

**HB**

**274**

FISCAL NOTE

No: 1

Bill Version: CSHB 274 (O&G)

(H) Publish Date: 2/20/98

STATE OF ALASKA  
1998 LEGISLATIVE SESSION

Revision Date: 2-12-98

Title: OIL & GAS CONSERVATION COMMISSION

Sponsor: REP. GREEN

Requester:

Dept. Affected

BRU

Component

Component Serial No.

Expenditures/Revenues

(Thousands of Dollars)

OPERATING EXPENDITURES	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

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						
1091 Designated Program Receipts						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY97) cost: \_\_\_\_\_

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS:

(Attach a separate page if necessary)

Prepared by  
Division

OIL & GAS

Approved by  
Agency

*[Signature]*  
OIL & GAS COMMISSION

Phone

465-2283

Date

2-12-98

# Alaska State Legislature

WHILE IN SESSION  
CAPITOL BUILDING  
JUNEAU ALASKA 99801-1102  
(907) 465-4931  
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CHAIRMAN, JUDICIAL COMMITTEE  
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MEMBER, RESOURCES COMMITTEE

FINANCE SUBCOMMITTEES  
DEPT. OF COMMERCE & ECONOMIC  
DEVELOPMENT  
ALASKA COURT SYSTEM

Representative Joe Green  
District 10

## Sponsor Statement

### HB 274 - Qualifications for service on the AOGCC

From statehood until November 1995, the group responsible for oil and gas conservation in Alaska included a petroleum engineer. Performance of the core functions for which the present-day Alaska Oil and Gas Conservation Commission (AOGCC) is charged - prevention of waste, protection of correlative rights, and maximization of recovery - requires among other things, a thorough understanding of porosity, permeability, stratigraphy, faulting, reservoir pressure, and reservoir drive mechanism(s). These are the core disciplines of petroleum engineering, and require the technical analysis that only a qualified petroleum engineer can provide. Unfortunately, since November 1995, the commission, which represents the people of the State of Alaska, has not had the benefit of a qualified petroleum engineer, appointed by the Governor, and confirmed by the legislature, as required by statute, to participate in the oversight of these types of conservation operations.

HB 274 clarifies the statutory requirements for service on the AOGCC. As written, one member of the commission will be required to be registered as a petroleum engineer, have education in the field of petroleum engineering, and have experience in the field of petroleum engineering. Additionally, one member will be required to hold a certificate as petroleum geologist, have earned a degree in the field of geology from an accredited university, and have field experience in the field of petroleum geology.

Alaska has been blessed with wealth derived from our hydrocarbon resources. In order to continue this flow of wealth, we must have qualified, capable people conserve and manage our resources to the highest possible standards. HB 274 is an attempt, not to establish that high standard, but rather, to establish the floor below which we will never go again.

# **oil and gas conservation commission**

## **Core Services**

- Prevent waste of Alaska's oil and gas resources
- Protect correlative rights of the mineral interest owner
- Maximize recovery of oil and gas for the benefit of Alaska's citizens
- Protect freshwater from contamination by oil/gas/mud during drilling, production, and abandonment operations
- Administer Alaska's Underground Injection Control program for oil and gas wells
- Inspect oil field drilling, production, metering, and abandonment activities
- Evaluate, modify, and approve drilling and workover operations
- Evaluate, modify, and approve oil pool development rules
- Adjudicate disputes between owners
- Maintain state production records
- Maintain well history files and well records

## **Customers**

- Oil and gas industry ● Concerned citizens and organizations ● Alaska Department of Natural Resources ● Alaska Department of Revenue ● U.S. Department of the Interior ● U.S. Environmental Protection Agency

# **oil and gas conservation commission**

## **Commission History**

The Alaska Oil and Gas Conservation Act (1955) created the Alaska Oil and Gas Conservation Commission (AOGCC or Commission). The Commission was composed of the Governor of the Territory of Alaska, the Territorial Commissioner of Mines, and the Territorial Highway Engineer. Rules and regulations governing Commission activities became effective on October 1, 1958.

Under the State Organization Act of 1959, the Oil and Gas Conservation Commission was abolished, its function and authority transferred to the Department of Natural Resources, Division of Mines and Minerals. A group within the department was designated to hold hearings and issue decisions on oil and gas matters. This group was the Alaska Oil and Gas Conservation Committee which consisted of the Director of the Division of Mines and Minerals (Chairman), the State Petroleum Geologist, the State Petroleum Engineer, and the Deputy Commissioner of the Department of Natural Resources.

In 1968 the Division of Oil and Gas was created within the Department on Natural Resources. The new division arose from the Petroleum Branch of the Division of Mines and Minerals. The Alaska Oil and Gas Committee was placed within the new division, and consisted of the Director, Chief Petroleum Geologist, and Chief Petroleum Engineer. In 1976 the word "conservation" was added to the division's title, and it became the Division of Oil and Gas Conservation.

With the advent of production from Prudhoe Bay in 1977, the Legislature became concerned that there was the appearance of a conflict of interest with the Department of Natural Resources. an owner of oil and gas rights. also acting as the regulator of other owners of oil and gas rights. To obviate its concern, the Legislature amended AS 31.05 by Chapter 158, SLA 1978 to restore the Commission, effective January 1, 1979, as an independent quasi-judicial agency within the executive branch of the state. Initially, the new Commission was housed within the Department of Natural Resources, but in 1980 it was transferred to the Department of Commerce and Economic Development. More recently, Governor Hickel transferred the Commission to the Department of Administration on February 17, 1994.

10/21/96 DOA

**DEPARTMENT OF ADMINISTRATION**

**I. NOTICES OF PROPOSED REGULATIONS**

**NOTICE OF PROPOSED CHANGES IN THE REGULATIONS OF THE ALASKA OIL AND GAS CONSERVATION COMMISSION AND NOTICE OF PUBLIC HEARING AND PUBLIC MEETING**

Notice is given that the Alaska Oil and Gas Conservation Commission ("AOGCC"), under the authority of AS 31.05.030, AS 31.05.040, and AS 31.05.060, **proposes to adopt, amend, and repeal regulations** in Title 20, Chapter 25, of the Alaska Administrative Code, **dealing with oil and gas conservation**, to implement AS 31.05. This proposal would comprehensively revise the AOGCC's existing regulations, **covering the following subjects among others: drilling, plugging and abandonment of wells, onshore and offshore location clearance, production practices, waste disposal, reports, enhanced recovery, pool development and operation, public and confidential information, enforcement, procedures, and definitions.**

Notice is also given that any person interested may present written comments relevant to the proposed action, including the potential costs to private persons of complying with the proposed action, by writing to AOGCC, 3001 Porcupine Drive, Anchorage, Alaska 99501-3192, so that they are received not later than November 13, 1996. Additionally, any interested person may present oral or written comments relevant to the proposed action, including the potential costs to private persons of complying with the proposed action, at a hearing to be held at 3001 Porcupine Drive, Anchorage, AK, on November 20, 1996. The hearing will be held from 9:00 AM to noon and might be extended to accommodate those present before 10:00 AM who do not have a chance to testify.

This action is not expected to require an increased appropriation.

Copies of the proposed regulations may be obtained by writing to AOGCC, 3001 Porcupine Drive, Anchorage, AK 99501-3192, or may be picked up at that address.

Notice is also given that the AOGCC will meet at 9:00 AM on December 10, 1996, at 3001 Porcupine Drive, Anchorage, AK, at which time it will either adopt this or another proposal dealing with the same subject, without further notice, or decide to take no action on it. It is not the purpose of this meeting to receive comments from interested persons; however, the AOGCC reserves the right to seek or accept such comments at the meeting in the event it determines they would be helpful at that time.

The language of the final regulations may vary from that of the proposed regulations. You should comment during the time allowed if your interests could be affected.

/s/David W. Johnston, Chairman, Alaska Oil and Gas Conservation Commission,  
Department of Administration, October 11, 1996.

Contact person: Diana Fleck, Alaska Oil and Gas Conservation Commission, Department of Administration, 3001 Porcupine Drive, Anchorage, AK 99501-3192; 279-1433.

**ADDITIONAL REGULATIONS NOTICE INFORMATION (AS 44.62.190(d))**

BOARDS AND COMMISSIONS RECRUITMENT LIST December 22, 1994

BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil and Gas Conservation Commission  
 Lic. Petroleum Engineer Russell Douglass 12/31/94 y y

BOARDS AND COMMISSIONS RECRUITMENT LIST January 16, 1995

BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil and Gas Conservation Commission  
 Lic. Petroleum Engineer Russell Douglass 12/31/94 y y

OFFICE OF THE GOVERNOR

BOARDS AND COMMISSIONS RECRUITMENT LIST March 27, 1995

BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil and Gas Conservation Commission  
 Lic. Petroleum Engineer Russell Douglass 12/31/94 y y

BOARDS AND COMMISSIONS RECRUITMENT LIST JUNE 19, 1995

BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil and Gas Conservation Commission  
 Lic. Petroleum Engineer Douglass, Russell 12/31/94 Y Y

BOARDS AND COMMISSIONS RECRUITMENT LIST September 11, 1995

BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil and Gas Conservation Commission  
 Lic. Petroleum Engineer Douglass, Russell 12/31/94 Y Y

BOARDS AND COMMISSIONS RECRUITMENT LIST September 18, 1995

BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil and Gas Conservation Commission  
 Lic. Petroleum Engineer Douglass, Russell 12/31/94 Y Y

BOARDS AND COMMISSIONS RECRUITMENT LIST September 25, 1995

BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil and Gas Conservation Commission  
 Lic. Petroleum Engineer Douglass, Russell 12/31/94 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST October 2, 1995  
BOARD EXPIRES FD\* LC\*\*  
SEAT CURRENT MEMBER

**Oil and Gas Conservation Commission**  
Lic. Petroleum Engineer Douglass, Russell 12/31/94 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST October 9, 1995  
BOARD EXPIRES FD\* LC\*\*  
SEAT CURRENT MEMBER

**Oil And Gas Conservation Commission**  
Lic. Petroleum Engineer Douglass, Russell 12/31/94 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST October 16, 1995  
BOARD EXPIRES FD\* LC\*\*  
SEAT CURRENT MEMBER

**Oil and Gas Conservation Commission**  
Lic. Petroleum Engineer Douglass, Russell 12/31/94 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST October 23, 1995  
BOARD EXPIRES FD\* LC\*\*  
SEAT CURRENT MEMBER

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BOARDS AND COMMISSIONS RECRUITMENT LIST May 27, 1996  
BOARD EXPIRES FD\* LC\*\*  
SEAT CURRENT MEMBER

**Oil & Gas Conervation Commission**  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST January 13, 1997  
BOARD EXPIRES FD\* LC\*\*  
SEAT CURRENT MEMBER

**Oil & Gas Conervation Commission**  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST April 21, 1997  
BOARD EXPIRES FD\* LC\*\*  
SEAT CURRENT MEMBER

**Oil & Gas Conervation Commission**  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

BOARDS AND COMMISSIONS RECRUITMENT LIST May 5, 1997  
BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil & Gas Conservation Commission  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST May 12, 1997  
BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil & Gas Conservation Commission  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST May 19, 1997  
BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil & Gas Conservation Commission  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST May 26, 1997  
BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil & Gas Conservation Commission  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST June 2, 1997  
BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil & Gas Conservation Commission  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST June 23, 1997  
BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil & Gas Conservation Commission  
Salaried/Licensed Engineer VACANT 12/31/00 Y Y

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BOARDS AND COMMISSIONS RECRUITMENT LIST June 30, 1997  
BOARD SEAT CURRENT MEMBER EXPIRES FD\* LC\*\*

Oil & Gas Conservation Commission  
Salaried/at large VACANT 12/31/02 Y Y

## Engineering

	<u>3rd Year</u>	<u>4th Year</u>
Petroleum Drilling and Production Laboratory	PETE 301 Reservoir Rock & Fluid PETE 302 Well Logging PETE 303 Reservoir Rock & Fluid Lab	PETE 407 Petro Production Engineering PETE 411 Drilling Fluids Lab PETE 421 Reservoir Characteristics PETE 426 Drilling Engineering PETE 431 Natural Gas Engineering PETE 456 Petro Evaluation and Economic Decisions PETE 466 Petroleum Recovery Methods PETE 476 Petro Reservoir Engineering PETE 478 Well Test Analysis PETE 481 Well Completions and Stimulation Design PETE 487 Petroleum Project Design PETE 489 Reservoir Simulation
	ME 302 Mechanical Design I ME 313 Mechanical Engineering Thermodynamics ME 321 Industrial Processes ME 334 Elements of Material Science/Engineering	ME 403 Mechanical Design II ME 404 Stress Analysis ME 408 Dynamics of Systems ME 409 Controls ME 414 Thermal Systems Design ME 415 Thermal Systems Lab ME 416 Design of Mechanical Equipment for the Petro ME 441 Heat and Mass Transfer ME 450 Theory of Flight ME 451 Aerodynamics ME 452 Intro to Astrodynamics ME 453 Propulsion Systems ME 458 Energy and the Environment ME 464 Corrosion Engineering ME 487 Design Project
	CE 326 Intro to Geotechnical Engineering CE 334 Properties of Materials CE 344 Water Resources Engineering	CE 400 EIT Exam CE 402 Intro to Transportation Engineering CE 403 Traffic Engineering CE 404 Highway Engineering CE 415 Advanced Surveying CE 416 Boundary Surveying CE 422 Foundation Engineering CE 423 Intro to Earthquake Engineering CE 425 Advanced Soil Mechanics CE 431 Structural Engineering I CE 432 Structural Engineering II CE 433 Reinforced Concrete Design CE 434 Timber Design CE 438 Design of Engineering Systems CE 441 Environmental Engineering CE 442 Environmental Engineering II CE 445 Engineering Hydrology CE 470 Civil Engineering Internship

March 9, 1998

House Resources Committee  
Legislature of the State of Alaska

RE: HB 274 (B) "An Act relating to the qualifications of the members of the Alaska Oil and Gas Conservation Commission"

Dear Co-Chairs Hudson and Ogan:

I am writing in reference to HB 274 that is currently before your committee. I would like to testify on this bill when it comes up for a hearing.

I am not in favor of the bill because it dilutes the requirement that the engineer appointee be a Professional Engineer, which would imply that the legislature does not support the code of ethical conduct and the commitment to uphold standards that provide safeguards to the public that is implicit in the licensing of Professional Engineers. In addition, the bill conversely narrows the requirements of the position to a limited area of the Commission's charter, namely requiring "downhole" experience only, which limits qualified candidates to the detriment of the best interest of the people of Alaska. The following information expands on my views.

I use a personal experience to illustrate my point. I served as an appointed commissioner to the Alaska Oil and Gas Conservation Commission for seven months in 1995/1996. During my tenure the Commission held hearings on further unitization of the Prudhoe Bay Field. This issue was probably the most important issue the Commission has ever taken up, as it went to the heart of the matter as to the best way to deplete the largest oil field in North America. The issue turned not only on drilling or reservoir mechanics, but significantly on surface facilities and the optimum use of oil and gas facilities for ultimate maximum resource recovery.

On this issue, I believe my expertise and background, as a former engineering manager for Alyeska Pipeline Service Company, was uniquely beneficial for the State's interest. In my previous positions, I had direct exposure to conflicting North Slope oil company priorities regarding production allocations, metering, and crude stream composition. I was able to bring a broad view of each oil company's motivations and culture to the deliberations that helped bring the issue into focus for the Commission. I was able to provide a technical understanding of the challenges of field development, based on my background in design and operation of surface facilities and transportation of oil and gas.

Today, more than ever, the Commission's efforts are focused on the challenges of managing a mature industry where sharing of common facilities to best utilize multiple fields create new issues in metering and joint-use facilities. I use my personal experience

as an example of a base of experience and expertise that would not be available to the Commission if HB 274 is enacted. Restricting qualifications for commissioners more narrowly than required only reduces the pool of talented people willing to serve the State and ultimately provides a disservice to the people of Alaska, who rely on government to look after their interests in the development of the State's oil and gas resources.

The existing qualification is that the commissioner be a licensed Professional Engineer with a background in petroleum engineering. This requirement is sufficiently broad to allow licensed Professional Engineers with an oil and gas background to qualify.

Petroleum engineering is a broad field populated with practitioners from a variety of technical disciplines, including mechanical, chemical and civil engineering, and from the sciences of physics, geology, chemistry and materials science. Many practicing petroleum engineers have degrees in these areas and may be licensed in other fields of engineering. For example, my alma mater, Rice University, is one of the top engineering schools in the nation and it does not even offer a degree program in petroleum engineering. I am a licensed Professional Engineer in civil engineering, and my career and background has been in oil and gas.

The field of petroleum engineering covers a spectrum of technical areas including drilling, reservoir mechanics, and surface equipment, processes and delivery. Practicing petroleum engineers are usually specialists in only one of these areas and it is unlikely that a licensed petroleum engineer would have expertise in all of these areas. Changing the requirement to limit the position to a licensed petroleum engineer would likely not provide a better or more comprehensive pool of candidates. Conversely, it would most likely result in a smaller pool of candidates no better qualified than the those currently qualified and probably would result in the best available candidates excluded.

The Commission is responsible for a wide variety of matters related to oil and gas exploration and development. Some of the issues relate to reservoir or "downhole" matters, but not all issues are exclusive to this area, as I noted in my personal experience with the North Slope field unitization hearings. Given the broad range of the Commission's functions, an individual with an engineering background in the design and operation of oil and gas production facilities would be as well suited as a reservoir specialist.

Previous legislative action has exempted engineering work performed by employees of large industrial companies from being performed by licensed Professional Engineers. The effect of this change is a relaxation of the requirements for engineers to be licensed Professional Engineers when they do work in the oil industry. This has resulted in a very small pool of licensed petroleum engineers that are residents of the state. To presumably address this scarcity, HB 274 (B) allows non-licensed engineers to be qualified, but only with a very narrow range of "downhole" background and education. This is doubly wrong, i.e.:

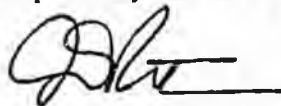
1. A licensed Professional Engineer connotes a level of public trust and ethical behavior that is key to public service. Allowing non-registered engineers to be qualified is a step backwards and dilutes the level of competency, code of ethics, and commitment to upholding standards that safeguard the people of the State that mark the licensing of Professional Engineers.
2. Overly prescriptive "downhole" experience requirements focus on only one area of the Commission's broad responsibilities. While the Commission does deal with downhole matters, this area of expertise should not be the sole criteria for qualifying an individual. This bill would restrict the focus of the appointment to only one area of the Commission's purview and would result in an inappropriately narrow view represented on the Commission that is not in the State's best interest.

The revised qualifications for the engineer seat in HB 274 (B) appear unevenly balanced compared to the qualifications for the geologist seat. While recent difficulties with confirmation of the governor's appointees to the engineer's seat have apparently been the catalyst for this proposed legislation, an appointment to the geologist seat may have the same difficulties, given the current broad and plain-language requirements for a petroleum geologist.

The difficulties with recent confirmations were the result of political differences between branches of government over a position that is quasi-judicial and non-political. HB 274 (B) does not solve the root cause of the problem; it only moves the problem to another area. Requirements for the engineer seat should be clear and plain, and leave room for discretion in future appointments and confirmations. Only in this way will the best and brightest available candidates be available to serve the public.

HB 274 (B) is overly prescriptive to the detriment of the public interest, awkwardly tries to fix something that is not broken, and should not be enacted.

Respectfully submitted,



J. David Norton, P.E.

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Copies to:

AOGCC Commissioners Johnston  
Oechsli  
Christenson

Members, Board of Registration for Engineers, Architects, and Land Surveyors