HJR

59

TESTIMONY OF THE
ALASKA OIL AND GAS ASSOCIATION
AND THE
RESOURCE DEVELOPMENT COUNCIL
HOUSE RESOURCES COMMITTEE HEARING ON HJR59
KENAI, ALASKA
February 23, 1996

My name is Marilyn Crockett. I am Assistant Executive Director of the Alaska Oil and Gas Association and a member of the Board of Directors of the Resource Development Council. I am presenting joint testimony today on behalf of AOGA and RDC in support of HJR59.

Let me begin by saying that we do appreciate the significant efforts required of EPA Region 10 in compiling this complex permit. The permit does provide for the continued ability to discharge produced water and drilling muds and cuttings from oil and gas facilities in Cook Inlet. A zero discharge requirement would force the early closure of many operations because of high costs.

However, we are very concerned about the draft permit's proposed increase in the amount of monitoring and reporting. These additional requirements will not result in any benefit to the environment, but they *will* add cost and administrative burden not only to the operators, but to EPA as well. Based on very conservative assumptions, the draft permit requires monitoring the largest number of parameters ever in such a permit. Additionally, the frequency of monitoring is extreme compared to similar permits. We estimate that to comply with these additional requirements will require the expenditure of $1 million annually. Changing regulations and requirements such as these pose special challenges for these mature fields which are under increasing pressure to maximize production while minimizing expenditures in order to remain economical.

It is somewhat ironic that EPA would propose significant increases in monitoring and reporting, given the objectives contained in EPA's 1996 National Water Program Agenda as described in HJR59. The elements contained in the 1996 Agenda are not new, but rather are an extension of President Clinton and Vice President Gore's March 16, 1995 report entitled "Reinventing Environmental Regulation", where it is stated that "...EPA will search out opportunities to simplify and reduce paperwork, including up front during the permitting process, and in recordkeeping and reporting... These actions will preserve essential data needed to measure environmental results and determine compliance with the law, but will eliminate low-value requirements...". The monitoring and reporting requirements contained in the draft permit are completely contrary to those stated goals.

Oil and gas exploration and production has occurred in Cook Inlet for almost 30 years. This development has positively affected the lives of all Alaskans and in particular the residents of southcentral Alaska. Without it, consumers would not be able to enjoy the benefits of low-cost natural gas and electricity. This development has coexisted with one of the state's most productive commercial salmon fisheries and active sport fisheries, provided jobs for the area's residents and significantly contributed to the Peninsula's tax base. These operations have been conducted in a safe and environmentally sound manner over the life of the development.

AOGA and RDC commend the Legislature for consideration of HJR59. We would like to recommend two minor technical amendments which I will provide in written form to Committee members at this time. I'd be happy to answer any questions you may have about these recommended amendments. Thank you for this opportunity to testify.

HOUSE JOINT RESOLUTION NO. 59

IN THE LEGISLATURE OF THE STATE OF ALASKA

NINETEENTH LEGISLATURE - SECOND SESSION

BY REPRESENTATIVES GREEN, Rokeberg

Introduced: 2/12/96
Referred: Resources

A RESOLUTION

Respectfully requesting the Environmental Protection Agency to issue a final National Pollutant Discharge Elimination System permit for Cook Inlet oil and gas operations that omits the incremental permittee monitoring and reporting obligations identified in the Agency's draft permit and, consistent with the philosophy of the Agency's 1996 National Water Program Agenda, allows the permittees to operate under pollutant discharge monitoring and reporting requirements that are not more rigorous than those requirements of the Cook Inlet National Pollutant Discharge Elimination System permit in place.

BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

WHEREAS, under the federal Clean Water Act, the principal mechanism for regulating and limiting pollutant discharge into water of the United States is the National Pollutant Discharge Elimination System (NPDES) permit program; and

WHEREAS, under the monitoring and reporting requirements imposed as part of an NPDES permit, the unit having responsibility for the Clean Water Act, the Environmental

Protection Agency, may require one or more parties who are responsible for pollutant discharge to install and use equipment to monitor the discharge, develop and maintain records and reports, and provide information to it as may be required under the Agency permit; and

WHEREAS the Environmental Protection Agency has determined in its 1996 National Water Program Agenda to reduce permittee monitoring and reporting requirements, with the objective of diminishing monitoring and reporting obligations imposed on permittees by about 25 percent; and

WHEREAS, the oil and gas industry has operated successfully in Cook Inlet for 30 years, coexisting throughout these decades with one of the state's most productive salmon fisheries; the industry operates in maturing fields that are at, or very close to becoming, uneconomic to produce; and

WHEREAS the Environmental Protection Agency, in conjunction with the Alaska Department of Environmental Conservation, has issued a draft general NPDES permit for Cook Inlet oil and gas ~~production~~ operations; and

WHEREAS, despite the reduced monitoring and reporting initiative announced in its 1996 National Water Program Agenda, the draft permit for Cook Inlet ~~production~~ operations proposes a substantial increase in the monitoring and reporting requirements to be imposed by the two agencies on the permittees; and

WHEREAS public comment on the proposed NPDES permit overwhelmingly endorses the Cook Inlet oil and gas industry permittees' ability to continue to operate under requirements of the permits in place, and supports eliminating provisions in the draft permit imposing an obligation on the permittees to increase monitoring and reporting requirements; and

WHEREAS recent scientific studies evaluating the quality of the water and other resources of Cook Inlet determined that there has been no adverse environmental impact in the inlet from the three decades of oil and gas operations; and

WHEREAS the Cook Inlet oil and gas production industry's history of successful coexistence with a productive fishery combined with the results of these recent studies together demonstrate that the Agency's draft NPDES permit requiring the permittees to incur substantial additional expense associated with the increased monitoring and reporting requirements identified in the draft NPDES permit is unwarranted, nor is the increased effort

supported by public testimony;

BE IT RESOLVED that the Alaska State Legislature respectfully requests the Environmental Protection Agency to issue a final National Pollutant Discharge Elimination System permit for Cook Inlet oil and gas operations that

(1) omits the incremental permittee monitoring and reporting obligations identified in the draft permit; and

(2) consistent with the philosophy of the Agency's 1996 National Water Program Agenda, allows the permittees either to operate under pollutant discharge monitoring and reporting requirements that are consistent with the Agency's national objective of diminishing monitoring and reporting obligations generally to be imposed on permittees, or to operate under pollutant discharge monitoring and reporting requirements that are not more rigorous than those requirements of the Cook Inlet NPDES permits in place.

COPIES of this resolution shall be sent to the Honorable Carol M. Browner, Administrator, Environmental Protection Agency; to Michele Brown, commissioner of environmental conservation; to the Honorable Don Gilman, Mayor of the Kenai Peninsula Borough; and to the Honorable Ted Stevens and the Honorable Frank Murkowski, U.S. Senators, and the Honorable Don Young, U.S. Representative, members of the Alaska delegation in Congress.

HOUSE RESOURCES COMMITTEE
FEBRUARY 23, 1996

Good morning Chairman Green and members of the House Resources Committee. My name is Norma Calvert and I am here today representing Marathon Oil Company. Marathon is an equity owner in five Cook Inlet platforms operated by UNOCAL and is operator of two platforms that are currently shut in due to economic factors. UNOCAL as operator and spokesperson for Marathon's interest in active Cook Inlet offshore production has presented an accurate overview of the NPDES permit issue. Marathon would like for your committee records to reflect our support of the industry position as presented by UNOCAL here this morning. We appreciate the House Resources Committee's interest in this issue and support the Joint Resolution before the committee regarding the Cook Inlet NPDES permit renewal; such action is necessary to remind the EPA of its own mandate to make the NPDES permit process practical. We have been a part of the oil and gas operations in Alaska's Cook Inlet for nearly 30 years and are proud that various independent scientific studies have consistently found no degradation of the Cook Inlet environment as a result of the oil and gas operations. The oil and gas industry is the primary economic base for the Kenai Peninsula that is supplemented by the commercial and sports fishing that continues to be bountiful in Cook Inlet. Unfortunately, declining oil production in the Cook Inlet has made the economic life of these state resources completely dependent on operating expenses. A NPDES permit that is more onerous than the existing permit will increase expenses, reduce resource recovery and fail to improve the environment. Again, we request your support of environmentally sound oil and gas operations in the Cook Inlet through the passage of HJR 59.

Alaska State Legislature

WHILE IN SESSION
CAPITOL BUILDING
JUNEAU, ALASKA 99801-1182
(907) 465-4931
(907) 465-4116 FAX

INTERIM ADDRESS
716 WEST 4TH AVENUE
ANCHORAGE, ALASKA 99501
(907) 258-8100
(907) 258-8171 FAX

CO-CHAIR, RESOURCES COMMITTEE
VICE CHAIR, JUDICIARY COMMITTEE
MEMBER, STATE AFFAIRS COMMITTEE

FINANCE SUBCOMMITTEES
DEPT. OF NATURAL RESOURCES
DEPT. OF COMMERCE & ECONOMIC DEVELOPMENT
DEPT. OF ENVIRONMENTAL CONSERVATION

Representative Joe Green
District 10

Sponsor Statement

HJR 59 - Supporting the Cook Inlet NPDES Permit

HJR 59 puts the Alaska Legislature on record supporting the re-issuance of the National Pollutant Discharge Elimination System (NPDES) permit for Cook Inlet oil operations.

The oil and gas industry has operated in Cook Inlet for over 30 years, coexisting with one of the state's most productive salmon fisheries. Despite this record of success, the US Environmental Protection Agency (EPA) has stipulated monitoring and reporting requirements beyond those required for the current permit. These new requirements have been added by EPA, even though the agency's own National Water Program Agenda calls for reduced monitoring and reporting requirements.

HJR 59 resolves that the NPDES permits be issued without new monitoring and reporting requirements.

Testified
HJR 59

Dennis Steffy
Director
Mining and Petroleum Training Service
155 Smithway, Suite 101
Soldotna, Alaska 99669
(907 262-2788
FAX: (907) 262-2812

ANC

Testimony Allowed
3 min time
= limit

LEGISLATIVE TELECONFERENCE NETWORK

SIGN-IN SHEET

60388

SPONSOR: House Resources

SUBJECT: HJR 59 NPDES Permit for Cook Inlet Oil & Gas

START/END TIME: 1:00 HB 175 Sport Fish Guide Testimony DATE: 2/23

PLEASE PRINT

	Name/Representing	Address	Zip	Phone No.	Testify	Observe	Bill No.
1.	Matt Rader DNR DO&G	3601 C Street Ste 1380 Anch.	99501	269-8776		X	HJR 59
2.	Joel Cooper Self	P.O. Box 3585 Homer AK	99603	235-6109	X		HJR 59
3.	Marla McPherson Self	P.O. Box 3585 Homer AK	99603	235-6109	X		HJR 59
4.	Pamela Miller Greenpeace	P.O Box 104432 Anchorage AK	99510	2778234	X		HJR 59
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Headquarters:
217 2nd Street, Suite 201
Juneau, Alaska 99801
(907) 586-2323 FAX 463-5515

ALASKA
★STATE★
CHAMBER
OF COMMERCE

TESTIMONY OF KATHRYN THOMAS
CHAIRMAN ELECT, ALASKA STATE CHAMBER OF COMMERCE
JANUARY 25, 1996
AT HOMER, ALASKA

MY NAME IS KATHRYN THOMAS, I AM HERE TO SPEAK ON BEHALF OF THE ALASKA STATE CHAMBER OF COMMERCE. I SERVE ON THE EXECUTIVE COMMITTEE AND AM THE CHAIR ELECT OF THE ALASKA STATE CHAMBER OF COMMERCE.

OUR ORGANIZATION REPRESENTS A DIRECT MEMBERSHIP OF APPROXIMATELY 700 BUSINESSES AND AN INDIRECT MEMBERSHIP OF MORE THAN 6000 ALASKAN FIRMS.
MOST OF OUR MEMBERS ARE SMALL BUSINESS PEOPLE WITH 20 OR FEWER EMPLOYEES. FOUNDED IN 1953, WE REPRESENT ALASKANS FROM BARROW TO KETCHIKAN.

I AM HERE TO SPEAK WITH YOU TONIGHT BECAUSE WE ARE THE VOICE OF ALASKA BUSINESS.

IN RECENT YEARS, ALASKA HAS SEEN HUGE BUSINESS REVERSALS IN MAJOR INDUSTRIES DUE TO ACTIONS TAKEN BY THE FEDERAL GOVERNMENT.

THE TIMBER INDUSTRY HAS CLOSED MILLS AND LAYED OFF HUNDREDS OF EMPLOYEES BECAUSE OF FEDERAL ACTION LIMITING THE USE OF ALASKAN TIMBER FOR LOGGING.

THE FISHING INDUSTRY HAS SEEN RECENT FEDERAL ACTION WHICH HAS HALTED COMMERCIAL SALMON FISHING IN SOUTHEAST ALASKA BECAUSE THE PACIFIC NORTHWEST AND CANADA WERE SUFFERING MAJOR SALMON SHORTAGES. ALASKA, ON THE OTHER HAND HAS MANAGED IT'S RESOURCE TO SEE RECORD RETURNS IN IT'S WATERS.

WE BELIEVE THAT ALASKAN'S ARE COMPETENT IN THE CARE AND MANAGEMENT OF THEIR RESOURCES. WE ASK THAT YOU RECOGNIZE THAT THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION DOES NOT INCLUDE COOK INLET ON THE LIST OF IMPAIRED WATER BODIES IN ALASKA, AS DEFINED UNDER THE FEDERAL CLEAN WATER ACT.

THE ALASKA STATE CHAMBER OF COMMERCE, HAS A COMMITMENT TO CREATE A PROSPEROUS ALASKAN ECONOMY; TO REDUCE THE COST OF DOING BUSINESS IN ALASKA AND TO THE DEVELOPMENT OF ALASKA'S VAST MINERAL RESOURCE WEALTH WHILE BALANCING SOUND ENVIRONMENTAL CONSIDERATIONS.

FOR 30 YEARS THE OIL PLATFORMS IN COOK INLET HAVE PROVIDED JOBS FOR ALASKANS, HEATED OUR HOMES, PROVIDED A SOURCE OF LOW COST POWER TO KEEP OUR BUSINESSES COMPETITIVE AND MORE PROFITABLE, AND CONTRIBUTED TO THE TAX BASE THAT SUPPORTS OUR GOVERNMENT AND SCHOOLS.

AND THIS IS A REAL ALASKAN SUCCESS STORY, BECAUSE THE RECENT ENVIRONMENTAL STUDIES HAVE SHOWN THAT THIS MAJOR CONTRIBUTION TO OUR ECONOMY HAS BEEN ACHIEVED WITHOUT ANY ADVERSE IMPACT TO OUR COOK INLET WATERS.

THE BUSINESS COMMUNITY IN ALASKA IS PUZZLED AS TO WHY THE FEDERAL GOVERNMENT WANTS TO FIX SOMETHING THAT IS NOT BROKEN AND THAT HAS PERFORMED SO WELL.

WE ASK THAT YOU RECOGNIZE THAT THE ALASKA STATE CHAMBER OF COMMERCE FEELS THAT ADDITIONAL STRINGENT REQUIREMENTS OF THE NPDES PERMITTING IS NOT WARRANTED BY THE DATA THAT IS REFLECTED IN THE MOST RECENT STUDIES OF COOK INLET WATERS.

BY NOT RECOGNIZING THE ENVIRONMENTAL SUCCESS OF THE DEVELOPMENT OF COOK INLET'S OIL RESOURCE, THE FEDERAL GOVERNMENT WILL CAUSE A LOSS OF REVENUE TO LARGE AND SMALL BUSINESSES AND ALASKA WILL LOSE JOBS THAT WE CANNOT REPLACE FROM OTHER SECTORS.

THANK YOU,

KATHRYN THOMAS
PHONE (907) 776-5515 FAX (907) 776-5132

Valdez L.D.C. TC# 60388

Parts. List:

1) Mr. Joe Kilian - Testify HB 175

2) Mr. James Heston - Observe HB 175

Testimony for HB 175

02/23/96 12:03:11 LEGISLATIVE TELECONFERENCE NETWORK SYSTEM LTN1120
MESSAGE FROM: LIOCJEN IN ANCHORAGE KEN

RE TCN: 60388 SCHEDULED FOR:02/23/96 08:00 TO 14:00
SPONSOR: HOUSE RESOURCES PURPOSE: PUBLIC HEARING

MESSAGE TEXT: ALAN LEMASTER IN GAKONA TO T

HB 175

12-02

Homer discharge hearing draws nearly 100 speakers

By KIRSTEN SCHULTZ
Peninsula Clarion 1-30-96

Close to 100 people testified Thursday at a U.S. Environmental Protection Agency water-quality hearing in Homer.

The hearing capped off EPA's three-month-long attempt to gather public comment on its National Pollutant Discharge Elimination System Permit, the document that will regulate what the oil industry can pour into Cook Inlet over the next five years.

Attendance at the Homer hearing, which was organized after EPA was inundated with requests from the southern Kenai Peninsula community, overshadowed attendance at a similar hearing held in Soldotna late last year.

The 10-or-so people who testified at the Soldotna hearing in November were evenly split on the NPDES issue — some claimed EPA's draft permit was too strict, while others maintained it wasn't tough enough.

Surprisingly, that also was the case in Homer, an area known for its opposition to the oil industry.

According to Mike O'Meara, a Homer-area resident who testified during the four-hour hearing, residents of Kenai and Nikiski had a "massive presence" at the hearing. Most of those people supported oil industry interests.

Overall, the testimony was mixed, though there were slightly more people favoring stronger regulations, like the so-called "zero-discharge" restriction required in other waterways around the country.

See EPA, back page

...EPA

Continued from page 1

Oil industry officials have lobbied hard against the zero-discharge requirement, which would outlaw any effluent poured into the inlet from oil platforms. The permit regulates 19 different waste streams, including drilling muds, bilge water, sewage as well as produced water, a mixture of oil, water and natural gas extracted during production.

Industry claimed reinjecting the waste or transporting it to shore would shut down already marginal Cook Inlet production facilities. When EPA released its draft permit last fall, that requirement was not included, but the oil industry still maintains that the new permit is too strict.

Aside from the Homer hearing, written public comment seemed to side with industry opinions. Of the 250 letters EPA has received, about 70 percent support claims that the new regulations are too stringent. The remaining 30 percent pushed for even tighter restrictions.

Laurie Mann, an environmental specialist at EPA who wrote the permit, emphasized that while the agency does keep track of how many people are for or against the regulations, that doesn't mean the side with the most support wins.

"It's not an election," said Mann, who has received 50 faxes about the permit in the past week. "Whatever we do has to be consistent with the law."

The only way any changes will be made to the draft permit is if the public comment is based on new technological or legal information EPA didn't know about. For example, said Mann, the permit may change if it conflicts with someone's interpretation of Alaska subsistence laws.

Mann now must read and respond to all the comments, a task that she estimated will take at least a month. It could be up to ten months before a final version of the permit is released, although Mann said it could take as little as three months.

Opponents of the permit then will have 190 days to challenge EPA's plans.

Kenai Peninsula residents have one more day to send their water-quality comments to the U.S. Environmental Protection Agency. Wednesday is the postmark deadline for public comment.

The EPA already extended its comment period for the permit from 60 to 90 days as a result of the overwhelming response. Residents can provide comment by sending letters to U.S. EPA, Region 10, Director, Office of Water, 1200 Sixth Ave., Seattle, Wash. 98101.

Comments must include the writer's name, address and phone number.

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House Resources Committee
re: HJR 59 Feb. 23, 1996

Dear Mr. Chairman,

I testified on the teleconference of 2/23/96. A member of the panel asked a general question in response to my testimony but I was not still connected to explain.

My statement was that as a Pacific cod fisherman, we sell our fish fresh and have the best reputation for quality in all of Alaska. My concern was that this permit will cover the upcoming Cook Inlet lease sale #149 which will allow discharge of drilling muds in this area, and anything that taints the product or reputation with discharges that are recognized as containing TOXIC substances will be damaging to existing commercial ventures in this area.

Somehow the question got posed that since they have been discharging for 30 years and we have this good fish quality maybe discharges are OK for the quality of fishery products. I will presume that the questioner was serious. so the following comments will explain the situation.

No one fishes Pacific cod in the area of the platforms which is about 90 miles away. Tanner crab shrimp, scallops, and generally, bottomfish are not harvested in that upper area but all are in the lower Cook Inlet. If this permit will cover "Cook Inlet" it would allow lease sale 149 drilling operations to discharge right in the fishing area.

I can already hear the industry representatives testifying that the lower inlet should have the same regulations as the upper inlet and, if HJR 59 passes, that the Alaska legislature agrees with them.

****

I request that you specify in HJR59 that this resolution does not establish precedent for nor apply to lease sale 149 or adjacent State waters in Lower Cook Inlet, and that the permitting process there should address the different potential impacts on the fisheries associated with Lower Cook Inlet.

****

Sincerely,

Paul K. Seaton

Paul K. Seaton
58360 Bruce Drive
Homer, Alaska 99603
Ph. & Fax (907) 235-6342

New hearing set for inlet discharges

By KIRSTEN SCHULTZ
Peninsula Clarion JAN. 12 '96

The U.S. Environmental Protection Agency has received so much public comment on its plans to regulate waste-water discharge in Cook Inlet that it will hold another hearing on the Kenai Peninsula.

The agency, which released its new National Pollutant Discharge Elimination System permit late last year, has been inundated with letters and phone calls from Southcentral residents.

According to Bob Jacobson, regional press officer with EPA in Seattle, "the volume of letters on the proposed permit is unusually heavy for this stage of the game." The proposal's comment period isn't up until the end of January.

So far, EPA has received more than 200 letters commenting on the permit, which will regulate what oil facilities can pour into inlet waters. The permit will apply to the inlet's 15 platforms for the next five years.

A large percentage of the letters to EPA came from people in Homer, Kenai and Soldotna, according to Jacobson.

About 70 percent of the comments supported industry claims that the new regulations are too stringent. The remaining 30 percent pushed for even tighter restrictions, like the so-called "zero-discharge" provision.

"A large number of people are concerned about the possible negative impact on the oil industry, " said Laurie Mann, an environmental specialist at EPA who wrote the permit. "That they're going to lose their jobs, or someone in their family is going to lose their job."

Since the last permit expired four years ago, environmental groups have been pushing the EPA to outlaw any discharge. Oil companies lobbied hard against the zero-discharge requirement, which they said would shut down already marginal production facilities in the inlet.

See EPA, back page

... EPA

Continued from page 1

The permit regulates 19 different waste streams, including drilling muds, bilge water, sewage and produced water, a mixture of oil, water and natural gas extracted during production.

Mann mentioned that not one of the 200-plus letters sent to EPA was a form letter and many of the notes were handwritten. All the letters either said EPA's new permit would over-regulate or under-regulate the inlet's oil industry.

"Not one letter said we like it, you did a good job," Mann said.

Mann also said that she has received about 20 phone calls from Homer residents, upset that EPA didn't schedule a hearing in their area.

The volume of comment was so unusually high that EPA decided to do just that. "Citizens don't normally call the EPA in Seattle," Mann said.

The agency already has held hearings in Anchorage and Soldotna. The Homer hearing is scheduled for Thursday, Jan. 25, at 7 p.m. at the Homer Senior Center. The hearing is only for gathering testimony, not for questions.

Also, a workshop with a panel of speakers will be held Thursday, Jan. 18, at 7 p.m., at the senior center. Mann, along with seven or so other people, will provide comment on the permit and answer audience questions. Other panel members will represent the oil industry, Native groups and the environmental community.

The Cook Inlet Keeper, a water-quality watchdog group, is sponsoring the program. The group is funded by a $1 million settlement over oil industry violations of EPA's last NPDES permit.

The EPA already extended its comment period for the permit as a result of the overwhelming response. Residents can provide comment until Jan. 31, by sending letters to U.S. EPA, Region 10, Director, Office of Water, 1200 Sixth Ave., Seattle, Wash. 98101.

Comments must include the writer's name, address and phone number.

The Homer hearing is scheduled for Thursday, Jan. 25, at 7 p.m. at the Homer Senior Center.

The EPA will release a final version of the permit, sometime after the comment period is ended.

Mann said the recent federal government shut down probably will have an affect on EPA's timeline for releasing the final version of the permit. Mann originally had scheduled to have the permit completed before she went on three months of maternity leave, but now it won't be done until she returns.

The final version most likely will be released sometime this year, followed by a 120-day challenge period.

Borough will discuss EPA discharge permit Tuesday

The Kenai Peninsula Borough Assembly will discuss the U.S. Environmental Protection Agency's recently released discharge permit at its next meeting, scheduled for Tuesday at 7:30 p.m.

Borough Mayor Don Gilman has introduced a resolution to support EPA's National Pollutant Discharge Elimination System permit, which will regulate Cook Inlet oil facilities.

The public is welcome to comment on the resolution, which is scheduled to be voted on at the meeting. The meeting will be held in the assembly chambers in the Soldotna Borough Building.

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See EPA, back page

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The Homer hearing is scheduled for Thursday, Jan. 25, at 7 p.m. at the Homer Senior Center.

The EPA will release a final version of the permit, sometime after the comment period is ended.

Mann said the recent federal government shut down probably will have an affect on EPA's timeline for releasing the final version of the permit. Mann originally had scheduled to have the permit completed before she went on three months of maternity leave, but now it won't be done until she returns.

The final version most likely will be released sometime this year, followed by a 120-day challenge period.

Borough will discuss EPA discharge permit Tuesday

The Kenai Peninsula Borough Assembly will discuss the U.S. Environmental Protection Agency's recently released discharge permit at its next meeting, scheduled for Tuesday at 7:30 p.m.

Borough Mayor Don Gilman has introduced a resolution to support EPA's National Pollutant Discharge Elimination System permit, which will regulate Cook Inlet oil facilities.

The public is welcome to comment on the resolution, which is scheduled to be voted on at the meeting. The meeting will be held in the assembly chambers in the Soldotna Borough Building.

Northern Test Lab

(907) 262-4624 Phone 35186 Spur Hwy, Soldotna, Alaska 99669 (907) 262-5777 Fax

FAX MEMO

Date: 23 February 1996

To: House Resources Committee Fax: 465-4316
Representatives Green, Williams, Ogan, Barnes, Kott, Austerman, Davies, Long, Nicholia

Copy: Representative Gary Davis Fax: 465-3835

From: Mike Tauriainen

Mike Tauriainen

I am writing to comment on the draft NPDES Permit for Cook Inlet Oil & Gas Exploration, Development, and Production. I have lived and worked in the Kenai-Soldotna area since 1959 and own a consulting engineering and environmental business. My family and I hunt, fish, play, and work on the Kenai Peninsula and are concerned about what happens to our community and the environment.

The proposed permit conditions are too stringent. I believe the permit should be renewed as is to allow the industry to continue operating essentially as they have. Our firm is regularly involved in environmental investigations, giving me a better than average understanding of industry impacts on the local environment. We test discharges from 12 Cook Inlet oil facilities on a weekly or monthly basis - roughly 500 - 600 samples per year; permit limits are exceeded maybe a half dozen times per year, and when they happen, the problems are usually rectified immediately. Just like the rest of us, the oil industry is not perfect, but they do a good job and are good neighbors.

Several studies have been done on the Inlet, some looking specifically for environmental degradation caused by the oil industry. The results? No indication of significant environmental damage, contrary to claims by a few environmental extremists. The challenges and cost of operating in Alaska and Cook Inlet are already burdensome. Sampling is costly because samples have to be transported by helicopter. I am concerned that the proposed permit would add an unfair burden on the oil operators in Cook Inlet and would result in cut backs and loss of jobs.

We have a good balance in Cook Inlet between development and environmental protection (other than too many regulations already). Please base the permit conditions on already available scientific evidence and not on emotion. Thanks for the opportunity to comment.

mt:texlepenpde2.fax

February 21, 1996

TO: Jeff Logan, Staff for Joe Green
FROM: Pamela Miller, Greenpeace
RE: Materials for Hearing on HJR 59

Here is a copy of an open letter I sent to the Kenai Peninsula delegation concerning the NPDES permit for oil and gas discharges in Cook Inlet. Also attached is a report from Dr. Robert Howarth of Cornell University who reviewed the draft permit and associated documents. Please attach these to the legislators information packets concerning HJR 59. Thank you.

Have you recieved any information on whether we can testify by teleconference for the hearing on Friday? I appreciate that you contacted me to inform me of the opportunity to testify.

Sincerely,

Pamela Miller

Pamela Miller

Your letter was irresponsible in light of the deep concerns of local citizens, especially Native communities (see letter attached from the Indigenous People's Council for Marine Mammals). I urge you to reconsider your opinion and write to EPA asking that the oil industry be required to meet zero discharge standards. Zero discharge is the norm for the oil and gas industry throughout the country -- it is not an undue technological or economic burden. Industry has greatly exaggerated the potential economic impacts of zero discharge in Cook Inlet (see attached comments). An economist, Dr. Thomas Goerold, who reviewed the permit concluded: "I believe that EPA has underestimated the future profitability of the petroleum operations in this region and overestimated the likelihood of the shutting-in of existing and currently planned platforms."

Thank you for your consideration of my comments. I would welcome an opportunity to discuss this issue further.

Sincerely,

Pam Miller

Pamela K. Miller
Researcher
Community Toxics Investigative and Advocacy Project

cc:
Peninsula Clarion
Homer News
Homer Tribune
Anchorage Daily News

GREENPEACE

February 19, 1996

An Open Letter to the Kenai Peninsula Delegation
Senator Judy Salo
Senator John Torgerson
Representative Gary Davis
Representative Mike Navarre
Representative Gail Phillips

Dear Ms. Salo, Mr. Torgerson, Mr. Davis, Mr. Navarre, and Ms. Phillips:

I am writing in response to your December 18, 1995 letter to Mr. Charles Clark, Director, EPA Region 10, regarding the proposed NPDES permit for oil and gas discharges in Cook Inlet. In the letter, you stated that "regulations for the oil and gas industry must be derived from sound scientific measurement and observation and then tempered by economic considerations." You stated that you "concur with the concerns expressed by UNOCAL."

I was disappointed in your response to the EPA because you have only reiterated UNOCAL's position on the permit. You have not, I believe, given adequate consideration to legitimate and scientifically-founded concerns regarding the reissuance of the permit. We asked an independent scientist from Cornell University, Dr. Robert Howarth, to review the draft permit and associated documents (including CIRCAC, MMS, and industry studies). Dr. Howarth is an internationally renowned scientist (his report and credentials are enclosed) who has served on a number of National Academy of Sciences panels and is the Atkinson Professor of Ecology and Environmental Biology at Cornell University.

Dr. Howarth concluded "that the scientific basis for issuing the proposed NPDES permit is flawed and inadequate." His report details the potential and pathways for transport and bioaccumulation of pollutants from the oil and gas industry. He clearly demonstrates that previous studies in Cook Inlet are inconclusive: "the actual risk to the biota of Cook Inlet cannot be adequately determined but is likely to be far greater than stated." Monitoring standards required by EPA in the draft permit are inadequate, *not* excessive.

PO Box 104432, Anchorage, AK 99510 • ☎ (907) 277-8234 • Fax (907) 272-6519

COMMENTS ON THE PROPOSED NPDES GENERAL PERMIT FOR OIL AND GAS EXPLORATION, DEVELOPMENT, AND PRODUCTION FACILITIES IN COOK INLET, ALASKA

by

Robert W. Howarth, Ph.D.
Section of Ecology & Systematics
Division of Biological Sciences
Cornell University
Ithaca, NY 14853 USA

25 January 1996

I have carefully reviewed the draft NPDES Permit #AKG285100 for Cook Inlet, the September 7, 1995 "Cook Inlet (Reissuance) Fact Sheet" for that permit, and the November 1995 report from Parametrix on "Mixing Zone Determination and Risk Assessment of Produced Waters from Oil and Gas Facilities in Cook Inlet, Alaska" which is relied upon heavily in the draft permit. Based on this review, I conclude that the scientific basis for issuing the proposed NPDES permit is flawed and inadequate. The actual risk to the biota of Cook Inlet cannot be adequately determined from the information provided in these reports but is likely to be far greater than stated.

The "Cook Inlet (Reissuance) Fact Sheet" for the proposed permit states: "If a definitive determination of no unreasonable degradation cannot be made because of insufficient information, EPA must then determine whether a discharge will cause irreparable harm to the marine environment and whether there are reasonable alternative to on-site disposal" (p. 7). The application of this policy to Cook Inlet mandates further analysis. I believe that such further analysis will lead to a requirement for alternatives to in situ disposal, such as reinjection of formation waters and shore-based disposal (and recycling and re-use) of drilling fluids (Howarth and Marino 1991). Since such alternatives are possible, the proposed permit conflicts with the "national policy that, whenever feasible, pollution should be prevented or reduced at the source, that pollution which cannot be prevented should be recycled in an environmentally safe manner, and that disposal or release into the environment should be employed only as a last resort ...." (p. 35 of "Cook Inlet (Reissuance) Fact Sheet"). Major failings of the permit and associated reports follow.

Bioaccumulation of Toxic Substances is Ignored:

The draft permit and fact sheet make no mention of the accumulation of oil hydrocarbons and other toxic substances in living organisms. In the supporting document for estimating mixing zones, Parametrix (1995) discounts problems with bioaccumulation and bioconcentraton of toxic substances in formation waters. Their logic is based on the relatively low octanol-water partioning coefficient for many oil hydrocarbons in formation waters, on a supposed rapid elimination of oil hydrocarbons from marine organisms, and on the often low and variable concentrations of oil hydrocarbons found in previous monitoring efforts in Cook Inlet (Parametrix 1995, pp. 24-25). Parametrix (1995) goes on to assert that "the few marine mammals and birds known to occupy upper Cook Inlet .... are unlikely to be at risk from exposure to produced water constituents since these compounds do not readily bioaccumulate" (p. 30).

These conclusions and the underlying logic are wrong. All of the hydrocarbons considered by Parametrix (1995) preferentially accumulate in fatty tissues over seawater, as shown by octanol-water partioning coefficients well over 1 and as high as 2,000 (Table E-a in Parametrix 1995). This simply must be explicitly considered in determining the exposure of organisms to toxic substances and therefore the size of the mixing zone, and cannot be dismissed by simple references to others who say that a little bioconcentration is O.K. (Parametrix 1995, p. 25). According to the National Academy of Science's report on Oil in the Sea: "Numerous studies have shown that bivalves can accumulate hydrocarbons to a level several orders of magnitude above the concentration in the water (NAS 1985, p. 239). Table 4-3 of that report supports this statement and specifically shows high levels of bioaccumulation of napthalene and diaromatics, major toxic components of formation waters.

Parametrix (1995, p. 25) states that the hydrocarbons taken up from formation waters into organisms will be rapidly depurated or removed from the organism. Such depuration can occur, but is often much slower than stated by Parametrix (1995). The length of original exposure of the organism to the pollutants is critical, with depuration being much longer in chronic pollution conditions (such as associated with formation waters) than in the short-term lab exposure studies cited by Parametrix (1995); see pp. 299-302 of the National Academy of Science report (NAS 1985). In the case of chronic pollution, the half life for depuration can be more than 1 month (NAS 1985, pp. 300-301), far longer than the hours to days stated by Parametrix (1995).

Parametrix (1995, p. 24) cites monitoring studies which have shown generally low concentrations of oil hydrocarbons in organisms near rigs, or in the case of the Arthur D. Little study, the lack of "any clear spatial pattern associated with the produced water outfall for the Trading Bay Production

Facility." Rather than indicating no problem with bioaccumulation, these findings may result from long-range transport of substances away from discharge cites, with bioaccumulation which is highly variable in space and may be most pronounced well away from rigs (where there has been little or no monitoring). The possibility of long-range transport is discussed further below.

Bioaccumulation poses a particular threat to birds and marine mammals since they have no gills through which oil hydrocarbons are equilibrated back into solution in seawater. Bioaccumulation in birds and mammals is often through the food they consume (NAS 1985, p. 303). The extent to which birds and marine mammals (including endangered species) in Cook Inlet are currently exposed to toxic oil hydrocarbons from formation waters and other sources is completely unknown and needs to be assessed before further discharges should be permitted.

Assumption that NPDES Permit will not Increase Pollution is Wrong:

Page 8 of the fact sheet issued in September 1995 for the proposed permit states: "The reissuance of this permit will not result in additional pollutant loading to the receiving waters; therefore, this action complies with the State's antidegradation policy." This statement is not correct. The amount of formation water produced during OCS development increases dramatically with age in a well and in a field. In a new well, the volume of formation water is small relative to the amount of oil produced, but in an old well may produce 20-times more formation water than oil (Neff et al. 1987). Thus, if current production rigs in Cook Inlet are allowed to continue to use the same technology, pollution from formation waters is likely to increase substantially over time under the new NPDES permit.

Proposed Testing Procedures are Extremely Permissive:

For monitoring effects, the proposed permit would rely very heavily on acute toxicity testing, or LC50's, where test organisms are exposed to various dilutions of effluents for 96 hrs and the concentration which kills half the test organisms is estimated. LC50 tests would be the only toxicity testing for drilling fluids (p. 16 of draft permit). For formation waters, LC50's would still be the primary method of determining toxicity, but tests would be augmented with determinations of pollutant effects on growth and some other sublethal effects (p. 24 of draft permit). To date, only LC50 and growth studies have been performed for effluents in Cook Inlet (Parametrix 1995, pp. 7-8 and 35). These tests are the basis for one of the approaches used to estimate required mixing zones for effluent discharges under the permit (p. 31 of "Cook Inlet (Reissuance) Fact Sheet").

Problems with LC50 approach are thoroughly reviewed and discussed in the 1985 National Academy of Sciences' report (NAS 1985), by Schindler (1987) and by Howarth (1989). The approach tends to greatly underestimate ecological harm. In the case of dissolved oil hydrocarbons, LC50 tests often lead to "values of concern" of 1,000 to 3,000 µg/l, while adverse ecological effects occur at oil concentrations as low as a few µg/l (NAS 1985; Howarth 1989). The National Academy of Sciences' report (NAS 1985) recommends that LC50 tests be used only to compare the toxicity of different substances or to compare the sensitivity of different organisms or life stages, and not to predict ecological harm or set "safe levels," as the draft NPDES attempts. "Such bioassays are helpful in ranking oils in order of toxicity but are of limited value for ecological prediction" (NAS 1985, p. 163).

Using growth rather than death as the measure in toxicity tests does little to improve the situation, and in fact the two approaches give comparable results (Parametrix 1995, pp. 35-38). This is at least in part due to the insensitivity of using growth rate as a measure. According to the National Academy of Sciences' report, "growth of fish is relatively easy to monitor, but fish require long exposure times before significant differences can be detected, compared with controls" (NAS 1985, p. 189). That report goes on to suggest that using behavioral changes provides a much more sensitive test of adverse effects from oil (NAS 1985; pp. 138-139). The NPDES permit would require no such testing. Some sublethal testing would be required, but only for formation waters (not drilling mud discharges), and only fecundity and larval development in two test invertebrate populations would be measured (p. 24 of draft permit).

In situ Environmental Monitoring is Inadequate:

During exploratory drilling, the proposed NPDES permit would require monitoring for changes in sediment pollutant concentrations and for impacts on the benthic community (p. 17 of draft permit). Previous monitoring efforts in Cook Inlet have been unable to see a major effect on the benthos during exploratory drilling, nor have they generally observed a predictable increase in pollutants near rigs. This, however, contrasts with studies elsewhere. In the North Sea, effects from chronic pollution associated with OCS activity have been clearly documented (Kingston 1987; Bakke et al. 1989-b; Reiersen et al. 1989; Gray 1989; Gray et al. 1990). Interestingly, effects have been seen even when low toxicity drilling fluids have been used (Kingston 1987; Reiersen et al. 1989), and these benthic effects were not predictable from toxicity testing, even including non-lethal testing (Bakke et al. 1989-a). The lack of measurable accumulation of pollutants near rigs in Cook Inlet, and the lack of a clearly demonstrable effect of pollutants on the benthos there, may be the result of transport of toxic substances away from the rigs (see discussion

below). Such transport seems likely given the strong tides and currents which characterize Cook Inlet. Without knowledge of the fate of the toxic substances discharged, it is impossible to estimate the amount of ecological harm. At present, this fate is unknown.

Under the terms of the proposed NPDES permit, environmental monitoring during development activities may not be required: "An exemption to post-drilling monitoring will be granted if no impact was indicated during drilling" (p. 17 of draft permit). This ignores potential problems of pollution from the formation waters during production. Continuous monitoring throughout the life of the field should be required, particularly since the volume of formation waters increases in an older field (discussed above).

Long-Range Transport of Toxic Substances is Ignored:

The draft permit and supporting documents fail completely to discuss the probability that toxic substances, both from drilling fluids and from formation waters, are likely to be transported for significant distances from the site of discharge. An implicit assumption behind the mixing zone models used (Parametrix 1995) is that such transport occurs, but apparently it is assumed that toxic substances will be diluted during such transport. Toxic materials may well be dispersed and diluted, but they may well also be accumulating in low-energy environments, including such sensitive areas as coastal marshes. The majority of toxic discharges from OCS operations are either particle bound or quickly become particle bound in the environment, particularly onto fine particles. Such fine particles, and associated pollutants, can easily accumulate in low-energy environments long distances away

Currently in Cook Inlet, the fate of toxic discharges is not known, and very little is known about transport of such substances. However, two reports present data which hint at accumulation of pollutant oil hydrocarbons away from rigs. Neff and Douglas (1944, as cited on page II.A.15 of the 1995 DEIS for lease sale 149 in Cook Inlet) found very high levels of petroleum hydrocarbons (8.97 to 13.76 ppm) 2 miles to the northeast of an outfall, concentrations much greater than found closer to rigs in Cook Inlet. Also, Arthur D. Little, Inc. (1995. pp. 3-4) found higher levels of sediment oil contamination at two sites away from rigs than near rigs and outfalls in the Beluga River and Trading Bay areas of Cook Inlet. Further discharges of formation waters should not be allowed in Cook Inlet until the fate of toxic hydrocarbons in such discharges is better known.

Problems with Synthetic Drilling Muds are Not Adequately Considered:

The "Cook Inlet (Reissuance) Fact Sheet" implies that synthetic drilling muds will be allowed and states that "preliminary data" show the toxicity of these muds to be similar to others used under Region 10's NPDES permit (pp. 18-19). The mutagenic and carcinogenic potential of synthetic oils is greater than that for natural crude oils (NAS 1985, p. 478). This led the National Academy of Science's report to conclude that "...the future use and discharge of these synthetic products should be monitored with care" (NAS 1985, p. 478). The testing procedures proposed for the NPDES permit are totally unable to determine whether the discharges are having mutagenic or carcinogenic effects.

Effects within Mixing Zone are Ignored, and Standards are Permissive:

The size of the proposed mixing zones are set by the State of Alaska water quality standards: 10 µg/l for aromatic hydrocarbons, and 15 µg/l for total aqueous hydrocarbons (p. 29 of "fact sheet"). These values may not be adequate, and if they are, they barely are. The National Academy of Science's report (NAS 1985) points out numerous biological effects which occur at lower concentrations of dissolved oil hydrocarbons, concentrations as low as 1 µg/l or less. Also, it is important to note that the toxicity of oil hydrocarbons in formation waters is higher than for many other oils since formation waters are enriched in the most water soluble, toxic fractions (Howarth and Marino 1991, p. 6). Benzene alone, which is a known carcinogen in addition to being extremely toxic, can constitute 30-40% of the oil discharged in formation waters in Alaska (NAS 1985, p. 474).

The report of the National Academy of Sciences (NAS 1985) is particularly concerned over the effects of fairly low levels of oil hydrocarbons on behavior. "Of all the processes examined, the perturbation of normal behavior at very low concentrations of petroleum (as low as 10 µg/L) suggests a particular concern. The continuance of normal behavior underlies and is absolutely critical to larval settling, feeding, reproduction, substrate recognition, and homing. In this context a change in or cessation of feeding is one of the first indications of oil pollution in many test animals." (NAS 1985, p. 486).

Even if one accepts the Alaskan water quality standards as adequate, it is critical to note that these cannot be met in Cook Inlet at the end of pipe discharges. The draft permit fully acknowledges that a "mixing zone" is required to allow for pollution to be diluted to these levels. Within the mixing zone, pollutant concentrations will be incredibly high: as high as 182,000 µg/l for total aromatic hydrocarbons from formation waters (p. 23 of draft permit). Organisms within this area will certainly be adversely affected. To meet the Alaskan water quality standard, mixing zones of up to 955 m (for

Granite Point) are proposed. This corresponds to an area of up to 720,000 m^2 around individual discharges. The draft permit and supporting documents make absolutely no effort to assess the magnitude of ecological harm from the pollution allowed within these areas.

Potential Effects on Marine Mammals are Real and Underestimated:

Even within the rather permissive analysis of the draft permit, it is acknowledged that species such as Beluga whales are at risk (p. 27 of "fact sheet"). The permit makes no provision for dealing with this risk. And for the reasons outlined above, the risk to Beluga whales and other species is probably much greater than the draft permit and supporting documents estimate. At present, it is probably not possible to fully assess the risk to marine mammals such as whales, and "probably less is known of how oil affects marine mammals than any other group of marine organisms" (NAS 1985). In addition to potential direct effects from bioconcentration of oil hydrocarbons in whales (discussed above), "marine mammals including whales may be adversely affected by alterations in the ecosystems supporting them, changing food webs. For instance, amphipods -- which regularly disappear from oil-contaminated sediments -- are a favored food for gray whales....." (Howarth and Marino 1991, p. 31). Such considerations dictate that toxic pollutants not be discharged into Cook Inlet until their effects can be better understood and predicted.

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About the Author:

Robert W. Howarth is an expert in coastal water quality and oil pollution. He received his Ph.D. in Biological Oceanography from the MIT/Woods Hole Oceanographic Institution Joint Program in 1979. He served as a staff research scientist in Woods Hole for 6 years before joining the faculty at Cornell University in 1985. At Cornell, Howarth is the Atkinson Professor of Ecology & Environmental Biology, the Director of Graduate Studies in Ecology & Evolutionary Biology, the Director of the Program in Biogeochemistry & Environmental Change, and the Director of the Cornell Laboratory for Natural Abundance Isotope Analysis. He is also the Editor-in-Chief of the international journal *Biogeochemistry* and the co-chair of the International SCOPE Nitrogen Project.

Howarth has published over 80 scientific articles. His research is funded by the National Science Foundation, the SeaGrant Program, the Hudson River Foundation, and the Mellon Foundation. Howarth has served on 8 committees, panels, and working groups of the National Academy of Sciences. In the past few years, he has served as a member of the NAS Committee on Managing Wastewater in Coastal Urban Areas, the NAS Committee on the Coastal Ocean, and the NAS Committee on High-Priority National Needs in the Coastal Zone. He is also a member of the NAS Panel on Nitrogen Cycling in China and chairs the NAS Working Group on the Conduct of Science on Public Lands. Howarth serves as a member of the Committee on Ethics of the American Society of Limnology & Oceanography and of the Advisory Committee for the Sustainable Biosphere Project of the Ecological Society of America.

Indigenous People's Council for Marine Mammals

P.O. Box 200908
Anchorage, Alaska 99520
(907) 279-2511
Fax (907) 279-6343

23 January 1996

Environmental Protection Agency, Region 10
Attn: Ocean Programs Section, WD-137
1200 Sixth Avenue
Seattle, WA 98101

To whom it may concern:

This letter is commentary on the Draft National Pollution Discharge Elimination System (NPDES) Permit for Cook Inlet Oil and Gas Exploration, Development and Production. My comments will focus largely on the marine mammals of the region and the materials in the EPA's fact sheet and proposed permit. I am opposed to issuing the permit as it stands and would request that a zero discharge permit be issued for this region.

In 1994 and 1995 I participated as a member of the U.S. delegation to the eight nation Arctic Monitoring and Assessment Program (AMAP). The major theme of the AMAP report that is being prepared is that pollution from all over the globe is moving to the north and impacting living systems.

AMAP considers movement of pollutants on a global scale. Within this permit the exclusion zones range from 1000 m to 20 miles along a relatively closed inlet system. Considering the inlet has the second highest tidal action in the world there will be movement of any discharged materials. Unfortunately this movement is not so much one of flushing, particularly in the winter months when fresh water input into the inlet is limited, but one of sloshing about in a tub of dirty water.

Materials discharged from a site will move at one period of the day down to the ocean in the normal current and with the outgoing tide. Within a few hours the tide changes and the materials reverse their action and move up the inlet perhaps even past their point of origin. Those materials discharged during tidal flow will first move up the inlet. During the Exxon Valdez oil spill, weathered crude was found well up the inlet in the summer, indicating that even at a time of increased river flow materials can move up the inlet over time.

Water movement and exclusion zones are therefore a concern. The fact sheet states that unique habitat was considered in this permit and that discharge is not allowed in some selected areas. Exclusion limits are mentioned for Steller Sea Lion aquatic foraging area (please note that this animal was named for a biologist whose name was Steller not for stars and so the spelling needs to be corrected), as well as for Sugarloaf Island, and other areas along the inlet. The implication is that with these exclusions that the permit would be safe for unique habitat and species of the region.

On the other hand, within the permit on page 37 under "2. Produced Water" it states that it "may affect, but is not likely to adversely affect, all of the considered species *except* the Beluga whale." The paragraph ends with the EPA concluding that "'may adversely affect' is based on lack of conclusive evidence regarding the actual impact of produced water discharges upon the species." This to my mind means that there is concern for the entire inlet for the Beluga whale.

In addition there is conflict with the concepts behing the mixing zones. The mixing zones have been described and it is noted that due to the flow of water in the Inlet, with its extremely high tides, any discharges will be stirred well. These statements are contradictory to the relatively small exclusion zones (1,000 - 1,500 m) that have been established for most of the Inlet. If there is a great deal of water movement, then that would require larger exclusion zones, especially if that movement is one of back and forth and not flushing in just one direction. I therefore have serious concerns over the mixing zones and relatively small discharge exclusion zones as outlined in the permit. This becomes a critical concern when the health of the marine mammals of the region are considered.

As stated above there may be adverse impact to Beluga. In 1994 I was appointed to sit on the National Scientific Review Group for the Alaska Region to evaluate all marine mammals under the amendments to the Marine Mammal Protection Act. Those reports list the Cook Inlet Beluga, and the Western Steller Sea Lion as "strategic stocks" which will be evaluated on an annual bases and for which habitat degradation must be considered. Harbor Seals were not classified due to a lack of definitive information. They have had significant declines in their population but it is unclear if there are multiple stocks and therefore the resilience of the animals.

EPA 1/96 - Hild

Steller Sea Lions have been declining in this region for nearly twenty years. Harbor Seals have been declining in this region for nearly twenty years. Harbor Seals are known to feed on octopus which feed on benthic populations. Benthic animals pick up pollution as they are filter feeders and/or search the sediments for food. Therefore it is possible that Harbor Seals are being impacted by the years of discharge in the region.

Several years ago there was a massive die off of Harbor Seals in Europe. It has been concluded that the animals died of a virus. It has also now been found that the blubber of the animals that died had low levels of an organochlorine compound. This pollutant of itself was well within "safe limits" and did not cause the deaths, but it had compromised the animals' ability to fight off infection by depressing the immune systems.

In people we carry a herpes virus in our body. It does not manifest itself unless we are stressed. Work loads, sickness, poor nutrition can cause the eruption of "cold sores" or "fever blisters." These are indications that our system is week. They are not related directly to a cold or fever, but are the manifestation of the virus itself. If we do not take care we can then become very sick, and if pneumonia sets in we can die. Those who die of pneumonia did not die of herpes, nor stress, nor even the sickness that may have made them bed ridden, but they do die of pneumonia.

Herring in Prince William Sound were observed to seriously suffer from a virus in 1993 four summers after the oil spill. It has been reported that they carry this virus all the time and it manifests itself when they are stressed. It is unknown what the exact stress was in 1992 or 1993 that caused the effect but the impact to herring, and the animals which feed on herring was evident.

Recent blood tests on Steller Sea Lions and Harbor Seals in this region, as reported by the University of Alaska Fairbanks Institute of Marine Studies, indicate from liver enzymes that they are under stress. It is unknown how stressed these animals are and what type of "straw it will take to break the camel's back" with a disease outbreak. No further pollution should be added to this scenario. We know that the ecosystem of the lower Cook Inlet is stressed. We have the ability to reduce pollution into the Inlet. We need to take precautions to

protect these species before there is any further degradation of their health.

Alaska Native hunters in Cook Inlet, who are legally allowed to take Beluga whales for subsistence. have reported lesions, and tumors in the animals over the past few years. Only recently have tissues been sampled to evaluate the health of these animals. As more analysis is completed there will be a better understanding of the overall health of this animals. Until then, and in light of these physical signs of ill health, it is prudent to, where possible, reduce the pollution into Cook Inlet. This permit is an excellent way to address this concern.

Humpback and Fin whales are also listed as "endangered" and are "strategic stocks." They do not come up the inlet, however they do feed at its southern end. Therefore there are four and possibly soon to be five "strategic stocks" which live and feed in the effluent of Cook Inlet. Two are already "endangered," and one is being considered to be listed as "endangered." I am not aware of any other area of the country where there is that type of concentration of marine mammals of concern which could all be impacted by one NPDES permit. It is incumbent upon EPA and ADEC to make this a zero discharge permit.

There has been an old saying "the solution to pollution is dilution." For centuries this has been the practice. What is now known is that no matter where pollution is created, and no matter what medium it is disposed into for dilution, it will move to areas of less energy, be metabolized and become incorporated into living systems. The EPA and the Alaska Department of Environmental Conservation have officially stated that their philosophy is one of pollution prevention. The Clean Water Act states that the national goal is to eliminate the discharge of pollutants into navigable waters. Considering the best technology available, the best management practice would be to insist on a zero discharge permit for this region.

Sincerely,

Carl M. Hild

Carl M. Hild, M.S.Sci.Mgmt.
Biologist / Planner