authorization to Discharge. When a general permit for a specific geographical area does not exist, proposed discharges are subject to an individual approval process and NPDES permit.

A NPDES permit covers the discharge of drilling muds, cuttings and wash water, as well as deck drainage, sanitary and domestic wastes, desalination unit waste, blow-out preventer fluids, boiler blowdown, fire control system test water, non-contact cooling water, uncontaminated ballast and bilge waters, excess cement slurry, water flooding discharges, produced waters, well treatment fluids and produced solids.

b. Review Process

Discharges needing authorization before a general permit is issued require individual permits. 40 C.F.R. § 122. Once EPA receives an application for a proposed discharge, a draft permit and fact sheet is prepared to address the proposal. Public notice solicits comments and provides notification of state certification under section 401 of the Clean Water Act. It also initiates a review for consistency with the ACMP.

There is a minimum period of 30-days for public comment and all comments received must be in writing. Public hearings, if scheduled in the original notice, will be canceled if there is no interest in holding them; however, anyone can request a hearing.

An individual permit will not take effect for 30 days, during which time an aggrieved party who earlier submitted written comments may request an evidentiary hearing. EPA will respond by issuing a finding identifying the qualifying issues to be decided before an adjudicatory law judge. For general permits, notice must be published in the Federal Register and issuance may be challenged for 120 days. 40 C.F.R. § 124.

A permit will not be issued unless ADEC certifies that the discharge will comply with the applicable provisions of the Clean Water Act. The certification process is addressed in an agreement between EPA and ADEC. In addition, the proposed activity must be consistent with the requirements of the Alaska Coastal Management Plan.

Persons wishing to comment on a state consistency determination or 401 certification must submit written comments within the 30 day comment period.

c. Typical Permit Requirements

Only pre-approved discharges may be released and each must be emitted in accordance with an effluent limitation designed for that particular emission at that point of discharge. After it is issued, the permit will be modified or revoked if new information justifies different conditions, or if new standards are promulgated that are more stringent than those in the original approval. For example, existing permits prohibit

discharges within 1,000 m of coastal marshes, river mouths, and specially designed monitoring programs are required within 1,500 m of areas considered sensitive.

In all cases, mixing zones are established at the discharge point and produced waters are passed through at least one oil separator before discharge. Under certain conditions verification studies may be required of the mixing zone; discharge limitations are then applied as the emission passes through the mixing zone.

Only pre-approved drilling muds, specialty additives and mineral oil pills may be discharged; and maximum concentrations are specified. For each mud system, a precise chemical inventory of its constituents is maintained. Free oil or oil-based muds (those containing oil as the continuous phase, with water as the dispersed phase) may not be discharged at any time. The oil content of a discharge must be analyzed (1) at the time the fluid or additive is used, (2) when a drilling fluid could become contaminated with hydrocarbons from an underground formation, and (3) immediately when the static sheen test of a discharge indicates violation. Water-based drilling fluids that have contained diesel oil or cuttings associated with muds that contain diesel oil may not be discharged. In state waters, the discharge of cuttings with an oil volume greater than 5 percent by weight, or the discharge of free oil as a result of discharging drilling muds or cuttings is prohibited as well. A static sheen test is performed daily on emission samples as well as prior to any bulk discharge. Generally, the discharge of floating solids or visible foam is not allowed. Surfactant, dispersant and detergent discharges are minimized, but may be allowed to comply with occupational health and safety requirements. In all cases, deck drainage and wash water must go through an oil/water separator; the effluent is tested and any discharge that would cause a sheen on the receiving waters is prohibited.

d. C-Plans

Owners or operators of non-transportation-related onshore and offshore facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing or consuming oil and oil products must prepare a spill prevention control and countermeasures plan in accordance with 40 C.F.R. § 112. Drilling rigs are included in this facility definition. The purpose of the c-plan is to prevent discharges of oil into navigable waters of the U.S. and the adjoining shorelines. The plan must address three areas:

1. operating procedures installed by the facility to prevent oil spills;
2. control measures installed to prevent a spill from entering navigable waters; and
3. countermeasures to contain, cleanup and mitigate the effects of an oil spill that impacts navigable waters.

The c-plan is facility-specific and is part of the required documentation that must be present at the facility for inspection. The owner or operator must have the plan certified by a registered engineer but does not submit it to EPA for approval prior to the beginning of operations. If the facility discharges more than 1,000 gallons or harmful quantities of oil in one event or experiences more than two discharges in a twelve-month period, the operator must submit the c-plan to the EPA and ADEC for review. The c-plan differs from the facility response plans (FRP) required by OPA 90 in that the c-plan focuses on prevention and the FRP focuses on response.

7. U.S. Army Corps of Engineers

The Department of the Army regulatory program is administered by the U.S. Army Corps of Engineers (Corps). The program is authorized by section 10 of the Rivers and Harbors Act of 1899, section 404 of the Clean Water Act, and section 103 of the Marine Protection, Research and Sanctuaries Act. The permit program authorizes activities in, on, or affecting, navigable waters as well as the discharge of dredge or fill into waters of the United States. For purposes of administration, waters of the United States includes wetlands. The most

common oil and gas activity requiring a Corps permit is the discharge or placement of fill, generally gravel or ice, on "wetlands."

The EPA and the Corps jointly administer the 404 program. The Corps performs the day-to-day permitting and enforcement functions (including individual permit decisions) and jurisdictional determinations, while EPA develops and interprets environmental criteria to be used in the evaluation of permit applications. The 404(b)(1) guidelines are EPA regulations; as a result, they can (and have) exercise veto authority over permit decisions made by the Corps.

a. Section 10 of Rivers and Harbors Act of 1899 (33 U.S.C. § 403)

If work is anticipated on or in (or affects) navigable waters, a Corps permit is required. A section 10 permit addresses activities that could obstruct navigation. Oil and gas activities requiring this type of permit would be exploration drilling from a backup drill rig, installation of a production platform, or construction of a causeway. The process and concerns are similar to those required for section 404 approval and, at times, both may be required.

b. Individual Permits, General Permits and Letters of Permission

Some oil and gas activities undergo individual project reviews. Under this process, projects are evaluated on a case-by-case basis and a public interest determination is conducted. 33 C.F.R. § 320. The Corps issues general permits that carry a standard set of stipulations that cover frequent, repetitive and similar activities when, individually and cumulatively, there will be a minimal environmental effect. A general permit describes the activity covered and includes appropriate proposed stipulations and mitigation measures. This type of permit generally has a geographical limitation. There are 36 nationwide general permits, while the Alaska District has 21.

c. Letters of Permission (LOP)

LOPs are a type of permit that, once approved for issuance after a public review process, undergo individual, but abbreviated reviews. These activities are routine and have been determined to have no significant environmental effect. In Alaska, LOPs are used only for activities that might have an affect on navigable waters under section 10.

d. Review Process

Upon receipt of an application, the Corps solicits comments from the public, federal, state and local agencies as well as other interested parties. They seek comments to assess the impact of the proposed activity on aquatic resources, endangered species, historic properties, water quality, environmental effects and other public interest factors. Most public comment periods last 30-days and a public hearing can be requested.

The U.S. Fish and Wildlife Service, National Marine Fisheries Service and ADF&G submit comments to the Corps in accordance with the Fish and Wildlife Coordination Act. Their comments address compliance with section 404(b)(1) of the Clean Water Act as well as the measures they consider necessary for the protection of wildlife resources. Under the Endangered Species Act of 1973, endangered species that frequent the area are identified and the effect the proposed activity might have on them or their habitat is considered In some cases, an environmental assessment or environmental impact statement may be required by the National Environmental Policy Act.

An application to the Corps serves as an application to ADEC for state water quality certification as required under section 401 of the Clean Water Act of 1977 (P.L. 95-217), and must be reviewed by EPA. The application is reviewed against the Act, the Alaska Water Quality Standards and other applicable state laws. For placing fill in wetlands, water quality stipulations included in the 401 Certification become part of the Corps permit (see ADEC 401 Certification).

The Corps will not issue a permit until consistency requirements for the Coastal Zone Management Act are met and a Coastal Zone Consistency Questionnaire is included with a Corps application. An applicant must certify consistency with the ACMP, and the state Division of Governmental Coordination must, based on the results of the ACMP review, concur. In addition, a review of cultural resources is coordinated with the state's Historic Preservation Office and the federal Minerals Management Service. Archeological or historical data that could be lost or destroyed by the proposed activity is considered and presented in the Corp's final assessment of the described project.

The public interest review (33 C.F.R. § 320.4) considers guidelines set forth under section 404(b) of the Clean Waters Act. The guidelines outline a mitigation sequence that must be followed in the decision-making process, which applies, to all waters, including wetlands. A permit will be denied if the contemplated discharge does not meet the required standards. For placement of fill, the mitigation sequence requires avoiding wetlands where practical, minimizing impact where avoidance is not practicable, and compensating for impact to the extent appropriate and practicable.

A decision to issue a permit, with proposed mitigation measures included, is based upon an evaluation of the probable impacts (including cumulative impacts) of a proposed activity. Benefits that can reasonably be expected to accrue are balanced against reasonably foreseeable costs. Factors relevant to the decision are conservation, economics, aesthetics, general environmental concerns, wetlands, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, property ownership, and in general, the needs and welfare of the people.

8. North Slope Borough

The NSB has adopted a comprehensive plan and land management regulations under Title 29 of the Alaska Statutes. AS 29.40.020-.040. These regulations are Title 19 of the NSB Municipal Code and require borough approval for certain activities necessary for exploration and development of lease contracts. The Borough can assert its land management powers to the fullest extent permissible under law to address any outstanding concerns regarding impacts to the area's fish and wildlife species, and habitat and subsistence activities.

The NSBCMP has been incorporated into the ACMP. The program presents policies to regulate activities in the borough's coastal zone. Consistency with the ACMP standards and the policies of the NSBCMP is discussed in *Alaska Coastal Management Program Consistency Analysis Regarding Proposed Oil and Gas Lease Sale North Slope Foothills Areawide 2001*, dated June 14, 2000.

9. Other Requirements

Lessees must comply with applicable federal law concerning Native allotments. Activities proposed in a plan of operations must not unreasonably diminish the use and enjoyment of lands within a Native allotment. Before entering onto lands subject to a pending or approved Native allotment, lessees must contact BIA and BLM and obtain approval to enter.

The U.S. Coast Guard has authority to regulate offshore oil pollution under 33 C.F.R. §§ 153-157.

Upon expiration or termination of the lease, paragraph 21 of the lease contract requires the lessee to rehabilitate the lease area to the satisfaction of the state. The lessee is granted one year from the date of expiration or termination to remove all equipment from the lease area and deliver up the lease area in good condition.

In addition to existing laws and regulations applicable to oil and gas activities, DO&G requires, under paragraph 26 of the state's standard lease contract, that leases be subject to all applicable state and federal statutes and regulations in effect on the effective date of the lease. North Slope Foothills Areawide leases will also be subject to all future laws and regulations placed in effect after the effective date of the leases to the full extent constitutionally permissible and will be affected by any changes to the agency responsibilities of oversight agencies.

State of Alaska

Division of Oil and Gas

Department of Natural Resources

Chapter Eight: Governmental Powers to Regulate Oil and Gas Exploration, Development, Production, and Transportation

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Chapter Eight: Governmental Powers to Regulate Oil and Gas Exploration, Development, Production, and Transportation

All oil and gas activities subsequent to an oil and gas lease sale, exploration, development, production, and transportation, are subject to numerous federal, state, and local laws, regulations, policies, and ordinances. Each successful bidder awarded a lease in a state oil and gas lease sale is obligated to comply with all federal, state, and local laws. A sample lease contract is contained in Appendix C. This portion of the finding discusses the broad powers that various government agencies have to prohibit, regulate, and condition any activities related to oil and gas which may ultimately occur on oil and gas leases. A list of important laws and regulations applicable to oil and gas activities is included in Appendix B. Each of the

regulatory agencies, state, federal, and local governments, has a different role in the oversight and regulation of post-lease sale activities.

Each lease issued as a result of the Cook Inlet Areawide Sale will grant the lessee exclusive rights to subsurface mineral interests. However, as discussed above, a lease does not authorize subsequent exploration or development. The lessee's rights are subject to the terms of the sale and the provisions of the lease (including the mitigation measures contained in Chapter Nine), all applicable state and federal laws and regulations, and may allow the leaseholder to drill for, extract, remove, clean, process, and dispose of any oil, gas, or associated substances that may underlie the lands described by the lease.

The director intends that the mitigation measures for the Cook Inlet Areawide Sale will apply to oil and gas activities in, on or accessing all areawide leased lands and waterbodies as a condition of issuing the lease, regardless of the ownership status of the land. To implement this policy, DNR has amended its regulations effective February 21, 1998 to require a plan of operations for activities that target state oil and gas leases regardless of surface ownership. The lease form has been revised by adding new language stating that "before any operations may be undertaken on the leased area, the lessee shall comply with the applicable statutes and regulations in effect on the date the proposed activity is scheduled to commence." The purpose of this revision is to notify potential lessees that they will have to obtain the approval of their plan of operations and comply with the areawide sale mitigation measures for any activity in, on or accessing the leased area, even if the state does not own the land from which the lessee seeks access.

The major permits and approvals that each agency requires are discussed below, with additional information on the review process on Tables 8A and 8B. The actual processes, terms and conditions proposed for activities on a leased area vary with time-certain, site-specific operations. Each agency assigns field monitors to ensure that operations are conducted as approved. The reader should consult the appropriate statutes and regulations when specifics are required, as agency procedures will change from time to time.

Alaska Coastal Management Program (ACMP) Review

Permit applications for post-lease sale activities must be as detailed as necessary for a comprehensive agency review. If a project affects or occurs within a coastal area, a review of the permit application will be conducted to determine whether the proposed activity is consistent with the standards of the ACMP. Following the review, each agency will approve or disapprove the permit and determine whether any additional protective stipulations or permit terms are required prior to approval.

The public is provided the opportunity to participate in ACMP reviews. For example, most permits needed for exploration well drilling require public notice. The ACMP permitting process goes through a 50-day agency review, and if approvals are needed by other agencies, the review is coordinated by DGC. This process provides for coordinated agency reviews, public input, and insures consistency with the ACMP and local coastal district plans. The coastal district plans applicable for this region are the MSBCMP, the MOACMP, and the KPBCMP.

To initiate the review process, the lessee or designated operator or the DGC distribute application packages to affected coastal resource districts and permitting agencies. The individual agencies initiate their consistency reviews and, if necessary, must send a request for additional information to the coordinating agency within 25 days. Public and agency review comments are due on or before day 34, and a proposed consistency finding is issued on or before day 44. Requests for additional review must be received on or before day 49, and the final consistency determination is issued on day 50 unless a reviewing agency objects and the determination is elevated. If the determination is elevated, a director's

determination is issued by day 65. A citizen can petition for Coastal Policy Council to review of the proposed consistency determination after the elevation of issues.

ACMP reviews are not required for all operations. Some activities can be authorized without an ACMP review under a general concurrence from either the "A" or "B" lists. These lists are developed by agencies involved in the ACMP permitting process and are reviewed annually.

"A" List activities are activities which do not result in significant impacts to coastal resources and they do not require a consistency determination review. Cleanup activities on an existing pad are an example of an "A" list activity.

"B" List General Concurrence activities are considered routine activities that, with standard conditions, are consistent with the ACMP. Individual ACMP consistency reviews are not necessary for activities that only require permits on the B List. However, a Coastal Project Questionnaire (CPQ) application is required for all projects on the "B" List.

The coordinating agency checks the CPQ to ensure that the project meets the requirements of the "B" List General Concurrence. The coordinating agency also reviews the standard stipulations and any applicable procedures with the applicant to ensure that the stipulations will be met. Activities not on the "A" or "B" lists constitute the "C" list and are subject to the review process described at the beginning of this section.

Alaska Department of Natural Resources (ADNR)

The Department of Natural Resources (ADNR), through the Divisions of Oil and Gas, Mining and Water Management, and Land, reviews, coordinates, conditions, and approves plans of operations or development and other permits as required before on-site activities take place. The department also monitors activities through field inspections once the activities have begun. Each plan of operations is site-specific and must be tailored to the activity requiring the permit. A plan of operations must identify the specific measures, design criteria, and construction methods and standards to be employed to comply with the terms of the lease. The plan must also comply with coastal zone consistency review standards and procedures established under 6 AAC 50 and 80. Applications for other state or federal agency authorizations or permits also must be submitted with the plan of operations.

Lease Operations Plan of Approval: Land use activities on state oil and gas leases are regulated by 11 AAC 83.158 and paragraphs 9 and 10 of the lease contract. These require the lessee to prepare a plan of operations that must be approved by ADNR through DO&G and by any other interest holder, if ownership is shared, before the lessee may commence any activities on the lease. Except for equipment uses exempted under 11 AAC 96.020, the lessee must prepare a plan of operations and obtain all required approvals and permits for each phase of exploration, development, or production prior to implementation of that activity. All permit applications and plans are available for public review.

An application for approval of a plan of operations must contain sufficient information, based on data reasonably available at the time the plan is submitted in order for the Commissioner to determine the surface use requirements and impacts directly associated with the proposed operations. An application must include statements and maps or drawings setting out the following:

- the sequence and schedule of the operations to be conducted on the leased area, including the date operations are proposed to begin and their proposed duration;
- projected use requirements directly associated with the proposed operations, including but not limited to the location and design of well sites, material sites, water supplies, solid waste sites,

buildings, roads, utilities, airstrips, and all other facilities and equipment necessary to conduct the proposed operations;

- plans for rehabilitation of the affected lease area after completion of operations or phases of those operations; and
- a description of operating procedures designed to prevent or minimize adverse effects on other natural resources and other uses of the leased area and adjacent areas, including fish and wildlife habitats, historic and archeological sites, and public use areas.

Other stipulations, in addition to the mitigation measures already developed at the lease sale stage, may be required at the plan of operations approval stage. These will address site-specific concerns directly associated with the proposed project. The stipulations and the terms and conditions of the lease are attached to the plan of operations approval and are binding on the lessee. Lease activities are field monitored by ADNR, ADEC, ADF&G, and AOGCC to ensure compliance with each agency's respective permit terms. Paragraph 16 of the lease contract requires that the lessee keep the area of activity open for inspection by authorized state officials. The lessee must post a $500,000 statewide bond to cover a drill site. Lease operations approvals are generally granted for three years.

Geophysical Exploration Permit: The geophysical exploration permit is a specific type of land use permit issued by DO&G (11 AAC 96.010(a)(1)(E)). Seismic surveys are the most common activity authorized by this permit. The purpose of the permit is to minimize adverse effects on lands and resources while making important geological information available to the state.[1]

Seismic surveys in the Cook Inlet area are subject to individual 30-day ACMP reviews. If the survey is part of an exploration program, agencies will review the geophysical exploration permit application as part of the exploration well permit package.

The application must contain sufficient detail to allow evaluation of the activities' effects on the lands and resources. A map showing the general location and routes of travel, and a description of the activity and equipment that will be used must be included. Maps showing the precise location of the survey lines must also be provided, though this information is usually held confidential. A $100,000 bond is usually required.

The permit will contain measures to protect the land and resources of the area. The permit is usually issued for one year or less but may be extended. If the permit is extended, the director may modify existing terms or add new ones when he issues the extension. The permit is revocable.

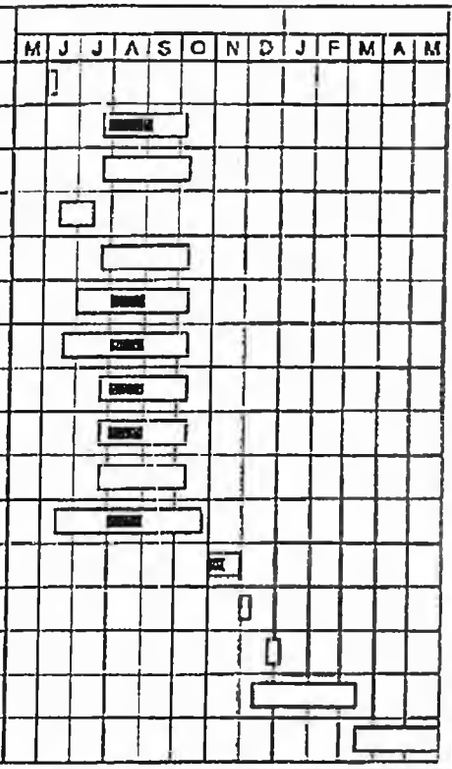
Table 8a &8b: Typical Permit Process Onshore and Offshore

TABLE 8A: Typical Permit Process - Onshore Exploration Well in Cook Inlet Area

ID	Name	M	J	J	A	S	O	N	D	J	F	M	A	M
1	ACMP Preapplication Conference													
2	ACMP Consistency Determination - AS 46.40													
3	DNR DO&G - Lease Plan of Operations Review													
4	DNR Parks - Cultural Resource Survey													
5	DNR DW - Temporary Water Use Permit													
6	DEC - Oil Spill Discharge and Contingency Plan													
7	DEC - Certificate of Reasonable Assurance													

TABLE 8A: Typical Permit Process - Onshore Exploration Well in Cook Inlet Area

ID	Name
1	ACMP Preapplication Conference
2	ACMP Consistency Determination - AS 46.40
3	DNR DO&G - Lease Plan of Operations Review
4	DNR Parks - Cultural Resource Survey
5	DNR DW - Temporary Water Use Permit
6	DEC - Oil Spill Discharge and Contingency Plan
7	DEC - Certificate of Reasonable Assurance
8	DEC - Solid Waste Disposal Permit
9	DEC - Wastewater Disposal Permit
10	ADFG - Special Areas Permit
11	Army Corps of Engineer - Sec. 404 Permit
12	AOGCC - Conservation Order
13	AOGCC - Permit to Drill
14	AOGCC - Application for Sundry Approval
15	Construction and Drilling
16	Demobilization and Rehabilitation



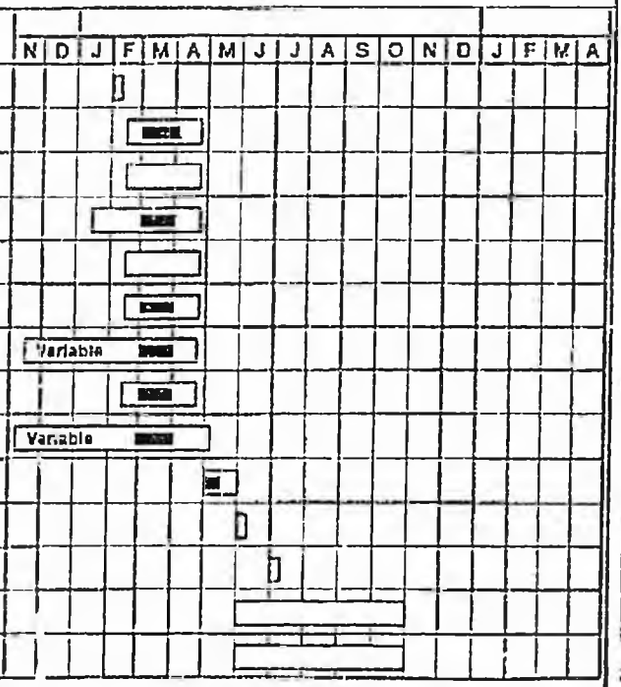
Project: Onshore
Date: 3/5/96

Permitting Activity

Public Notice

TABLE 8B: Typical Permit Process - Offshore Exploration Well in Cook Inlet Area

ID	Name
1	ACMP Preapplication Conference
2	ACMP Consistency Review
3	DNR DO&G - Lease Plan of Operations Review
4	DEC - New Oil Spill Discharge and Contingency Plan
5	DEC - Annular Injection under General Permit
6	DEC - Air Quality Permit to Operate
7	DEC - 401 Certificate of Reasonable Assurance
8	Army Corps of Engineer - Sec. 10 Permit
9	EPA - Individual NPDES Waste Disposal Permit
10	AOGCC Conservation Order
11	AOGCC - Permit to Drill
12	AOGCC - Application for Sundry Approvals
13	Drill Rig on Location
14	Discharge and Environmental Monitoring



Project: Offshore Permit Activity
Date: 3/5/96

Permitting Activity

Public Comment Period

Pipeline Right-of-Way: Most transportation facilities within the lease area or beyond the boundaries of these areas must be authorized by ADNR under the Right-of-Way Leasing Act, AS 38.35. This act gives the commissioner broad authority to oversee and regulate the transportation of oil and gas by pipelines, which are in whole or in part located on state land, to ensure that the state's interests are protected. The Right of Way Leasing Act permits are administered by the Joint Pipeline Office.

Temporary Water Use Permit: Under 11 AAC 93.210-220, Temporary Water Use Permits are issued by the Division of Mining and Water Management and may be required for exploration activities. The

operator must submit an application for a temporary water use permit if the amount of water to be used is a significant amount as defined by 11 AAC 93.970(14), the use continues for less than five consecutive years, and the water applied for is not otherwise appropriated. The permit may be extended one time for good cause for a period of time not exceeding five years. The application must include: (1) the application fee; (2) a map indicating the location of the property, take point and point of use; (3) the quantity of water to be used; (4) the nature of the water use; (5) the time period during which the water is to be used; and (6) the type and size of equipment to be used to withdraw the water. At the discretion of the commissioner, a temporary water use permit will be subject to conditions, including suspension and termination, in order to protect the water rights of other persons or the public interest.

Permit and Certificate to Appropriate Water: Industrial or commercial use of water requires a Permit to Appropriate Water (11 AAC 93.120). The permit is issued for a period of time (not to exceed five years for industrial or commercial uses) consistent with the public interest and adequate to finish construction and establish full use of water. The commissioner will, in his discretion, issue a permit subject to conditions he considers necessary to protect the public interest. The conditions include, but are not limited to, conditions that reserve a sufficient quantity of water to achieve any of the following purposes: protection of fish and wildlife habitat, recreation, navigation, sanitation and water quality, protection of prior appropriations and for any other substantial public purpose.

A Certificate of Appropriation (11 AAC 93.130) will be issued if (1) the permit holder has shown that the means necessary for the taking of water has been developed; (2) the permit holder is beneficially using the amount of water to be certified; and (3) the permit holder has substantially complied with all permit conditions. Again, the commissioner will, in his or her discretion issue a certificate subject to conditions necessary to protect the public interest. For example, the applicant may be required to maintain a specific quantity of water at a given point on a stream or waterbody, or in a specified stretch of stream, throughout the year or for specified times of the year in order to protect fish and wildlife habitat, recreation, navigation or prior appropriations (11 AAC 93.130(c)(1)).

Land Use Permits: 11 AAC 96.010-140. Land Use Permits are issued by the Division of Land and may be required for exploration, development and production activities. Permits have a term of one year. All land use activities are subject to the following provisions:

- Activities employing wheeled or tracked vehicles shall be conducted in such a manner as to minimize surface damage;
- Existing roads and trails shall be used whenever possible. Trail widths shall be kept to the minimum necessary. Trail surface may be cleared of timber, stumps, and snags. Due care shall be used to avoid excessive scarring or removal of ground vegetative cover;
- All activities shall be conducted in a manner that will minimize disturbance of drainage systems, changing the character, polluting, or silting of streams, lakes, ponds, waterholes, seeps, and marshes, or disturbance of fish and wildlife resources. Cuts, fills, and other activities causing any of the above disturbances, if not repaired immediately, are subject to such corrective action as may be required by the director;
- The director may prohibit the disturbance of vegetation within 300 feet of any waters located in specially designated areas as prescribed in 11 AAC 96.010(2) except at designated stream crossings;
- The director may prohibit the use of explosives within one-fourth mile of designated fishery waters as prescribed in 11 AAC 96.010(2);
- Trails and campsites shall be kept clean. All garbage and foreign debris shall be eliminated by removal, burning, or burial, unless otherwise authorized;

- All survey monuments, witness corners, reference monuments, mining claim posts, and bearing trees

shall be protected against destruction, obliteration, or damage. Any damaged or obliterated markers shall be reestablished in accordance with accepted survey practice of the division;

- Every reasonable effort shall be made to prevent, control, or suppress any fire in the operating area. Uncontrolled fires shall be immediately reported;
- Holes, pits, and excavations shall be filled, plugged, or repaired to the satisfaction of the director. Holes, pits, and excavations necessary to verify discovery on prospecting sites, mining claims, and mining leasehold locations may be left open but shall be maintained as required by the director;
- No person may engage in mineral exploratory activity on land, the surface of which has been granted or leased by the state of Alaska, or on land for which the state has received the reserved interest of the United States until good faith attempts have been made to agree with the surface owner or lessee on settlement for damages which may be caused by such activity. If agreement cannot be reached, or lease or surface owner cannot be found within a reasonable time, operations may be commenced on the land only with specific approval of the director, and after making adequate provision for full payment of any damages which the owner may suffer;
- Entry on all lands under mineral permit, lease, or claim, by other than the holder of the permit, lease, or claim or his authorized representative, shall be made in a manner which will prevent unnecessary or unreasonable interference with the rights of the permittee, lessee, or claimant. Additional stipulations may be imposed.

Material Sale Contract: A material sale contract must include, if applicable, but is not limited to (1) a description of the sale area, (2) the volume of material to be removed, (3) the method of payment, (4) the method of removal of the material, (5) the bonds and deposits required of the purchaser, (6) the purchaser's liability under the contract, (7) the improvements to and occupancy of the sale area required of the purchaser, (8) the reservation of material within the sale area to the division, (9) the purchasers site-specific operation requirements including, but not limited to, erosion control and protection of water; fire prevention and control; roads; sale area supervision; protection of fish, wildlife and recreational values; sale area access and public safety and (10) the date upon which the severance or extraction of material is to be completed. The director at his discretion may grant an extension not to exceed one year. When determined by the director that a delay in completing the contract is due to causes beyond the purchaser's control, the contract will be extended for a time period equal to the delay.

The director, in his discretion, will require a purchaser to provide a performance bond based on the total value of the sale. The performance bond must remain in effect for the duration of the contract unless released in writing by the director.

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Alaska Department of Environmental Conservation (ADEC)

The Department of Environmental Conservation (ADEC) has statutory responsibility for preventing air, land, and water pollution. Oil and gas activities, such as the disposal of drilling mud and cuttings, the flaring of hydrocarbon gases, and the discharge of wastewater, are regulated by this agency as well as the Oil and Gas Conservation Commission if the activity involves a class II injection well. Several separate written permits are required of the operator before activity can begin. Before a solid waste disposal, wastewater or air quality permit is issued, two public notices and an opportunity for public comment (and a public hearing, if requested) are required.

Oil Discharge Prevention and Contingency Plan: Lessees must comply with the requirements of AS 46.04.010-900, Oil and Hazardous Substance Pollution Control. This requirement includes the preparation and approval by ADEC of an Oil Discharge Prevention and Contingency Plan (C-Plan) (AS 46.04.030 and

18 AAC 75.445). Details regarding the contents of the plan are in Chapter Six.

Prior to receiving a permit to drill, the lessee must demonstrate in the plan of operations the ability to promptly detect, contain, and cleanup any lease-related hydrocarbon spill before the spill impacts fish and wildlife populations or their habitats. This includes the capability to drill a relief well in the event of a loss of well control. ADEC has authority under AS 46.04 over both onshore and offshore activities for the purpose of preventing and cleaning up oil spills.

If transportation by water is planned, AS 46.04.030 requires that the lessee obtain ADEC approval of detailed oil spill contingency plans prior to the commencement of each aspect of the operation, including individual wells, drilling pads or platforms, pipelines, storage facilities, loading facilities, and individual tankers or barges.

Wastewater Disposal: Domestic greywater must be disposed of properly at the surface and a Wastewater Disposal Permit is required (18 AAC 72). Typically, waste is processed through an on-site plant and disinfected before discharge. ADEC sets fluid volume limitations and threshold concentrations for biochemical oxygen demand (BOD), suspended solids, pH, oil and grease, fecal coliform, and chlorine residual. Monitoring records must be available for inspection and a written report may be required upon completion of operations.

Annular Injection: If fluid is to be injected into a well annulus, a permit is required. ADEC considers the volume, depth and other physical and chemical characteristics of the formation designated to receive the waste. Injection is not permitted into water-bearing zones where dissolved solids or salinity concentrations fall below predetermined threshold limits. Waste that was not generated from a hydrocarbon reservoir cannot be injected into a reservoir.

Solid Waste Disposal Permit: Recent industry practice has been to utilize methods other than surface reserve pits for disposal of drilling muds, such as injection wells, where possible. In addition, the majority of muds utilized today are water-based. When a well is drilled, muds and cuttings are initially either temporarily stored on a gravel pad or collected in a reserve pit pending final disposal via injection. Discharging drilling muds and cuttings into a reserve pit requires pre-approval and a written permit. The permit addresses design, operation and closure concerns to assure that unacceptable environmental effects are avoided.

Solid waste storage, treatment, transportation and disposal is regulated under 18 AAC 60. For all solid waste disposal facilities, a comprehensive disposal plan is required, which must include engineering design criteria and drawings, specifications, calculations and a discussion demonstrating how the various design features (liners, berms, dikes) will assure compliance with regulations. Plans for containment and fluid management must be approved and endorsed by an engineer registered in Alaska.

Before approval, solid waste disposal permit applications are reviewed for compliance with air and water quality standards, wastewater disposal and drinking water standards, as well as for their consistency with the ACMP and Alaska Historic Preservation Act (18 AAC 60.215). The application for a waste disposal permit must include a map or aerial photograph (indicating relevant topographical, geological, hydrological, biological, and archeological features), with a cover letter describing type, estimated quantity and source of the waste as well as the type of facility proposed. Roads, drinking water systems and airports within a two-mile radius of the site must be identified, along with all residential drinking water wells within a half-mile. There must also be a site plan with cross-sectional drawings that indicate the location of existing and proposed containment structures, material storage areas, monitoring devices, area improvements and on-site equipment. An evaluation of the potential for generating leachate must be

presented as well. For above-grade disposal options, baseline water-quality data may be needed to establish the physical and chemical characteristics of the site before installing a containment cell.

Non-drilling related solid waste must be disposed of in an approved municipal solid waste landfill (MSWL). MSWL's are regulated under 18 AAC 60.300-397. All other solid waste (except for hazardous materials) must be disposed of in an approved monofill (18 AAC 60.400-495). A monofill is a landfill or drilling waste disposal facility that receives primarily one type of solid waste and is not an inactive reserve pit (18 AAC 60.990(81). An inactive reserve pit is a drilling waste disposal area, containment structure, or group of containment structures where drilling waste has been disposed of which the owner or operator does not plan to continue disposing of drilling waste (18 AAC 60.990(61)). Closure of inactive reserve pits is regulated under 18 AAC 60.440.

Drilling waste disposal is specifically regulated under 18 AAC 60.430. Design and monitoring requirements for drilling waste,disposal facilities are identified in 18 AAC 60.430(c) and (d), respectively. Under 18 AAC 60.430(c)(1), "the design must take into account the location of the seasonal high groundwater table, surface water, and continuous permafrost, as well as proximity to human population and to public water systems, with the goal of avoiding any adverse effect on these resources." The facility must be designed to prevent the escape of drilling waste and leachate, prevent contamination of groundwater, and be of sufficient volume and integrity to prevent leakage due to erosion, precipitation, wind and wave action, and changing permafrost conditions. The plans for the proposed design and construction of the drilling waste disposal facility and the fluid management plan must be approved and signed and sealed by a registered engineer (18 AAC 60.430(c)(5)).

Today, drilling fluids are disposed of by reinjection deep into the ground. In the past, muds and cuttings were disposed of using surface disposal methods (reserve pits). Reserve pits must still be constructed for every well. Before a well may be permitted under 20 AAC 25.005, a proper and appropriate reserve pit must be constructed, or appropriate tankage installed for the reception and confinement of drilling fluids and cuttings, to facilitate the safety of the drilling operation, and to prevent contamination of ground water and damage to the surface environment (20 AAC 25.047).

Typically, a reserve pit is a containment cell, lined with an impermeable barrier compatible with both hydrocarbons and drilling mud. Typical dimensions may be approximately 130-feet wide by 150-feet long by 12-feet deep, although specific configurations vary by site. The cell may receive only drilling and production wastes associated with the exploration, development or production of crude oil, natural gas or hydrocarbon contaminated solids. The disposal of hazardous or other waste in a containment cell is prohibited. After the well is deepened, the residue in the reserve pit is often dewatered and the fluids are injected into the well annulus. An inventory of injection operations, including volume, date, type and source of material injected is maintained by requirement. Following completion of well activities, the material remaining in the pit is permanently encapsulated in the impermeable liner. Fill and organic soil is placed over it and proper drainage is reestablished. Surface impoundments within 1,500 feet are sampled on a periodic basis and analyzed. In addition, groundwater monitoring wells are drilled and sampled on a regular basis. If there are uncontained releases during operations, or if water samples indicate an increase in the compounds being monitored, additional observation may be required.

Substances proposed for disposal classified as "hazardous" must undergo a more rigorous and thorough permitting and review process by both ADEC (18 AAC 62 and 63) and EPA. There are no available public facilities for waste disposal on the Kenai Peninsula; all existing facilities are proprietary. Proposed disposal sites for the areawide sale must be individually approved by ADEC under regulation in 18 AAC 60.200 – 240.

Air Quality Control Permit to Operate: The federal Prevention of Significant Deterioration (PSD) program, which is administered by ADEC, establishes threshold amounts for the release of byproducts into the atmosphere. Oil and gas exploration and production operations with emissions below predetermined threshold amounts must still comply with state regulations designed to control emissions at these lower levels (18 AAC 50). Activities that exceed pre-determined PSD threshold amounts are subject to a more rigorous application and review process. Such activities include the operation of turbines and gas flares.

For oil and gas activities, these requirements translate into the requirement for a permit to flare gas during well testing (a safety measure) or when operating smoke-ge .erating equipment such as diesel-powered generators. Permit conditions will induce additional scrutiny if a black smoke incident exceeds 20 percent opacity for more than three minutes in any one-hour period.

The burning of produced fluids is prohibited unless failures or seasonal constraints preclude storage in tanks, backhauling or reinjection. If liquids are to be incinerated, they must be burned in smokeless flares. The open burning of produced liquids is prohibited except under emergency conditions.

Gas produced as a by-product of oil production is usually reinjected into the producing formation to maintain pressure that supports further production. Flaring is not an approved method of disposal, however, as a safety measure and backup for standard gas handling systems production facilities, which separate gas from oil, are capable of flaring large volumes of gas. Flaring occurs when the oil and gas separation process is interrupted, or when an unplanned event requires an immediate release from pressure increases. Pilot flares are an operational necessity; they are subject to permit requirements as well.

401 Certification: Under 18 AAC 15.120, a person who conducts an operation which results in the disposal of wastewater into the water of the state need not apply for a permit from ADEC if the disposal is permitted under an NPDES permit. When an NPDES permit is issued under Section 401 (33 U.S.C. § 1341) of the Clean Water Act, ADEC does not require a separate permit, but participates by certifying that the discharge meets state and federal water quality standards.

When an application is made, a duplicate must be filed with the department and public notice of the certification application is published jointly by EPA and ADEC (18 AAC 15.140 and 40 C.F.R. § 125.32). As a result, the state and federal reviews run concurrently. Public comment is sought and a hearing can be requested.

Following an EPA determination, but within 30-days, the department must provide the applicant, EPA, and all persons who submitted timely comments with a copy of the certification. The decision may impose stipulations and conditions (such as monitoring and/or mixing zone requirements), and any person disagreeing with the decision may request an adjudicatory hearing (18 AAC 15.200-920). Once activity begins, both EPA and the department have the responsibility to monitor the project for compliance with the terms of the permit.

The Corps of Engineers 404 permit program (see Corps of Engineers) also requires certification under section 401 of the Clean Water Act and it is processed in a similar manner. The ADEC certification is termed a Certificate of Reasonable Assurance.

Review Process: Following receipt of an application for a permit to dispose of solid waste disposal, wastewater, or air quality permit, ADEC must publish two consecutive notices in a newspaper of general circulation in the area affected by the proposed operation as well as through other appropriate media.

Comments must be submitted in writing within 30-days after the second publication and a public hearing

may be requested. A hearing will be scheduled if good cause exists. Notice of a public hearing is handled in a manner similar to that of the initial application. Permits issued by the department may be subject to review for consistency with the Alaska Coastal Zone Management Program.

A decision on an application includes (1) the permit, (2) a summary of the basis for the decision and (3) provisions for an opportunity for an adjudicatory hearing (18 AAC 15). The decision, as conditioned, is sent to the applicant as well as each person, or entity, who submitted timely comments or testified at a public hearing. Permits may be valid for up to five years. Renewals are treated the same as the original application, but they do not receive public notice.

Alaska Department of Fish and Game (ADF&G)

The Alaska Department of Fish and Game analyzes the effect of any activity on fish and wildlife, the users of those resources, and the protection of habitat. ADF&G requires permits for any activity in state game refuges, sanctuaries, critical habitat areas, and streams that contain anadromous fish, as well as other areas the agency believes might be threatened by development. Management plans control activities within many legislatively designated areas. By statute these areas are jointly managed with the Department of Natural Resources. Permits are conditioned to mitigate impacts. For example, timing restrictions are used to limit the impact on transitory wildlife. Public notice of ADF&G permit actions is not required.

Fish Habitat Permit: Title 16 gives ADF&G permitting authority over activities affecting anadromous fish streams that could block fish passage. A fish habitat permit must be obtained from ADF&G prior to using, diverting, obstructing, polluting, or changing the natural flow or bed of anadromous streams (AS 16.05.870). If the proposed activity obstructs fish passage, a fishway and device for the safe passage of downstream migrants may be required under AS 16.05.840.

Additionally under the ACMP, wetlands and tidelands must be managed to assure adequate water flow, avoid adverse effects on natural drainage patterns, and the destruction of important habitat (6 AAC 80.130(c)(3)). Rivers, streams, and lakes must be managed to protect natural vegetation, water quality, important fish or wildlife habitat, and natural water flow (6 AAC 80.130(c)(7)). To further protect fish and wildlife habitat, 6 AAC 80.070(b)(3) requires that facilities be consolidated, to the extent feasible and prudent.

ADF&G Special Area Permit: For activities in a legislatively designated area (such as a game refuge, a game sanctuary or critical habitat area), a Special Areas Permit is required (AS 16.20 and 5 AAC 95). An oil and gas exploration well in one of these areas would require a Special Area Permit. The sale area includes several special areas.

Applications must include plans, specifications and any other detail necessary to describe a proposed project fully by including a narrative addressing how activities might disturb fish and wildlife, habitat and public use. The application requests details concerning the method of construction, type of equipment, planned water use (including method and rate of withdrawal and consumption), any proposed excavation and fill, the type and location of material sources, how access will be accomplished and the number of people involved. Detailed maps with plan and cross-sectional views (drawn to scale) showing project features and the location of proposed facilities are required as well. As a condition of approval, applicants are required to agree to compensate the state fully for damage to fish and wildlife populations or the destruction of habitat. A mitigation plan may be required.

Each project is considered in relation to the purposes for which the area was established and permit conditions are often imposed to mitigate adverse impacts. Timing restrictions that limit activity to winter

are common. A project will be allowed, however, if the protection of fish and game and important habitat is not precluded.

For projects in the coastal zone, ADF&G also evaluates the project for consistency with ACMP habitat standards. The standards are summarized below. Wetlands and tidelands must be managed to assure adequate water flow, avoid adverse effects on natural drainage patterns, and the destruction of important habitat (6 AAC 80.130(c)(3)). Rivers, streams, and lakes must be managed to protect natural vegetation, water quality, important fish or wildlife habitat, and natural water flow (6 AAC 80.130(c)(7)). To further protect fish and wildlife habitat, 6 AAC 80.070(b)(3) requires that facilities be consolidated, to the extent feasible and prudent.

Review Process: A fish habitat permit issued by the department is subject to the Alaska Coastal Management Program consistency review process. General permits, with standard stipulations, may be issued when it is determined that the impact of frequent and recurring activities meet pre-determined criteria. Applications, including the Coastal Zone Questionnaire, are submitted to the department's Habitat and Restoration Division.

Most permit actions subject to ADF&G require a 30-day review unless surface occupancy issues or other related permits require additional time. An informal review is conducted with the Departments of Natural Resources and Environmental Conservation as well as any affected coastal districts. Public notice of ADF&G permit actions is not required.

Decisions are based upon suggestions provided by area staff, the commenting agencies and coastal districts. For special area permits and permits issued for activities in anadromous streams, an applicant may appeal a rejection or stipulation through procedures described in the Administrative Procedures Act.

Alaska Oil and Gas Conservation Commission (AOGCC)

The Alaska Oil and Gas Conservation Commission (AOGCC) administers the Alaska Oil and Gas Conservation Act under Title 31. The AOGCC may investigate to determine whether waste exists or is imminent. It is also responsible for assuring that accurate metering and measuring of oil and gas production takes place.

The commission maintains programs to ensure that the drilling, casing and plugging of a well occurs in a manner that prevents (1) escapement from one stratum into another, (2) the intrusion of water into an oil or gas horizon, (3) the pollution of fresh water supplies, and (3) blowouts, cavings, seepage and fires. For conservation purposes, the commission regulates certain aspects of the drilling, production, and plugging of wells in addition to well spacing, the disposal of salt water and oil field waste and the contamination of underground water.

Reports, well logs, drilling logs and other information must be filed with the commission for each well drilled. The information is confidential for two years. However, if the data is considered especially important for the evaluation of nearby unleased land, it may be held confidential for an extended period.

Permit to Drill: Before drilling, a Permit to Drill, valid for 24-months, must be obtained from the commission (AS 31.05 and 20 AAC 25). The permit application informs the commission of a proposed operator's engineering and safety plans designed to ensure the structural and mechanical ability of the well to contain fluids and gases that could be encountered at various depths and under varying pressure.

With the application, a diagram of the proposed blowout prevention (BOP) equipment (used for secondary

well control) must be included with an analysis of expected down-hole pressures. A BOP, along with related well-control equipment, must be installed, used, maintained and regularly tested as necessary to assure control over the well and conform to the latest technology and accepted industry practice.

Casing, cementing, and drilling fluid programs are also designed to assure primary well control. A drilling fluid monitoring program must be in place to detect gases entrained in the drilling fluid and detect hydrogen sulfide, a poisonous gas.

For exploration wells, a well-site survey is conducted using seismic techniques. The data from the seismic survey are analyzed to detect shallow gas in near-surface strata to a depth of 2,000 feet and the depths of suspected overpressured strata are predicted. For offshore wells, an analysis of seafloor conditions is required.

If climatic conditions and operational or environmental concerns become apparent, or if unplanned-for circumstances prevent the continuation of an approved program, an operator can secure a well and apply for an operational shut down. When a well is abandoned, plans for setting plugs, mudding, cementing, shooting, testing and removing the casing must be submitted to the commission for approval. Abandoned or suspended wells may remain that way for long periods of time and until final plans are made, the commission seeks to prevent the movement of fluids into or between freshwater and/or hydrocarbon sources.

Before beginning to drill, an operator must post a bond for $100,000 in favor of the state for a single well, or $200,000 for a blanket bond covering more than one well. The purpose of the bond is to insure that a well is properly completed or abandoned.

After abandonment, a location clearance is required. For onshore locations, materials, supplies, structures, and installations must be removed, debris properly disposed of and the reserve pit filled and graded. The location must be left uncontaminated, in a clean condition acceptable to state inspectors. Offshore locations must have all casing, wellhead equipment, pilings and other structures removed to a depth of 15 feet below the mud line.

Disposal of Wastes: AOGCC must also review and approve proposals for the underground disposal of water and oil field waste (20 AAC 25.252). Before receiving an approval, an operator must demonstrate to the commission that the movement of fluids into freshwater sources will not occur. Disposal must be into a well with equipment designed to assure a controlled release. A plat is required showing the location of other wells within a quarter-mile that penetrate the same disposal zone, and surface owners (located within one quarter-mile) must be provided with a copy of the application.

ncluded with a description of the fluid to be injected (with its composition, source, daily amount and disposal pressures), the application must contain the name, description, depth, thickness, lithologic description and geological data of the disposal formation and adjacent confining zones. There must be evidence presented that the disposal well will not initiate or propagate fractures through the confining zones that would allow fluids to migrate: a laboratory analysis is required. Under certain circumstances, however, a fresh water aquifer exemption may be granted (20 AAC 25.440).

Following approval, liquid waste from drilling operations may be pumped into a well drill pipe, casing or annulus. The pumping of drilling mud from reserve pits (not runoff) into exploration or stratigraphic test wells or into the annuli of a well approved in accordance with 20 AAC 25.005 is an operation incidental to drilling of the well, and is not a disposal operation subject to regulation as a Class II well under EPA regulations.

Review Process: Actions by the commission that have statewide application (such as adopting regulations) are conducted in accordance with the Administrative Procedures Act. Major actions, resulting in conservation orders that apply to a single well or field, receive public notice by publication in a newspaper (20 AAC 25.540). In addition, a mailing list is maintained for the purpose of sending notices, orders or publications to those who request them. There are different lists for different purposes.

U.S. Environmental Protection Agency (EPA)

NPDES Permit: The federal Clean Water Act requires a National Pollution Discharge Elimination System Permit (NPDES) to release pollutants into the waters and wetlands of Alaska. The permitting system is designed to ensure that discharges do not violate state and federal water quality standards by identifying control technologies, setting effluent limitations, and gathering information through reporting and inspection.

Typically, approved discharges are covered by a general permit developed through a public review process after the specific location of a proposed discharge has been identified by the EPA in an Authorization to Discharge. When a general permit for a specific geographical area does not exist, proposed discharges are subject to an individual approval process and NPDES permit.

A NPDES permit covers the discharge of drilling muds, cuttings and wash water, as well as deck drainage, sanitary and domestic wastes, desalination unit waste, blowout preventer fluids, boiler blowdown, fire control system test water, non-contact cooling water, uncontaminated ballast and bilge waters, excess cement slurry, waterflooding discharges, produced waters, well treatment fluids and produced solids.

Review Process: Discharges needing authorization before a general permit is issued require individual permits (40 C.F.R. § 122). Once EPA receives an application for a proposed discharge, a draft permit and fact sheet is prepared to address the proposal. Public notice solicits comments and provides notification of state certification under section 401 of the Clean Water Act. It also initiates a review for consistency with the ACMP.

There is a minimum period of 30 days for public comment and all comments received must be in writing. Public hearings, if scheduled in the original notice, will be canceled if there is no interest in holding them; however, anyone can request a hearing.

If issued, an individual permit will not take effect for 30 days, during which time an aggrieved party who earlier submitted written comments may request an evidentiary hearing. EPA will respond by issuing a finding identifying the qualifying issues to be decided before an adjudicatory law judge. For general permits, notice must be published in the Federal Register and issuance may be challenged for 120 days (40 C.F.R. § 124).

A permit will not be issued unless ADEC certifies that the discharge will comply with the applicable provisions of the Clean Water Act. The certification process is addressed in an agreement between EPA and ADEC. In addition, the proposed activity must be consistent with the requirements of the Alaska Coastal Management Plan.

Persons wishing to comment on a state consistency determination or 401 certification must submit written comments within the 30-day comment period.

Typical Permit Requirements: Only pre-approved discharges may be released and each must be emitted

in accordance with an effluent limitation designed for that particular emission at that point of discharge. After it is issued, the permit will be modified or revoked if new information justifies different conditions, or if new standards are promulgated that are more stringent than those in the original approval.

In all cases, mixing zones are established at the discharge point and produced waters are passed through at least one oil separator before discharge. Under certain conditions verification studies may be required of the mixing zone; discharge limitations are then applied as the emission passes through the mixing zone.

Only pre-approved drilling muds, specialty additives and mineral oil pills may be discharged; and maximum concentrations are specified. For each mud system, a precise chemical inventory of its constituents is maintained. Free oil or oil-based muds (those containing oil as the continuous phase, with water as the dispersed phase) may not be discharged at any time. The oil content of a discharge must be analyzed (1) at the time the fluid or additive is used, (2) when a drilling fluid could become contaminated with hydrocarbons from an underground formation, and (3) immediately when the static sheen test of a discharge indicates violation. Water-based drilling fluids that have contained diesel oil or cuttings associated with muds that contain diesel oil may not be discharged. In state waters, the discharge of cuttings with an oil volume greater than 5 percent by weight, or the discharge of free oil as a result of discharging drilling muds or cuttings is prohibited as well. A static sheen test is performed daily on emission samples as well as prior to any bulk discharge. Generally, the discharge of floating solids or visible foam is not allowed. Surfactant, dispersant and detergent discharges are minimized, but may be allowed to comply with occupational health and safety requirements. In all cases, deck drainage and wash water must go through an oil/water separator; the effluent is tested and any discharge that would cause a sheen on the receiving waters is prohibited.

SPCC Plans: Owners or operators of non-transportation-related onshore and offshore facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing or consuming oil and oil products must prepare a spill prevention control and countermeasures plan in accordance with 40 C.F.R.§112. Drilling rigs are included in this facility definition. The purpose of the SPCC plan is to prevent discharges of oil into navigable waters of the U.S. and the adjoining shorelines. The plan must address three areas:

1. operating procedures installed by the facility to prevent oil spills;

2. control measures installed to prevent a spill from entering navigable waters; and

3. countermeasures to contain, cleanup and mitigate the effects of an oil spill that impacts navigable waters.

The SPCC plan is facility-specific and is part of the required documentation that must be present at the facility. The owner or operator must have the plan certified by a registered engineer but does not submit it to EPA for approval prior to the beginning of operations. The plan must be available for inspection at the facility. If the facility discharges more than 1,000 gallons or harmful quantities of oil in one event or experiences more than two discharges in a twelve-month period, the operator must submit the SPCC plan to the EPA and the ADEC for review. The SPCC plan differs from the facility response plans (FRP) required by OPA 90 in that the SPCC plan focuses on prevention and the FRP focuses on response.

U.S. Army Corps of Engineers

The Department of the Army regulatory program is administered by the U.S. Army Corps of Engineers (Corps). The program is under section 10 of the Rivers and Harbors Act of 1899, section 404 of the Clean

Water Act, and section 103 of the Marine Protection, Research and Sanctuaries Act. The permit program authorizes activities in, on, or affecting, navigable waters as well as the discharge of dredge or fill into waters of the United States.

For purposes of administration, waters of the United States includes wetlands. The most common oil and gas activity requiring a Corps permit is the discharge or placement of fill, generally gravel or ice, on "wetlands."

The Environmental Protection Agency and the Corps jointly administer the 404 program. The Corps performs the day-to-day permitting and enforcement functions (including individual permit decisions) and jurisdictional determinations, while EPA develops and interprets environmental criteria to be used in the evaluation of permit applications. The 404(b)(1) guidelines are EPA regulations; as a result, they can (and have) exercise veto authority over permit decisions made by the Corps.

Section 10 of Rivers and Harbors Act of 1899 (33 U.S.C. § 403): If work is anticipated to be performed on or in (or affect) navigable waters, a permit from the Corps is required. A section 10 permit addresses activities that could obstruct navigation. Oil and gas activities requiring this type of permit would be exploration drilling from a backup drill rig, installation of a production platform, or construction of a causeway. The process and concerns are similar to those required for section 404 approval and, at times, both may be required.

Individual Permits, General Permits and Letters of Permission: Some oil and gas activities undergo individual project reviews. Under this process, projects are evaluated on a case-by-case basis and a public interest determination (33 C.F.R. § 320) is conducted. The Corps issues general permits that carry a standard set of stipulations that cover frequent, repetitive and similar activities when, individually and cumulatively, there will be a minimal environmental effect. A general permit describes the activity covered and includes appropriate proposed stipulations and mitigation measures. This type of permit generally has a geographical limitation. There are 36 nationwide general permits while the Alaska District has 21.

Letters of Permission (LOP): LOPs are a type of permit that, once approved for issuance after a public review process, undergo individual, but abbreviated reviews. These activities are routine and have been determined to have no significant environmental effect. In Alaska, LOPs are used only for activities that might have an affect on navigable waters under section 10.

Review Process: Upon receipt of an application, the Corps solicits comments from the public, federal, state and local agencies as well as other interested parties. They seek comments to assess the impact of the proposed activity on aquatic resources, endangered species, historic properties, water quality, environmental effects and other public interest factors. Most public comment periods last 30 days and a public hearing can be requested.

The U.S. Fish and Wildlife Service, National Marine Fisheries Service and the Alaska Department of Fish and Game submit comments to the Corps in accordance with the Fish and Wildlife Coordination Act. Their comments address compliance with section 404(b)(1) of the Clean Water Act as well as the measures they consider necessary for the protection of wildlife resources. Endangered species that frequent the area are identified and the effect the proposed activity might have on them or their habitat is considered (Endangered Species Act 1973, 87 Statute 844). In some cases, an environmental assessment or environmental impact statement may be required by the National Environmental Policy Act.

An application to the Corps serves as an application to ADEC for state water quality certification as required under section 401 of the Clean Water Act of 1977 (PL 95-217), and must be reviewed by EPA.

The application is reviewed against the Act, the Alaska Water Quality Standards and other applicable state laws. For placing fill in wetlands, water quality stipulations included in the 401 Certification become part of the Corps permit (see ADEC 401 Certification).

The Corps will not issue a permit until consistency requirements for the Coastal Zone Management Act are met and a Coastal Zone Consistency Questionnaire is included with a Corps application. An applicant must certify consistency with the ACMP, and the state Division of Governmental Coordination must, based on the results of the ACMP review, concur. In addition, a review of cultural resources is coordinated with the state's Historic Preservation Office and the federal Minerals Management Service. Archeological or historical resources that could be lost or destroyed by the proposed activity are considered and presented in the Corp's final assessment of the described project.

The public interest review (33 C.F.R. § 320.4) considers guidelines set forth under section 404(b) of the Clean Waters Act. The guidelines outline a mitigation sequence that must be followed in the decision-making process that applies to all waters, including wetlands. A permit will be denied if the contemplated discharge does not meet the required standards. For placement of fill, the mitigation sequence requires avoiding wetlands where practical, minimizing impact where avoidance is not practicable, and compensating for impact to the extent appropriate and practicable.

A decision to issue a permit, with proposed mitigation measures included, is based upon an evaluation of the probable impacts (including cumulative impacts) of a proposed activity. Benefits that can reasonably be expected to accrue are balanced against reasonably foreseeable costs. Factors relevant to the decision are conservation, economics, aesthetics, general environmental concerns, wetlands, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, property ownership, and in general, the needs and welfare of the people.

Other Requirements

Lessees must comply with applicable federal law concerning Native allotments. Activities proposed in a plan of operations must not unreasonably diminish the use and enjoyment of lands within a Native allotment. Before entering onto lands subject to a pending or approved Native allotment, lessees must contact BIA and BLM and obtain approval to enter.

The U.S. Coast Guard has authority to regulate offshore oil pollution under 33 C.F.R. §§ 153-157 and the federal Oil Pollution Act of 1990. The agency reviews and approves oil spill contingency plans. Most operators prepare one spill contingency plan for their facilities that meets both federal and state requirements. These are discussed in more detail in the oil spill prevention and response section of Chapter 5.

Paragraph 21 of the lease contract requires the lessee to rehabilitate the lease area to the satisfaction of the state upon expiration or termination of the oil and gas lease. The lessee is granted one year from the date of expiration or termination to remove all equipment from the lease area and deliver up the lease area in good condition.

In addition to existing laws and regulations applicable to oil and gas activities, DO&G requires, under paragraph 26 of the state's standard lease contract, that leases be subject to all applicable state and federal statutes and regulations in effect on the effective date of the lease. Leases will also be subject to all future laws and regulations placed in effect after the effective date of the leases to the full extent constitutionally permissible.

[1]Under AS 38.05.035(a)(9)(c) the geological and geophysical data are held confidential at the request of the permittee.

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Maintained By: Lynn Blessington CLOSE *Last Revised July 30, 1999*

6 P.3d 270 KACHEMAK BAY CONSERVATION SOC'Y V. STATE (S. Ct. 2000)
2000 Alas. Lexis 78

KACHEMAK BAY CONSERVATION SOCIETY, COOK INLET KEEPER, TRUSTEES FOR ALASKA, STACEY MARZ, MICHAEL O'MEARA,
Appellants,
vs.
STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES; JOHN SHIVELY, Commissioner, Department of Natural Resources; KENNETH BOYD, Director, Division of Oil and Gas, Appellees.
MARATHON OIL COMPANY; UNION OIL COMPANY OF CALIFORNIA; COOK INLET REGIONAL CORPORATION, INC.; FORCENERGY, INC.; ANADARKO PETROLEUM CORPORATION; ALASKA MENTAL HEALTH TRUST,
Intervenors.

Supreme Court No. S-8554, No. 5303
SUPREME COURT OF ALASKA
6 P.3d 270, 2000 Alas. LEXIS 78
August 11, 2000, Decided

<CASE SUMMARY>

Appeal from the Superior Court of the State of Alaska, Third Judicial District, Anchorage, Sigurd E. Murphy, Judge pro tem. Superior Court No. 3AN-96-7909 Cl.

COUNSEL

Patrick Lavin and Valerie L. Brown, Trustees for Alaska, Anchorage, for appellants.

Lawrence Z. Ostrovsky and Jeffrey D. Landry, Assistant Attorneys General, Anchorage, and Bruce M. Botelho, Attorney General, Juneau, for appellees.

Susan E. Reeves and Thomas P. Amodio, Foster Pepper Rubini & Reeves, LLC, Anchorage, for intervenors Marathon Oil Company, Union Oil Company of California, Forcenergy, Inc., Cook Inlet Regional Corporation, Inc., and Anadarko Petroleum Corporation.

T. Henry Wilson, Assistant Attorney General, Anchorage, and Bruce M. Botelho, Attorney General, Juneau, for intervenor Alaska Mental Health Trust.

JUDGES

Before: Matthews, Chief Justice, and Eastaugh, Fabe, Bryner, and Carpeneti, Justices.
AUTHOR: CARPENETI

OPINION

CARPENETI, Justice.

I. INTRODUCTION

This case involves a challenge by citizens and environmental groups (collectively, Kachemak Bay) to the Department of Natural Resources' (DNR) decision that an oil and gas lease sale concerning state lands in Cook Inlet was (1) in the best interests of the state and (2) consistent with the state's coastal management program.

The challenge has two major aspects. First, Kachemak Bay contends that DNR impermissibly "phased" its review of the proposed sale.[1] Second, Kachemak Bay challenges the substantive basis for DNR's decisions.

Because we find that Kachemak Bay's challenge fails in all respects, we affirm the decision of the superior court.

II. FACTS AND PROCEEDINGS

In early 1996 the state offered over one million acres of state-owned on-shore and off-shore land for lease for potential petroleum exploration and development. This land is almost entirely within the Kenai Peninsula Borough, and is predominantly either under the waters or on the coastline of Cook Inlet.

DNR evaluated the proposed sale. It determined that (1) the sale was in the best interests of the state, and (2) the sale was consistent with the Alaska Coastal Management Plan. DNR issued two documents -- a best interests finding and conclusive consistency determination, respectively -- to that effect in September 1996.

Kachemak Bay challenged these determinations. It first requested reconsideration of both decisions, which DNR denied in October 1996. Kachemak Bay then appealed to the superior court.

In November, Kachemak Bay unsuccessfully moved for an injunction against the lease sale; the sale took place as scheduled in December. Extraction rights to over 173,000 acres were leased, generating over $ 3 million in state revenue. The superior court still had before it Kachemak Bay's underlying appeal of DNR's findings regarding the lease sale.

After our decision in **Ninilchik Traditional Council v. Noah**[2] was issued on December 26, 1996, DNR asked the superior court to remand the appeal to allow DNR to reconsider its conclusive consistency determination. DNR issued the revised conclusive consistency determination in November 1997.

The superior court upheld DNR's best interests finding and conclusive consistency determination in all respects in January 1998. This appeal followed.

III. STANDARDS OF REVIEW

A. Superior Court's Decision

Here the superior court sat as a court of appeal reviewing DNR's decision.[3] In such cases, we independently review the merits of the administrative determination; we do not defer to the superior court's decision.[4]

B. DNR's Decision

We have held that "to what extent the . . . code allows phasing . . . . is a question of statutory interpretation which does not involve agency expertise. Thus, this court will use its independent judgment."[5]

Once we have determined whether and to what extent the relevant law allows phasing, both DNR's best interests determination and its determination that a project is consistent with the Alaska Coastal Management Plan's habitat standard are subject to a deferential reasonable basis review.[6] This standard properly reflects the fact that in these cases, DNR's determination "is almost entirely a policy decision, involving complex issues that are beyond this court's ability to decide. . . . This court has neither the authority nor competence to decide whether the public interest is 'best served' by a proposed disposition of land for offshore oil and gas exploration and development."[7]

However, while deferential, this is not a toothless standard of review. On the contrary, we have stated that our duty is to ensure that DNR has taken a "hard look at the salient problems and has genuinely engaged in reasoned decision making."[8] Further, we have held that such decisions "will be regarded as arbitrary where an agency fails to consider an important factor in making its decision."[9]

IV. DISCUSSION

A. The Best Interests Finding

DNR's obligation to consider the "best interests of the state" and to issue written findings when it proposes to alienate state land or an interest in state land can be traced to the Alaska Constitution. Article VIII, Section 1 proclaims that "it is the policy of the State to encourage the . . . development of its resources by making them available for maximum use consistent with the public interest." Section 2 further provides that "the legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people." Finally, Section 8 endows the Legislature with the power to "provide for the leasing of, and the issuance of permits for the exploration of, any part of the public domain or interest therein, subject to reasonable concurrent uses."

In Title 38, Chapter 5 of the Alaska Statutes, the legislature delegated to DNR much of its authority to ensure that such leasing of state land or interests in land is consistent with the public interest.[10] Alaska Statute 38.05.035(e) provides, in part: "Upon a written finding that the interests of the state will be best served, [DNR] may . . . approve contracts for the sale, lease, or other disposal of available land, resources, property, or interests in them." Kachemak Bay asserts that DNR failed to fulfill this obligation.

1. **"Phasing" is permitted when DNR undertakes best interests findings.**

Kachemak Bay argues that DNR "impermissibly 'phased' its best interest finding." Thus, a threshold question is whether DNR may phase its best interests finding, an issue addressed in AS 38.05.035(e).

DNR maintains that subsection (1)(C), enacted in 1994,[11] explicitly permits the type of phased review it undertook here. The subsection allows phasing, subject to several conditions:

> For a specific proposed disposal of available land, resources, or property, or of an interest in them, [DNR] in the written finding, ... may, if the project for which the proposed disposal is sought is a multiphased development, limit the scope of an administrative review and finding for the proposed disposal to the applicable statutes and regulations, facts, and issues identified in (B)(i)-(iii) of this paragraph[[12]] that pertain solely to a discrete phase of the project when
>
> (i) the only uses to be authorized by the proposed disposal are part of that discrete phase;
>
> (ii) [DNR]'s approval is required before the next phase of the project may proceed; and
>
> (iii) [DNR] describes its reasons for a decision to phase and conditions its approval to ensure that any additional uses or activities proposed for that or any later phase of the project will serve the best interests of the state.

This subsection was enacted by the legislature in reaction to a string of decisions by this court concerning what we characterized as DNR's "phasing" of its review of various mining and gas and oil projects.[13] This line of cases was summed up effectively and concisely in **Thane Neighborhood Association v. City and Borough of Juneau**. In **Thane**, citizens' groups challenged the Juneau Planning Commission's approval of a mining company's application to reopen the AJ Mine, arguing that the Borough had "impermissibly used a 'phased' approach in approving the permit."[14] We laid out the relevant case law in this way:

> Three of our recent cases provide considerable guidance as to what sorts of permit approval "phasing" techniques are appropriate and what kinds are not: **Trustees for Alaska v. Gorsuch**,

835 P.2d 1239 (Alaska 1992); [**Camden Bay II**, and **Kuitsarak**].

. . . .

We can draw three general, guiding principles concerning when and in what manner "phasing" or "segmentation" is permissible from **Gorsuch**, **Camden Bay II**, and **Kuitsarak**. First, unless a specific statute or regulation allows phasing, phasing is disfavored. Where a statute is silent or ambiguous, phasing should generally not be allowed.

Second, phasing is prohibited if it can result in disregard of the cumulative potential environmental impacts of a project. The more interlinked the components of a project are and the greater the danger that phasing will lead to insufficient consideration of cumulative impacts, the greater the need to bar phasing.

Third, conditions and stipulations may be used to address unforeseen occurrences or unforeseen situations that may arise during exploration or development, but permit conditions may not serve as a substitute for an initial pre-permitting analysis that can be conducted with reasonably obtainable information.

Thus, phasing through the use of conditions is prohibited where it is feasible to obtain the information necessary to determine whether environmental standards will be satisfied before granting an initial permit, but allowed where it is impractical or impossible to create detailed development plans without conducting additional physical exploration.[15]

Applying these principles, we held in **Thane** that "the Commission should not have granted the AJ Mine permit while excepting major portions of the project . . . [which are] significantly interlinked to other parts of the project. . . . Phasing the approval of those components could . . . cause the cumulative impacts of the mining project to be inadequately considered."[16]

We have not yet had occasion to analyze the effect of the 1994 amendment discussed above on the line of cases culminating in **Thane**.[17] It is clear that by enacting the amendment the legislature was seeking to allow DNR to phase its approval of projects. However, the legislature did not explicitly overrule any of the cases mentioned above. Thus, we must discern to what extent, if at all, the principles we enunciated in **Thane** and its predecessors survived the 1994 amendment.

First, the first principle enunciated in **Thane**, -- that phasing is "disfavored" and not allowed unless specifically authorized by statute[18] -- did not survive the 1994 amendment. The amendment added AS 38.05.035(e)(1)(C), which speaks in terms of "phases" of a project, and expressly allows DNR to limit its review to the "applicable statutes and regulations, facts and issues . . . that pertain solely to a discrete phase of [a] project" under certain circumstances.[19] Given this new language, it cannot be said that phasing is "disfavored" under Alaska law; on the contrary, the amendment affirmatively empowered DNR to phase its best interests findings if it meets the criteria.

However, the second **Thane** principle appears to have survived and, indeed, to have been reaffirmed by the 1994 amendment. In **Thane**, we held that "phasing is prohibited if it can result in disregard of the cumulative potential environmental impacts of a project. "[20] The "Legislative Findings" section of the 1994 amendment provides that "consideration of a disposal[[21]] as a phase of a development project is not intended to artificially divide or segment a proposed development project to avoid thorough review of the project or to avoid consideration of potential future environmental, sociological, or economic effects."[22] Further, subsection (g)(1)(B)(vi), which was substantively unaffected by the 1994 amendment,[23] provides that "when the director prepares a written finding . . . for an oil and gas lease . . . the director shall consider and discuss . . . the reasonably foreseeable cumulative effects of oil and gas exploration, development, production, and transportation on the sale area."

However, the third principle we announced in **Thane** did not survive the 1994 amendment, or at least did not survive unscathed. **Thane** held that "phasing through the use of conditions is prohibited where it is feasible to obtain the information necessary to determine whether environmental standards will be satisfied before granting an initial permit."[24] We drew that principle, in part, from **Kuitsarak**, where we noted that "DNR's argument that it was difficult to obtain the information necessary to perform a proper evaluation of the impacts of mining in the region was undermined by evidence of federal studies similar to the studies which DNR needed to do."[25]

The 1994 amendment seems to have severely limited, if not nullified, this principle. The legislature did so in two ways. First, it added subsection (e)(1)(B)(ii), which provides that DNR "may limit the scope of an administrative review and finding for a proposed disposal to . . . the facts pertaining to the land . . . that the director finds are material to the determination and **that are known to the director or knowledge of which is made available to the director** during the administrative review".[26] Second, it stated in its findings section that "analyses comparable to those generally required by [the federal National Environmental Policy Act] for the preparation of an environmental impact statement . . . are not required by the state for support of best interest findings."[27]

Thus, under the revised statute, DNR may limit its review to only those facts which (1) it **knows** at the time it conducts the review and (2) others bring to DNR's attention during the review. Its determinations may not be overturned, as we did in **Kuitsarak**, for failure to affirmatively **seek out** additional evidence. Further, a failure on DNR's part to gather the same level of information as a federal agency would in an environmental impact statement is an impermissible ground for finding DNR's determination inadequate -- again, this is a repudiation of **Kuitsarak**.[28]

Finally, the 1994 amendment created an entirely new subsection (h).[29] That subsection

provides that DNR may not be required to "speculate about possible future effects subject to future permitting that cannot reasonably be determined until the project or proposed use for which a best interests finding is required is more specifically defined."[30] The subsection goes on to list three specific types of "speculation" in which DNR may not be required to engage.[31]

In sum, the 1994 amendment, at least in a general sense, empowers DNR to phase its best interests findings under AS 38.05.035(g). It is undisputed that DNR did, in fact, phase its review of Sale 85A. The next step in the analysis, then, is to examine whether it was proper, under the new AS 38.05.035(e)(1)(C), for DNR to phase its analysis of this particular project.

2. **It was proper for DNR to "phase" its best interests finding regarding Sale 85A.**

a. **The only uses to be authorized by the lease were part of the lease sale phase.**

As this court has noted, "the mere decision to lease does not in itself bring about great risks to the environment."[32] This is so because the lease is no more than an interest in land, and does not in itself authorize any actual "use" of the land. As DNR puts it, "while the lease gives the lessee the **right** to conduct these activities, the lease sale itself does not **authorize** any exploration or development activities by the lessee on leased tracts."[33] (Emphasis added.) Thus, the first part of the AS 38.05.035(e)(1)(C) test is satisfied.

b. **DNR's approval was required before the next phase of the project was allowed to proceed.**

As DNR discusses in the introduction to its best interests finding, "state approval is required before the next phase (exploration) may proceed." The Sale 85A lease form provides, under the heading PLAN OF OPERATIONS, that "before any operations may be undertaken on the leased area, the lessee shall comply with the applicable statutes and regulations. . . ."

The relevant regulation is the requirement, codified in 11 Alaska Administrative Code 83.158(a), that a lessee must file a DNR-approved "plan of operations" before any operations may be undertaken on the leased area. This plan is required to contain "sufficient information, based on data reasonably available at the time the plan is submitted for approval, for [DNR] to determine the surface use requirements and impacts directly associated with the proposed operations."[34]

Because the lessees must submit these plans before conducting exploration, construction, or production activities on the land, the second part of the AS 38.05.035(e)(1)(C) test is satisfied.

c. **DNR described its reasons for its decision to phase and conditioned its approval to ensure that any additional uses or activities proposed for the lease phase or any other phase will serve the best interests of the state.**

(1) **Reasons to phase**

DNR stated in the introduction to the best interests finding that "in oil and gas leasing, it cannot be determined with any specificity or definition at the leasing stage if, where, when, how, or what kind of production might ultimately occur[] as the result of leasing. . . . A discussion of the possible specific effects of unknown future exploration, development and production activities is not within the scope of this finding." Thus, DNR has described its reasons for phasing its review.

(2) **Conditioned approval to ensure that the project continues to serve the state's best interests**

DNR states that its best interests finding meets this part of the AS 38.05.035(e)(1)(C) test because DNR "is conditioning this best interests determination and any leases ultimately issued with a number of mitigation measures designed to ensure that any future activities in the exploration, . . . development and production phases will serve the best interests of the state." These measures are found in Chapter 7 of the best interests finding. All Sale 85A lessees must comply with these measures as a condition of the lease.

The measures deal with many subjects: oil and hazardous substance pollution control, use of explosives, road building, water removal, facilities and structures, local hiring, training, public access to the leased land, stream preservation, waste disposal, gravel mining, and wildlife preservation. This detailed list of mitigation measures suffices to ensure that the development of Sale 85A remains in the public interest, as determined by DNR.

d. **DNR, by phasing its review, would not avoid thorough review of the project or avoid consideration of potential future environmental, sociological, or economic effects.**

While DNR has met all of the factors enumerated in AS 38.05.035(e)(1)(C), our analysis is not finished. As discussed above, in addition to these factors, the statute contains an overarching factor that DNR must consider. That is, whether DNR, by phasing its review, would "avoid thorough review of the project or . . . avoid consideration of potential future environmental, sociological, or economic effects";[35] or, as we stated in **Thane**, whether phasing would "result in disregard of the cumulative potential environmental impacts of a project."[36]

Kachemak Bay vigorously asserts that it would, stating:

The threshold decision that the expansion of oil industry infrastructure to the Southern Kenai Peninsula is acceptable is made at the lease sale stage. It is at that stage, therefore, that DNR must consider all relevant factors bearing on that determination. Otherwise, the impacts associated with that decision will be masked until later stages of the process, when it is, as a practical matter, too late to prevent the development.

DNR's best interests finding contains a thirty-page chapter entitled "reasonably foreseeable cumulative effects of Sale 85A." One section contains descriptions of each of the "three phases of

industrial activity: exploration, development, and production." The next section "focuses on how these later phases would impact communities and municipalities in the sale area, and the expected distribution of fiscal benefits to the state and local areas." The final section "focuses on physical and non-physical effects on habitats, fish and wildlife, subsistence and historic and cultural resources of the sale region." Given these detailed and comprehensive findings, it does not appear that DNR's decision to phase its review of Sale 85A has caused the impacts of development to be masked.

e. **Conclusion**

Sale 85A meets the requirements for a phased development under AS 38.05.035(e)(1)(C), and phasing review of Sale 85A does not allow DNR to avoid thorough review of the project or avoid consideration of potential future environmental, sociological, or economic effects. Therefore, DNR's decision to phase was proper.

3. DNR fulfilled its obligation to consider and discuss the relevant factors in its best interests finding.

Having determined that DNR was permitted to phase its review of Sale 85A, the next step is to examine the challenged aspects of DNR's best interests finding and determine whether they meet the AS 38.05.035(g) standards.

a. **Transportation methods and risks**

Kachemak Bay's first contention is that "DNR failed to discuss the likely oil and gas transportation methods and risks." Analogizing to **Demarcation Point** and **Camden Bay I**, Kachemak Bay asserts that "in its [best interests finding] for Sale 85A, DNR discussed only the methods currently used to transport oil and gas in Alaska generally. . . . Thus, DNR again failed to address the methods and risks of transporting oil from the sale area to market." Kachemak Bay cites an environmental impact statement prepared by the federal Minerals Management Service for a 1995 federal lease sale in Cook Inlet to support its claim that it is "simply untrue that DNR lacks the ability to estimate the likely oil transportation modes and impacts until the specific location and nature of oil and gas deposits [are] determined."

As previously discussed, however, the 1994 amendment explicitly rejected the federal environmental impact statement standard as the standard for state best interests findings.[37] Thus, Kachemak Bay's argument -- that DNR's failure to conduct an analysis of the likely impacts of oil and gas transportation similar to an environmental impact statement renders the best interests finding insufficient -- is unavailing. In any event, the environmental impact statement cited by Kachemak Bay is, in many ways, less complete than the best interests finding submitted by DNR.[38]

Kachemak Bay's more general argument -- that DNR did not adequately consider the methods and risks of transporting oil from the sale area to market -- is not as easily resolved. Alaska Statute 38.05.035(g)(1)(B)(viii) provides the relevant standard, requiring DNR to "consider and discuss . . . the method or methods most likely to be used to transport oil or gas from the lease

sale area, and the advantages, disadvantages, and relative risks of each."

DNR devotes some three pages of its best interests finding to a section entitled "transportation of crude oil and natural gas." DNR first discusses the existing Cook Inlet oil and gas transportation infrastructure generally, and lists the methods used. These methods, according to DNR, include pipelines, both onshore and offshore; marine terminals with offshore loading platforms; and tank vessels. The best interests finding then proceeds to discuss each of these methods in greater detail.

The "advantages and risks" portion of the finding is reserved mainly for the next section of the best interests finding, entitled "oil spill risk, prevention and response." This analysis takes up some three pages of the best interests finding.[39] In that section, DNR discusses in general terms how spills might occur, as well as the oil spill history of Cook Inlet. DNR then discusses in more detail spills that occur as a result of exploration and production, as well as spills that occur as a result of each transportation method and measures to prevent such spills.

Regarding exploration and production, DNR gives statistics for platform spill history and discusses various types of spills that might occur -- it also gives examples of several individual Cook Inlet spills and discusses the "worst case discharge" scenario. DNR then discusses pipelines -- it reviews the current condition of those in Cook Inlet, as well as the potential amount of oil that might be spilled from a pipeline, how such a spill might occur, and the history of Cook Inlet pipeline spills. Next, DNR discusses marine terminals, their safety records generally, and the volume of oil they handle. In this discussion, DNR briefly addresses three incidents where oil spills occurred at marine terminals in Cook Inlet. Finally, DNR discusses tanker vessels. It states that tankers "present the largest potential for oil pollution" and explains why, as well as giving world-wide oil spill statistics. Finally, DNR discusses a 1987 Cook Inlet spill as well as the infamous 1989 EXXON VALDEZ disaster in Prince William Sound.

Nevertheless, Kachemak Bay argues that "DNR failed to estimate the risk and impacts of a substantial oil spill in the sale area." Again, Kachemak Bay cites the federal Minerals Management Service's environmental impact statement, which contained a detailed analysis of the "likely impacts of a spill in Cook Inlet, taking into account the weather patterns, likely oil fate and transport, and the nature and location of the substantial natural resources at risk in the Inlet." Kachemak Bay asserts that because this analysis was available at the lease sale stage, DNR "may not hide behind a professed lack of ability" to similarly estimate the probability of an oil spill in the context of Sale 85A.

DNR counters that its analysis shows that it "considered the available and known facts [and] used them in its own consideration of the relative risks and foreseeable effects of the likely transportation methods." While DNR concedes that it is "required to consider the relative risks of the likely methods of transporting oil or gas from the sale area," it argues that "neither statute nor case law . . . requires DNR to quantify the probability of oil spills in the sale area." DNR further claims that Kachemak Bay "is completely incorrect when it characterizes DNR's consideration of the issue as 'hiding behind a professed lack of ability to estimate an oil spill.'" Rather, DNR states that it was "skeptical of [the Minerals Management Service's] spill assessment methodology and,

purposefully, decided not to adopt it."

The record shows DNR's original decision-making process regarding the Minerals Management Service's spill analysis in more detail. In a response to a public comment, DNR characterized the analysis as "speculative." DNR asserted that the Minerals Management Service "generates its spill estimate using a computer model which manipulates large numbers of variables, most of which are estimates themselves. Resource estimates are one of the variables in the spill model and are highly speculative." Likewise, in an October 15, 1996 memorandum, a DNR Natural Resource Manager stated that "although [the Minerals Management Service] includes an estimate of oil spill risk and impact in [its] [environmental impact statement] for [outer continental shelf] areas, I have serious reservations about the reliability of their estimates." The manager went on to make four specific comments about the speculative nature of the Minerals Management Service oil spill "guess."[40]

DNR's decision to question and ultimately discard as "unhelpful" Minerals Management Service's methodology is entirely proper. DNR is correct in its assertion that it need not "use the MMS methodology to estimate oil spills." The 1994 amendments explicitly exempted DNR from being required to conduct analyses similar to environmental impact statements.[41]

Kachemak Bay is correct, however, that DNR does not discuss "how any oil or gas will likely be transported from the remote areas of the sale area." In fact, DNR expressly declined to discuss exactly what "transportation strategies" would be used in the area:

A discussion of specific transportation alternatives for oil from the Sale 85A area is not possible at this time because strategies used to transport potential petroleum reserves depend on many factors, most of which are unique to an individual tract and discovery. The location and nature of oil and gas deposits determine the type and extent of facilities necessary to develop and transport the resource. No oil or gas may be transported from Sale 85A leases until the operator has obtained the necessary permits and authorizations. . . . [DNR] and other state, federal, and local agencies will review the specific transportation system when it is actually proposed.

Kachemak Bay argues that by failing to address "the key question of how any oil or gas will likely be transported from the remote portions of the sale area," DNR falls short of the subsection (g) standard relating to transportation.

Again, Kachemak Bay analogizes to **Camden Bay I** and **Demarcation Point**, where we remanded best interests findings that failed to discuss and weigh the risks of the likely transportation methods to be used. Kachemak Bay asserts that the forty to sixty mile distance between some portions of Sale 85A and any existing oil and gas industry infrastructure is reminiscent of the fifty to eighty mile distance in the **Demarcation Point** and **Camden Bay I** cases. As in those cases, the transportation of oil from remote areas devoid of existing infrastructure -- e.g., via a long-distance pipeline on the ocean bottom or across land -- entails potentially significant risks and impacts which DNR must consider in its best interest finding.

DNR correctly points out that both of these cases are distinguishable from the instant case. **Camden Bay I** involved a potential oil field off Alaska's northern coast, west of Kaktovik and north of the Arctic National Wildlife Refuge (ANWR).[42] At the time DNR issued the best interests finding, Congress was deciding whether to open ANWR to oil and gas leasing and associated uses.[43] We remanded the best interests finding for a supplemental written finding regarding transportation issues because DNR had failed to "consider the unique risks presented by the oil transportation methods that would be necessary if the legal status of ANWR remains unchanged."[44]

Demarcation Point involved a nearly identical situation. The potential oil field was in the same geographic region, abutting ANWR, though further east than Camden Bay.[45] Relying on **Camden Bay I,** we held that the best interests finding was deficient for failure to address the issue of transportation if ANWR did not become available.[46] We noted that the best interests finding in that case was "remarkably similar to the . . . Finding that was rejected by this court in **Camden Bay [I]**. . . . [It] dealt with transportation issues in a similar cursory manner."[47] Thus, we remanded the best interests finding for a supplemental finding on the issue.[48]

Camden Bay I and **Demarcation Point** are distinguishable from this case in that the best interests findings in those cases did not even address how oil would be transported if ANWR's status was not changed.[49] DNR's transportation analysis here is not similarly lacking. As discussed above, DNR analyzes the various methods of transportation and their risks in some detail, and no such major policy change, beyond DNR's control, is necessary before oil and gas can be transported in Cook Inlet.

Kachemak Bay argues for a broader application of **Camden Bay I** and **Demarcation Point** ; it would have us hold that "while DNR may flesh out the size, nature and location of the specific facilities at a later stage, it must identify at the lease sale stage the most likely methods of moving oil from the sale area to market, and the associated impacts on the sale area and affected communities." Specifically, Kachemak Bay urges us to remand the best interests finding for an alleged failure to address transportation of oil "from remote areas [of the sale area] devoid of existing infrastructure."

However, statutory and case law do not support this approach. As mentioned above, the 1994 amendment added AS 38.05.035(h)(1), which provides that in best interests findings DNR "may not be required to speculate about . . . the exact location and size of an ultimate use and related facilities." Further, as we held in **Camden Bay II**, "until exploration is proposed and, in all likelihood, until and unless a commercially exploitable discovery is made, there will be no occasion for siting, designing or constructing transportation and utility routes."[50] Thus, DNR's relatively general approach to the issue of the methods and risks of transporting oil and gas in Cook Inlet satisfies the now-more-generous AS 38.05.035(g) standard. Kachemak Bay's assertion that DNR needs to specify the means and risks of transporting oil and gas from the most remote parts of the Sale 85A area is asking DNR to engage in what the legislature has deemed improper

"speculation."[51]

In short, DNR has met the subsection (g) standard. Kachemak Bay's argument that DNR "failed to identify and discuss the methods and risks of transporting oil and gas from the Sale 85A area to market" is simply not supported by the record.

b. **Sociological impacts on sale area and affected communities**

Kachemak Bay argues briefly that "the addition of industry infrastructure requires a labor pool, necessary support companies and services, and associated demands on public services, which will impact nearby communities. . . . DNR failed to meaningfully respond to public comments and to discuss the sale's reasonably foreseeable impacts on the sale area and affected communities."

Kachemak Bay is correct that DNR is obliged to "consider and discuss . . . the reasonably foreseeable effects of oil and gas exploration, development, production, and transportation on municipalities and communities within or adjacent to the lease sale area"[52] in its best interests finding. DNR's discussion of these issues is found in a three-page subsection of the best interests finding entitled "effects on municipalities and communities."

This subsection first lists the affected communities and refers broadly to possible changes in "education level, household or per capita income, occupancy or rental rates, population density or expansion of a particular age bracket," but states that "due to intervening factors, such as overall population growth in the sale area, such changes are not measurable or predictable." DNR goes on to state that "long[-]term effects of Sale 85A could mean a change in employment opportunity, influx of cash, or increase in demand for services, like sanitation, police protection, or road maintenance."

In a similar fashion, DNR lists several possible "physical effects of industry activities," including "vegetation loss, siltation, sedimentation, water quality changes, noise, increases in human congestion, or disturbances to wildlife." Again, however, DNR does not make specific predictions as to the exact location or degree of these effects:

Effects related to physical alterations of the environment would be directly related to the number of exploration, delineation, and production drill sites, and those numbers depend on the size, extent, location, and recoverability of discovered reserves. The siting of possible drill sites depends on factors including ecology, costs, the presence of an existing road system, and land ownership and management. The extent of effects would also be related to the proximity of development sites to important habitats . . . .

DNR then refers the reader to chapter six of the best interests finding for a discussion of water quality. In that discussion, DNR describes current instances of groundwater contamination, methods of disposal of contaminated water, and the potential for drawdown of local groundwater

tables. DNR also points the reader to chapter six for its discussion of oil spill "risk, preparedness, response and clean-up."[53]

DNR goes on to discuss the possibility that oil and gas projects will require "new or expanded utilities, " including electricity and water. DNR also mentions the potential for "increased use of transportation systems, such as air charter services, air strips, docks or roads." Once again, however, DNR disavows its ability to predict more precisely the probability or extent of these needs and uses, as they would "depend on the specific project proposed, its location, and the existing supply and demand for the service."

DNR next addresses land use, beginning with a discussion of the communities likely to be affected by development. DNR then mentions the possibility that uses such as hunting, fishing, and trapping might be adversely affected by development, and that increased "human presence" on private property made more accessible by development might have "negative impacts on traditional and recreational use."

Finally, DNR addresses the issue of employment. It discusses some of the extant gas fields and describes their impact on employment as "minimal." DNR states that Sale 85A "may create new employment opportunities," but adds that the "long-term employment benefits of this sale on the [Kenai Peninsula Borough, the Municipality of Anchorage,] and local communities will depend on the subsequent production of commercial quantities of petroleum." DNR claims that "an influx of workers from outside Alaska is unlikely," because "as existing Cook Inlet fields decline, more and more of the current resident labor pool and service industry will be in need of employment." DNR states that for those positions which the local labor pool is unable to fill, contractors will be encouraged to employ Alaskans.

As part of the best interests finding, DNR also catalogues and responds to the voluminous public comment that its announcement of the proposed lease sale generated.

As this summary shows, DNR is essentially correct when it says that Kachemak Bay "may not agree with DNR's conclusions, but it has simply not established that DNR failed to consider and discuss material information or that DNR failed to take a hard look at the reasonably foreseeable effects of post-lease sale activities on communities." DNR did consider these impacts in a manner that meets the relatively forgiving standard of AS 38.05.035(g)(1)(B)(x). Moreover, pursuant to AS 38.05.035(h), added by the 1994 amendment, DNR need not engage in "speculation" regarding "possible future effects subject to future permitting that cannot be reasonably determined until the project . . . is more specifically defined." Kachemak Bay has not borne its burden of showing that DNR's decision was arbitrary, unreasonable, or an abuse of discretion.[54]

c. Conclusion

The best interests finding is affirmed in all respects.

B. The Consistency Determination

Besides being obliged under Title 38 to determine whether lease sales are in the state's best interests, DNR is also required, under Title 46, Chapter 40 (the Alaska Coastal Mamanagement Plan), as implemented by Title 6, Chapter 80 of the Alaska Administrative Code, to determine that the lease sale is consistent with (1) the Alaska Coastal Management Plan and (2) district coastal management plans.[55] Kachemak Bay asserts that DNR's consistency determination regarding Sale 85A was erroneous in both respects, and that DNR improperly phased its consistency determination regarding the latter. As discussed below, however, these arguments fail.

1. **Consistency with the habitats standard**

a. **DNR's determination that Sale 85A was consistent with the Alaska Coastal Management Plan habitats standard was not erroneous.**

We discussed the Alaska Coastal Management Plan's habitats standard in **Camden Bay II**, notings its stringent requirements:

The ACMP has, among its objectives, protecting numerous environmental and cultural values in Alaska's coastal zone. As we have elsewhere had occasion to note, the ACMP's standards are extremely protective of the environment. Offshore areas are among the habitats subject to the Alaska coastal management program. Such habitats "must be managed so as to **maintain** or **enhance** the biological, physical, and chemical characteristics of the habitat which contribute to its capacity to support living resources." 6 AAC 80.130(b) (emphasis added). Uses or activities that fail to maintain or enhance the habitat's capacity to support living resources may be authorized only if several stringent additional conditions are met.[56]

Kachemak Bay asserts that DNR's consistency determination violates 6 AAC 80.130, commonly known as the "habitats standard," because Sale 85A neither (1) maintains or enhances the relevant habitat nor (2) meets the three "stringent additional conditions"[57] that the habitats standard specifies.

(1) **Sale 85A does not "maintain or enhance" the habitat.**

It is undisputed that the activities that will and may occur on the leased tracts -- i.e., exploration for and production of oil or gas -- "do not maintain or enhance the coastal habitat." Therefore, DNR was required to show that the proposal met the three subsection (d) conditions.

(2) **DNR showed that Sale 85A meets the subsection (d) requirements.**

(a) **DNR showed a "significant public need" for Sale 85A.**

In its consistency determination, DNR found that there was a significant public need for Sale 85A. DNR listed several aspects of the need, including: (1) "increased revenues from[:] oil and gas lease bonus bids, rentals, and royalties; production taxes; and corporate income taxes"; (2)

the "need for a continuous supply of energy"; (3) "the public need for continuing economic stability," based on the state's dependence on revenue and employment derived from oil and gas exploration and development; and (4) the "national need to replace domestic [petroleum] reserves to maintain future production levels and prevent a further deterioration of the country's position in the world market."

Despite this litany, Kachemak Bay argues that DNR "has not demonstrated any significant public need to offer Sale 85A." Kachemak Bay contends that the amount of money that the state will receive from the lease sale itself will "not materially affect total state revenues." Further, Kachemak Bay argues, "DNR did not even estimate potential revenues to be derived from subsequent exploration, development, and production, and its reliance on this phantom figure as a 'significant need' is arbitrary and capricious." Kachemak Bay argues that DNR was required to estimate the "Sale 85A-related income," and points to the Minerals Management Service's estimate for Sale 149 as proving that such estimates are feasible. In any event, Kachemak Bay contends, "any revenues derived from Sale 85A are highly unlikely to be 'significant' in terms of their impact on existing revenues." Finally, Kachemak Bay makes the broad argument that if a "need" for any revenue which may flow from an oil and gas lease sale, standing alone, constitutes a "significant public need," then there would be in effect an unwritten exception to the Habitats Standard for oil and gas lease sales, since such sales always [would] be expected to generate revenue. . . . While the estimated revenue from a given lease sale might potentially constitute a significant public need, that is not the case here, where DNR has refused to estimate revenues, and [has] identified no reasonable possibility that the Sale 85A revenues will significantly impact total state oil and gas revenues.

These arguments are unavailing; we considered and rejected similar arguments in **Ninilchik.** In that case, DNR adverted to benefits that closely resemble those advanced here: namely, revenue for the state, revenue for local governmental bodies, employment opportunities, and the "long-range goal of the State of utilizing the oil and gas lease program to provide the basis for a stable and prosperous economy."[58] Citing our holding in **Camden Bay I**, we held that DNR's analysis sufficed to show that DNR's determination that there was a significant public need for the sale was not arbitrary or capricious.[59]

The determination that a significant public need for a lease sale exists is exactly the type of "policy decision, involving complex issues that are beyond this court's ability to decide,"[60] to which we give considerable deference. Without evidence that this decision was arbitrary or capricious, we cannot negate this policy decision by DNR. We accordingly decline to reverse the consistency determination on these grounds.[61]

(b) **DNR showed that there is no feasible and prudent alternative to meet the public need for the proposed use or activity which would maintain or enhance the habitat.**

Kachemak Bay argues that "there were many potentially feasible and prudent alternatives to offering Sale 85A as it was offered." The alternatives proposed by Kachemak Bay include deferring or deleting some portions of the sale area, and evaluating the use of alternative energy resources and conservation measures to reduce the United States' national demand for oil.

In its consistency determination, DNR found that there was "no feasible and prudent alternative to offering lands in the coastal zone that would meet the public need for Sale 85A." DNR found that because "industry interest lies in the coastal zone," it would not be prudent to offer lands outside the coastal zone. If the state offered lands where there was a lack of industry interest, DNR found, "this state would receive no economic benefit from holding this sale."

Examination of the record reveals that DNR's decision that there were no prudent and feasible alternatives to Sale 85A was not arbitrary nor capricious. In fact, as DNR points out, the sale area was pared down by 40,000 acres in direct response to concerns of residents of Homer. This indicates that DNR took the requisite "hard look" at the sale area before issuing its consistency determination.

Further, deleting part of the sale area would potentially reduce or eliminate all of the benefits listed above. In **Ninilchik**, we rejected such deletion as a feasible and prudent alternative for just that reason: "The State maintains that while it might be feasible to offer less promising areas for lease, it would not be prudent because potential lessees have expressed an interest in the Sale 78 area."[62] Obviously, forgoing offering the lease sale altogether (as Kachemak Bay apparently proposes in favor of development of alternative energy sources) would result in complete loss of the benefits cited by DNR; Kachemak Bay has not shown that its proposals regarding alternative energy sources would provide those benefits.

b. **Conclusion**

We affirm DNR's determination that Sale 85A was consistent with the habitats standard.[63]

2. **Consistency with the Kenai Peninsula Borough Coastal Management Plan**

Kachemak Bay further alleges that DNR failed to fulfill its duty, pursuant to AS 46.40.100(a), to "administer land and water use regulations or controls in conformity with district coastal management programs."[64] The relevant district program here is the Kenai Peninsula Borough Coastal Management Plan[65] -- specifically, Policy 2.7.

Policy 2.7 is succinct. It provides: "The cumulative effects of proposed new and existing development on ambient air and water quality and coastal habitats shall be considered in the review or renewal of coastal projects."

a. **It was proper for DNR to "phase" its determination that Sale 85A was consistent**

with the Kenai Peninsula Borough Coastal Management Plan.

DNR's revised consistency determination begins with a caveat:

State leases alone do not authorize any activities that would impact air and water quality. Focused consideration of this requirement is reserved until a specific activity is proposed. Until a development, use or activity which might actually impact air and water quality is proposed, DNR will have no specific information about its impact on future air and water quality.

In short, DNR is indicating that it will phase its determination that Sale 85A conforms with Policy 2.7.

The same line of case law discussed above in the best interests finding context is relevant to the question of whether DNR may phase its consistency determinations; those cases apply to phased permitting generally.[66] The 1994 amendment discussed above is also relevant; in that amendment, the legislature added AS 46.40.094, entitled "Consistency Determinations for Phased Uses and Activities."[67] That section permits DNR to phase its consistency determinations if:

(1) at the time the proposed use or activity is initiated, there is insufficient information to evaluate and render a consistency determination for the entirety of the proposed use or activity;

(2) the proposed use or activity is capable of proceeding in discrete phases based upon developing information obtained in the course of a phase; and

(3) each subsequent phase of the proposed use or activity is subject to discretion to implement alternative decisions based upon the developing information.[68]

In essence, these conditions determine whether a given project is eligible for a phased consistency review. The statute further provides that if these conditions are met, DNR may limit the consistency review to [a] particular phase if, but only if,

(A) the agency or another state agency must carry out a subsequent consistency review and make a consistency determination before a later phase may proceed; and

(B) the agency responsible conditions its consistency determination for that phase on a requirement that a use or activity authorized in a subsequent phase be consistent with the [Alaska Coastal Management Plan].[69]

As is the case with best interests findings, then, it can no longer be said that phasing is disfavored under Alaska law when DNR makes a conclusive consistency determination. Neither can a consistency determination be found wanting for DNR's failure to conduct additional studies; the material DNR must consider is limited to that already at hand and that presented to DNR.

Further, the "findings" section of the amendment applies to consistency determinations as well as best interests findings. Therefore, DNR is not required to undertake analyses comparable

to federal environmental impact statements in its consistency determinations.[70] As discussed above, another finding provides that DNR may not avoid thorough review of the project or its potential effects by artificially dividing the project.[71]

Just as with the best interests finding, then, the threshold question here is whether, under the Alaska Coastal Management Plan as amended, DNR may phase its conclusive consistency determination.

(1) **Sale 85A is eligible for phasing.**

Kachemak Bay asserts that DNR "ignored virtually all of the most relevant and readily available information pertaining to the impacts of existing development in the sale area. Further, as to future impacts, DNR did not provide any meaningful discussion or estimates, and instead asserted its inability to forecast such impacts until a later stage." Kachemak Bay states that DNR may not phase its consideration of the effects of **existing** development at all, because those impacts are "quantified and accessible." Further, Kachemak Bay asserts, "impacts from new development, including those from activities associated with Sale 85A, are foreseeable and capable of estimation."

Kachemak Bay's characterization of the scope of the review required by Policy 2.7 is somewhat misleading. The policy does not call for piecemeal review of (1) the impacts of existing development, (2) the impacts of proposed new development, and (3) the cumulative effects of (1) and (2). Rather, it calls for DNR to consider the "cumulative effects of proposed new and existing development" -- what might be called a holistic approach. This approach comports more closely with the Kenai Peninsula Borough Coastal Management Plan's "goals and objectives" -- i.e., "to protect important fish and wildlife habitat areas and environmentally sensitive areas from incompatible development"[72] -- than a piecemeal analysis would.

DNR asserts that it "carefully considered, to the extent reasonable and practical at the time of the consistency determination, the cumulative effects of existing and proposed new development on ambient air and water quality." However, DNR stated that it was unable to predict the effects of development on air and water quality. "Focused consideration of this requirement is reserved until a specific activity is proposed. Until a development, use or activity which might actually impact air and water quality is proposed, DNR will have no specific information about its impact on future air and water quality."

Again, the 1994 amendments endorse DNR's approach to this issue. As DNR states, "leases alone do not authorize any activities that would impact ambient air and water." The future activities that would have such impacts -- exploration and development -- are "subject to independent permitting requirements,"[73] as previously discussed.[74] Pursuant to the 1994 amendments, DNR may not be required to "speculate" concerning the effects of these activities.[75] For these reasons, DNR's finding that there was insufficient information to render a determination regarding the entire project was proper.

(2) **The proposed petroleum development project was capable of proceeding in discrete phases based upon developing information obtained in the course of a phase.**

DNR states that "each phase of oil and gas activities builds on the previous phase. That is, exploration cannot take place before the lease sale. Depending on the information gathered at the exploration phase, development may or may not take place." This analysis seems correct -- in any event, Kachemak Bay does not contest this characterization of oil and gas activities. Accordingly, this element of the AS 46.40.094(a) test is met.

(3) **Each subsequent phase of the proposed petroleum development project is subject to discretion to implement alternative decisions based upon the developing information.**

DNR states:

At each phase, proposed site-specific and project-specific activities will be analyzed for consistency based on information developed at the previous stages. Further, each of these subsequent phases [--] exploration and development/production [--] is subject to discretion to implement alternative decisions based upon this developing information. During the exploration and development phases, lessees submit proposed plans of operation for permit approval. At that time, agency staff reviews information developed from the previous phases along with new technological developments and site-specific data, and implements any needed alternative mitigation measures when determining whether the permit request complies with the [Alaska Coastal Management Plan].

Assuming that this characterization of DNR's internal policies is accurate -- and Kachemak Bay does not dispute it -- the third part of the AS 46.40.094(a) test is met as well.

Therefore, Sale 85A is eligible for a phased review under AS 46.40.094.

b. **DNR may limit its consistency review to the lease sale stage.**

As mentioned above, once a project is found eligible for a phased review, AS 46.40.094(b)(1) contains two more conditions that must be met before DNR is allowed to limit its consistency review to a given phase.

(1) **DNR must carry out a subsequent consistency review and make a consistency determination before the next phase may proceed.**[76]

DNR states:

Each lessee who proposes to conduct activities related to exploration and development of the proposed Sale 85A area will be required to submit a plan of operations to [DNR] for review and approval . . . [which] must contain sufficient information based on data reasonably available at the time to determine the surface use requirements and impacts directly associated with the proposed operations.

This analysis is supported by 11 AAC 83.158(d), and Kachemak Bay does not suggest

otherwise. Accordingly, this element of the AS 46.40.094(b)(1) test is met.

(2) **DNR conditioned its consistency determination on a requirement that future uses or activities be consistent with the Alaska Coastal Management Plan.**[77]

DNR states that "as a condition for consistency approval of the lease operations, [DNR] will require such modifications as may be necessary to ensure consistency with the Alaska Coastal Management Plan. Measures in addition to . . . the lease sale mitigation measures may be added to address site[-]specific resource values and activities directly associated with the proposed project." Again, Kachemak Bay does not dispute that this is so. Therefore, this element of the AS 46.40.094(b)(1) test is met as well.

c. **Conclusion**

Under AS 46.40.094, it was proper for DNR to phase its consistency review.[78]

3. **DNR's decision that Sale 85A was consistent with the Kenai Peninsula Borough Coastal Management Plan was not erroneous.**

That DNR may phase its consistency determination does not, however, relieve it of its duty to make its determination for the lease sale phase that Sale 85A is consistent with Policy 2.7. Alaska Statute 46.40.094(b)(2) provides that DNR is to conduct the review based on (1) applicable statutes and regulations; (2) material facts that are known to DNR or are made known during the consistency review; and (3) the "reasonably foreseeable, significant effects of the use or activity for which the consistency determination is sought."

Kachemak Bay challenges DNR's analysis of the second and third of these elements, both as to air and water quality. It argues that DNR's revised conclusive consistency determination fails "to even mention the existing **impacts** due to current development in the sale area, in blatant contravention of [Kenai Peninsula Borough Coastal Management Plan] Policy 2.7. Further, the revised [conclusive consistency determination] . . . fails to employ available data to estimate future impacts."

a. **Air quality**

In its conclusive consistency determination, DNR discusses, in general terms, the likely sources of air pollution that would result from exploration, development, and production in the sale area. DNR lists "routine" activities, which it states would have only a temporary effect which would diminish after construction was complete. It then discusses the possibility of gas and oil leaks and spills, but concludes that either would have minimal impact. DNR concludes that the impact of possible emissions during tanker loading operations would be "minimal" as well.

Regarding present development, DNR briefly states that "overall air quality in Cook Inlet is

good. . . . There may be specific locations that exceed air quality standards, but the impacted areas are restricted in size due to meteorological air patterns. The Municipality of Anchorage and Tesoro's oil refinery are two examples."

Kachemak Bay argues that DNR should have considered other sources of information in its air quality analysis. For instance, Kachemak Bay argues that DNR should have examined information about air pollution that is "readily available" pursuant to the Clean Air Act and from the federal Environmental Protection Agency's Toxics Release Inventory.

b. **Water quality**

DNR's findings regarding water quality are more detailed than its findings regarding air quality. In the revised conclusive consistency determination, DNR lists the ways that Sale 85A may affect water quality; namely, discharges of drilling muds and cuttings. It also discusses how discharges from platforms might affect Cook Inlet. DNR mentions a 1997 report that characterizes Cook Inlet as a whole as "healthy," despite some areas that had been disproportionately affected by human pollution.

As mentioned above, DNR also discusses Sale 85A's potential effects on water quality in its best interests finding, which DNR incorporated by reference in the revised conclusive consistency determination.[79] DNR devotes some five pages to the issue and provides a schematic of a Cook Inlet wellbore.

Kachemak Bay makes similar arguments regarding the insufficiency of DNR's water quality findings as it does regarding DNR's air quality findings; these arguments boil down to Kachemak Bay's dissatisfaction with the information that DNR considered. For example, Kachemak Bay discusses a subdivision in Soldotna which was apparently subject to oil field pollution in its drinking water. Kachemak Bay also refers to publicly available information that DNR could have obtained pursuant to the Clean Water Act.

c. **Conclusion**

DNR's analyses are not exhaustive, nor do they take into account all of the information that Kachemak Bay discusses. However, the analyses do show that DNR "considered" the cumulative effect of the lease sales on the air and water quality in the district. These findings, combined with the fact that the Borough itself concurred with DNR's determination,[80] suffice to show that DNR's determination was not arbitrary or capricious.

Further, as discussed above, the 1994 amendment discharged DNR from a duty to consider information other than that "known to [DNR] or made a part of the record during the consistency review."[81] There is no basis in the record to conclude that the information Kachemak Bay would have DNR consider fits either of these categories. Therefore, DNR's conclusive consistency determination cannot be overturned for failure to consider such information.

C. **Additional Issues**

1. **Intervenors' arguments**

At the superior court, several petroleum companies who had successfully bid on tracts offered in Sale 85A moved to intervene in this action; the court granted these motions. Cook Inlet Regional Corporation, Inc. (CIRI), a Native corporation with lands in the vicinity of the Sale 85A area, also successfully moved to intervene. The Alaska Mental Health Trust did likewise; title to some of the land in the Sale 85A area is held by the Trust.

The brief jointly submitted by the oil companies and CIRI mounts a defense of the substance of DNR's best interests finding and conclusive consistency determination -- a defense ably mounted by DNR itself. Because it does not raise separate issues, we have considered its arguments when we considered DNR's arguments.

The Trust argues separately that Sale 85A was in the best interests of the Trust. That claim is not challenged by Kachemak Bay. In fact, this issue was not even raised by Kachemak Bay in its points on appeal. Therefore, we need not consider the issue.

2. **The "juggernaut" argument**

At several points in its brief and with slight variations, Kachemak Bay argues that "the lease sale stage marks the best, and, as a practical matter, the only time to plan for the impacts of the subsequent development." This is so, Kachemak Bay contends, because if the state cancels a lease after it has been sold, it must compensate the lessee. Because of this requirement, Kachemak Bay asserts, "[a] lease cancellation would undoubtably be a painful, disruptive, and expensive proposition, and is patently not a transaction in which any state would care to engage. The lease sale is thus a pivotal threshold event, after which point there is substantial momentum toward developing the leased tracts." In short, Kachemak Bay argues that DNR's failure to evaluate, at the lease-sale stage, all of the potential impacts of the development creates an unstoppable juggernaut of a project. The implication is that the state will be unwilling to cancel the leases, no matter how dire the environmental consequences, because of the financial burden of doing so.

The "sample lease" that DNR generated for Sale 85A does indeed contain a provision requiring the state to reimburse lessees if the state cancels a lease. And Kachemak Bay's argument holds much intuitive appeal. It does seem possible that the state may unwisely decide to continue to allow a project which is causing untoward environmental damage if the state stands to lose a significant amount of revenue by canceling a lease. In fact, we have discussed this problem in several of our "phasing" cases.[82]

However, Kachemak Bay's argument really goes to the question of whether phasing should be allowed at all -- a question which was definitively answered by the legislature in the 1994 act amending Title 38 and the Alaska Coastal Management Plan. Within the strictures specified by

the legislature, phasing is now expressly allowed. It is not for us to overturn that policy choice.

We note, however, that the legislature's policy choice does not, by any means, relieve DNR of its duty to take a continuing "hard look" at future development on the lease sale lands. To the contrary, DNR is obliged, at **each phase** of development, to issue a best interests finding and a conclusive consistency determination relating to **that** phase before the proposed development may proceed.[83]

V. CONCLUSION

Because DNR has not impermissibly phased its review of the proposed lease sale, and because there is a reasonable basis for both DNR's best interests finding and conclusive consistency determination, the agency's actions are AFFIRMED.

DISPOSITION

AFFIRMED.

OPINION FOOTNOTES

1 "Phasing" consists of DNR's dividing a proposal into discrete parts -- e.g., exploration, construction of facilities, and production -- and examining each of these parts individually for compliance rather than examining the project as a whole.

2 928 P.2d 1206 (Alaska 1996). **Ninilchik** is discussed in detail below.

3 **See** AS 38.05.035(I) (providing for judicial review of DNR's final written findings); Alaska R. App. P. 601(b) (providing for appeals of final decisions of administrative agencies to the superior court).

4 **See Bruner v. Petersen**, 944 P.2d 43, 47 n.5 (Alaska 1997) (citing **Handley v. State, Dep't of Revenue**, 838 P.2d 1231, 1233 (Alaska 1992)).

5 **Thane Neighborhood Ass'n v. City and Borough of Juneau**, 922 P.2d 901, 905-06 (Alaska 1996).

6 **See Trustees for Alaska v. State, Dep't of Natural Resources (Demarcation Point)**, 865 P.2d 745, 747 (Alaska 1993) ("DNR's best-interest determination is subject to deferential review by this court. Since the determination involves complex subject matter or fundamental policy formulations, this court reviews the decision only to the extent necessary to ascertain whether the decision has a reasonable basis.") (quoting **Trustees for Alaska v. State, Dep't of Natural Resources (Camden Bay I)**, 795 P.2d 805, 809 (Alaska 1990) (footnote, internal quotation marks and brackets omitted)); **Ninilchik**, 928 P.2d at 1213 ("This court's review [of DNR's consistency analysis] is limited to ensuring that DNR's decision was not arbitrary, capricious, or unreasonable." (internal quotation marks omitted)) (quoting **Trustees for Alaska v. State, Dep't of Natural Resources (Camden Bay II)**, 851 P.2d 1340, 1347 (Alaska 1993)).

7 **Hammond v. N. Slope Borough**, 645 P.2d 750, 758-59 (Alaska 1982) (internal brackets omitted) (quoting **Moore v. State**, 553 P.2d 8, 36 n.20 (Alaska 1976)). **See also** Ch. 38, § 1(2), SLA 1994 ("each determination under AS 38.05 that the interests of the state will be best served is a policy decision involving facts unique to each proposed disposal, and complex issues the analysis and resolution of which are most appropriately left to the expertise of the agency making the determination").

8 **Demarcation Point**, 865 P.2d at 747 (internal quotation marks omitted) (quoting **Alaska Survival v. State**, 723 P.2d 1281, 1287 (Alaska 1986)).

9 **Id.** (internal quotation marks omitted) (quoting **Camden Bay I**, 795 P.2d at 809).

10 **See Hammond**, 645 P.2d at 758.

11 **See** Ch. 38, § 2, SLA 1994.

12 Subsection (B) provides the director with authority to limit the scope of best interests findings:

The director, in the written finding, . . . may limit the scope of an administrative review and finding for a proposed disposal to

(i) applicable statutes and regulations;

(ii) the facts pertaining to the land, resources, or property, or interest in them, that the director finds are material to the determination and that are known to the director or knowledge of which is made available to the director during the administrative review; and

(iii) issues that, based on the statutes and regulations referred to in (i) of this subparagraph, on the facts as described in (ii) of this subparagraph, and on the nature of the uses sought to be authorized, the director finds are material to the determination of whether the proposed disposal will best serve the interests of the state[.]

13 **See** Alaska House of Representatives Judiciary Committee Minutes, April 27, 1994, No. 31, testimony of Assistant Attorney General Mary Ann Lundquist (citing five supreme court cases regarding lease sales as reason for bill); No. 332, testimony of Jim Eason, Director of Division of Oil and Gas (DO&G), DNR (citing **Kuitsarak Corp. v. Swope**, 870 P.2d 387 (Alaska 1994) as reason for amendment). **See also** Alaska Senate Finance Committee Minutes, March 22, 1994, testimony of Kyle Parker, Office of the Governor (citing **Kuitsarak** as evidence of Alaska courts "driving the state toward a federal environmental impact process"); testimony of Barbara Fullmer, Legal Counsel, DO&G (citing **Ninilchik** as reason for amendment); February 24, 1994, testimony of Jim Eason (citing "string of court cases," including **Ninilchik**, as reason for amendment); testimony of Barbara Fullmer (citing **Ninilchik**). **See also** Alaska Senate Resources Committee Minutes, February 22, 1994, No. 363, testimony of Jim Eason (legislation is "a reaction to a series of litigation results that began in 1987 that have clearly established a pattern of the court in picking up the jurisdiction and authority to make leasing policy"). Available at Alaska State Legislature, **Committee Minutes -- 18th Legislature** (last modified November 1994) <http://www.legis.state.ak.us/cgi-bin/folioisa.dll √18?>.

14 **Thane**, 922 P.2d at 903 (internal quotation marks omitted).

15 **Thane**, 922 P.2d at 906-08 (internal citations, brackets, and quotation marks omitted).

16 **Id.** at 908.

17 Although **Thane** was decided in 1996, the approval at issue was issued in 1993. **See** 922 P.2d at 903. The 1994 amendments were not effective until August 7, 1994, **see** Ch. 38, SLA 1994 (cover page), and therefore were not applied in **Thane**.

18 **See Thane**, 922 P.2d at 908.

19 Ch. 38, § 2, SLA 1994.

20 **Thane**, 922 P.2d at 908 (citing **Kuitsarak**, 870 P.2d at 396 n.30; **Camden Bay II**, 851 P.2d at

1344, 1346; **Gorsuch**, 835 P.2d at 1246).

21 "Disposal" in this chapter of Title 38 is apparently a catch-all term for all alienations of state land and interests in state land.

22 Ch. 38, § 1(11), SLA 1994.

23 **See** Ch. 38, § 3, SLA 1994 (renumbering section).

24 **Thane**, 922 P.2d at 908.

25 **Id.** (citing **Kuitsarak**, 870 P.2d at 396).

26 Ch. 38, § 2, SLA 1994 (emphasis added).

27 Ch. 38, § 1(7), SLA 1994.

28 **See Kuitsarak**, 870 P.2d at 396 ("The record indicates that the federal government has conducted environmental impact studies for off-shore mining based on various mining scenarios. DNR can emulate these studies.").

29 **See** Ch. 38, § 4, SLA 1994.

30 **Id.**

31 **See id.** The types of "speculation" are:

(1) the exact location and size of an ultimate use and related facilities;

(2) . . . the economic feasibility of ultimate development; and

(3) future environmental or other laws that may apply at the time of any future development.

32 **Hammond**, 645 P.2d at 759; **see also Camden Bay II**, 851 P.2d at 1344 n.6 (same).

33 The risk, of course, is that as a practical matter the act of leasing will make it more difficult to deny later permits authorizing environmentally damaging activities related to the lease. **See Thane**, 922 P.2d at 907; **Camden Bay II**, 851 P.2d at 1344.

34 11 AAC 83.158(d). The plan must contain detailed information about the proposed operations:

(1) the sequence and schedule of the operations to be conducted on or in the leased or licensed area, including the date operations are proposed to begin and their proposed duration;

(2) projected use requirements directly associated with the proposed operations, including the location and design of well sites, material sites, water supplies, solid waste sites, buildings, roads, utilities, airstrips, and all other facilities and equipment necessary to conduct the proposed operations;

(3) plans for rehabilitation of the affected leased or licensed area after completion of operations or phases of those operations; and

(4) a description of operating procedures designed to prevent or minimize adverse effects on other natural resources and other uses of the leased or licensed area and adjacent areas, including fish and wildlife habitats, historic and archeological sites, and public use areas.

35 Ch. 38, § 1(11), SLA 1994.

36 **Thane**, 922 P.2d at 908 (citing **Kuitsarak**, 870 P.2d at 396 n.30; **Camden Bay II**, 851 P.2d at

1344, 1346; **Gorsuch**, 835 P.2d at 1246).

37 **See** Ch. 38, § 1(7), SLA 1994.

38 For example, DNR discusses in detail three types of pipelines that may be used to transport oil and gas, while Mineral Management Service's environmental impact statement contains only a cursory two-sentence reference to pipelines.

39 As DNR acknowledges, while there is no specific statutory requirement that oil spills be considered in a best interests finding, they are an obvious risk of transportation and thus must be considered in the best interests finding pursuant to AS 38.05.035(g)(1)(B)(viii).

40 The manager stated:

1. MMS's oil spill risk guess is based on a guess of oil reserves that may (or may not) be handled during the life of the sale area. Basing an estimate on an estimate compounds any error in the original estimate.

2. The historical data on spills that MMS uses in [its] analysis . . . is only current to 1992. Much of the new spill prevention measures have been implemented since that time.

3. MMS's spill estimate is based on [outer continental shelf] experience and resource estimates and can only be applied to the [outer continental shelf] area. Extreme caution must be used extrapolating that guess to state lands and waters.

4. MMS's method of basing spill risk on the volume of oil handled is an extremely simple approach to an extraordinarily complex issue. This simplicity increases the range of error for the estimate.

41 **See** Ch. 38, § 1(7), SLA 1994.

42 **See Camden Bay I**, 795 P.2d at 806.

43 **See id.** at 807.

44 **Id.** at 811.

45 **See** 865 P.2d at 752 (map).

46 **See id.** at 749-50.

47 **Id.**

48 **See id.** at 750.

49 **See Camden Bay I**, 795 P.2d at 811; **Demarcation Point**, 865 P.2d at 749.

50 **Trustees for Alaska v. State, Dep't of Natural Resources (Camden Bay II)**, 851 P.2d 1340, 1346 (Alaska 1993).

51 For the same reason, Kachemak Bay's argument that "DNR may not defer its review of oil and gas transportation methods and impacts because sufficient information is readily available at the lease sale stage" fails. Kachemak Bay essentially argues that this court should forbid **any** phasing of oil and gas development project approvals -- a result explicitly rejected by the legislature in its 1994 amendment. **See supra** Part IV.A.1.; **Infra** Part IV.C.2.

52 AS 38.05.035(g)(1)(B)(x).

53 We discuss these findings in the context of "transportation methods and risks." **See supra** Part IV.A.3.a. However, oil spills obviously fall within the scope of the section (g) discussion of "effects on the community" as well.

54 **See** AS 38.05.035(m) ("For purposes of appeal [of a best interests finding], the burden is upon the party seeking review to establish the invalidity of the finding.").

55 **See** AS 46.40.100(a); 6 AAC 80.130. Sale 85A must comply with the Alaska Coastal Management Plan because it is located within Alaska's coastal zone. **See** 6 AAC 80.010(b); **Ninilchik**, 928 P.2d at 1209.

56 **Camden Bay II**, 851 P.2d at 1344 (internal footnote, citations and some quotation marks omitted).

57 The 6 AAC 80.130(d) conditions are:

(1) there is a significant public need for the proposed use or activity;

(2) there is no feasible prudent alternative to meet the public need for the proposed use or activity which would [maintain or enhance the habitat]; and

(3) all feasible and prudent steps to maximize [maintenance or enhancement of the habitat] will be taken.

58 **Ninilchik**, 928 P.2d at 1213 (citing **Camden Bay I**, 795 P.2d at 810).

59 **See id.** It appears that in neither **Ninilchik** nor **Camden Bay I** had DNR presented specific revenue predictions of the sort sought by Kachemak Bay here. **See id. ; see also Camden Bay I**, 795 P.2d at 810.

60 **Hammond**, 645 P.2d at 758-59 (citation omitted).

61 **See Ninilchik**, 928 P.2d at 1213 (citing **Camden Bay I**, 795 P.2d at 809-10). Kachemak Bay argues that the **Ninilchik** court erred in basing its holding on **Camden Bay I**, because the former dealt with the "extremely stringent" habitats standard, and the latter with the more lenient best interests requirement. Kachemak Bay notes that "the **Ninilchik** court did not recognize, or at least did not discuss, the difference between a 'significant need' sufficient to satisfy the Habitats Standard and a 'need' sufficient for a [best interests finding]."

The state has indeed, in an official publication, characterized the habitats standard as applying "a strict limitation on impacts to the point of prohibition." Office of Coastal Management, State of Alaska & Office of Coastal Zone Management, U.S. Dep't of Commerce, **State of Alaska Coastal Management Program and Final Environmental Impact Statement** 72 (1979). **Cf. Ninilchik**, 928 P.2d at 1211 n.8 (citing same publication as evincing purpose of Alaska Coastal Management Plan). When activities diverge from the habitats standard, the state noted, they must meet "a series of stringent tests" in order to be allowed.

Given this, Kachemak Bay's argument that projects which are reviewed under the habitats standard should be given more scrutiny than those merely reviewed under the best interests standard is well taken. Nevertheless, we are to give these policy decisions by DNR the deference they are due. It is incumbent on DNR to rigorously enforce the habitats standard; we apply the same standard of review to both best interests findings and consistency determinations. That is, we reverse DNR's consistency determinations only if those decisions are arbitrary or capricious. Of course, this standard does not mean that we rubber-stamp all of DNR's decisions; we are forced by Alaska's statutory scheme to rely on the state's good faith, **see Hammond**, 645 P.2d at 759 n.5, but we continue to "expect state agencies to give faithful and scrupulous attention to the clear requirements of their regulations." **Camden Bay II**, 851 P.2d at 1344

n.6.

62 **Ninilchik**, 928 P.2d at 1213.

63 The third subsection (d) condition is that "all feasible and prudent steps to maximize conformance with the standards contained in [6 AAC 80.130(b) and (c)] will be taken." Kachemak Bay raised no issue with respect to this third condition.

64 **See also** 6 AAC 80.010(b) ("Uses and activities conducted by state agencies in the coastal area must be consistent with the applicable district program.").

65 The Kenai Peninsula Borough Coastal Management Plan applies because almost all of the relevant lease sale land is located in the Kenai Peninsula Borough. A small portion of the land lies within the Municipality of Anchorage; Kachemak Bay does not challenge DNR's determination that Sale 85A is consistent with Municipality of Anchorage's Coastal Management Program.

66 **See supra** Part IV.A.1.

67 **See** Ch. 38, § 8, SLA 1994.

68 AS 46.40.094(a).

69 AS 46.40.094(b)(1).

70 **See** Ch. 38, § 1(7), SLA 1994.

71 **See** Ch. 38, § 1(11), SLA 1994.

72 Kenai Peninsula Borough Coastal Management Program, Chapter 3.0, Page 3-9, Objective 1.3.

73 Ch. 38, § 1(8), SLA 1994.

74 **See supra** Part IV.A.2.b.

75 **See** Ch. 38, § 1(8), SLA 1994.

76 **See** AS 46.40.094(b)(1)(A).

77 **See** AS 46.40.094(b)(1)(B).

78 The same additional, overarching factor that applies to the best interests finding -- namely, that phasing may not be used so as to avoid thorough review of the effects of the project -- applies to the conclusive consistency determination. **See supra** Part IV.A.2.d. For the same reasons discussed in that section, DNR's phased conclusive consistency determination review does not violate this requirement.

79 **See supra** Part IV.A.3.b.

80 In **Ninilchik**, we held that DNR was required to "determine independently that the Sale is consistent with the Kenai [Draft Coastal Management Plan]." **Ninilchik**, 928 P.2d at 1215. In fact, this holding was the reason that DNR requested that it be allowed to revise its conclusive consistency determination in this case. However, we also held that "because the regulations mandate . . . deference to the districts themselves, DNR can rely on the concurrence of coastal districts as one basis for its conclusion that a sale is consistent with the [Draft Coastal Management Plans]." **Id.** (footnote omitted).

81 AS 46.40.094(b)(2)(B)(i).

82 **See, e.g., Gorsuch**, 835 P.2d at 1246 n.6 ("'concept approval' is necessary in order to avoid a

situation where, because of industry investment and reliance upon a past . . . permit approval, DNR might feel compelled to approve a subsequent permit for a related but environmentally unsound support facility"); **Camden Bay II**, 851 P.2d at 1344 (same).

83 **See** AS 38.05.035(e)(1)(C); AS 46.40.094(b)(1)(A).