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Hanh Shaw to: Pooja Parikh 01/27/2009 08:57 AM

Cc: Carey Johnston, Dianne Soderlund, Courtney Hamamoto, Timothy Mayers

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Hi Pooja,

Here's the memo from Elin Miller to Ben Grumbles requesting review of the ELG exemption.

Hanh

ELG Memo to HQ.pdf

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

Reply To
Attn Of: OWW-130

AUG 1 4 2007

MEMORANDUM

SUBJECT: Request for Addition of Cook Inlet Coastal Subcategory ELG Exemption to 2008 Effluent Guidelines Program Plan

FROM: Elin D. Miller
Regional Administrator

TO: Benjamin H. Grumbles
Assistant Administrator for Water
Mail Code 4101M

Pursuant to the process identified in the Final Agency Review meeting protocol for the Preliminary 2008 Effluent Guidelines Program Plan, EPA Region 10 is providing concurrence with comment. In addition to the industry sectors currently identified in the proposed plan, Region 10 requests that the Coastal Subcategory effluent limitations exemption for Cook Inlet, Alaska, be added to the 2008 Program Plan.

Background

All facilities regulated by the Coastal subcategory effluent limitation guidelines (ELGs), except for facilities in Cook Inlet, are prohibited from discharging drill cuttings, produced water, and all other drilling wastes. Based on the record for the 1996 Coastal effluent guidelines, Region 10 determined that onsite injection and other zero discharge options were not feasible throughout Cook Inlet. Consequently, a decision was made that zero discharge for drill cuttings and produced water was not Best Available Technology (BAT) for Cook Inlet operators. Currently, Cook Inlet discharge requirements are equivalent to the effluent guidelines for operators in the Offshore Subcategory. In 2004, Region 10 received comments on the Preliminary Effluent Guidelines Plan from two Cook Inlet native villages and Cook Inletkeeper requesting that EPA eliminate the existing exemption from zero discharge for Cook Inlet facilities. Region 10 subsequently denied this request as documented in the Technical Support Document for the 2004 Effluent Guidelines Program Plan.

In addition to oil production, Cook Inlet is a high value tidal embayment heavily used for commercial, recreational and subsistence harvesting of fish and shellfish. The National Marine Fisheries Service has recently proposed the Cook Inlet Beluga whale population (a genetically unique subpopulation) for listing under the Endangered Species Act (ESA). Additionally, the State of Alaska is preparing to issue a fish consumption advisory for mercury, a monitored constituent under the Cook Inlet NPDES General Permit (Cook Inlet GP). This will be the first time in the State's history that this action has been taken.

Current Status

For the last three years EPA Region 10 has been in the process of reissuing the NPDES General Permit which provides coverage to current Cook Inlet onshore and offshore oil and gas facilities, and exploration in existing and new state and federal lease sale areas (Effective July 2, 2007). A consistent comment at all phases of permit development, from scoping through formal comment and government-to-government consultation, was the request from the ten consulted tribal governments, local citizens, native communities and some non-government entities to review and ultimately eliminate the Cook Inlet exemption. In the process of reissuing the Cook Inlet general permit, Region 10 considered the information brought forward regarding these issues, and additional observational data and information provided through the collection of Traditional Ecological Knowledge. Region 10 strongly believes that the factors identified in the 1996 ELG development and reconsidered in the 2004 Technical Support Document (TSD) have changed significantly, and reevaluation is warranted. Following is a brief summary identifying some of the most compelling facts supporting this reevaluation.

Economics

It has long been held that the Cook Inlet platforms are at the end of their production cycle, and very near the point where facilities will be shut in. While current production in the Cook Inlet fields is in decline, the projected shut in of additional facilities has not occurred. In fact, during the Cook Inlet GP reissuance, applications were filed identifying anticipated production level flows for current shut in facilities. Also, there are a number of indicators that additional production may be forthcoming. These include:

- Chevron (who took over Unocal operations in Cook Inlet in 2005 and is the largest owner of Cook Inlet facilities) stated in a March 2007 Petroleum News article "One of our primary focuses now is stemming the decline of Cook Inlet oil production and extending the life of the mature field here in the inlet." Additionally, "a second focus area is waterflood optimization including rework the existing water injection wells, add new injector wells." Lastly, Chevron plans to use state-of-the-art drilling technology to extend field limits beyond existing field perimeters, likely using extended reach drilling (ERD). Page 5-228 of the TSD notes that the declining fields in coastal Cook Inlet mean that fewer wells are being drilled and reconditioned than in 1996. This statement may no longer be accurate; and in fact, a major new drilling program especially using ERD technology, could generate a significant and unanticipated amount of drilling muds and cuttings.
- Forest Oil has notified Region 10 that they intend to commence additional exploration drilling operations in the 2007/2008 drilling season.
- In fiscal year 2004 the Cook Inlet Wellhead price was $27.85/barrel. The 2006 fiscal year Cook Inlet Wellhead price was $57.06/barrel.
- EPA Region 10 has been contacted by several potential Independent Cook Inlet explorers intending to transport mobile drilling vessels/rigs from the lower 48 to Cook Inlet for exploration activities in 2007 or 2008. (No facilities have arrived on site.)

- There have been numerous media reports of plans to explore and develop heavy oil deposits in Cook Inlet.
- Pioneer Resources is utilizing ERD to access Cook Inlet OCS reservoirs from a shore based drilling operation during 2007/2008.

Technology

In the 2004 TSD, EPA did not identify the injection of drill cuttings as the basis for BAT limitations or New Source Performance Standards (NSPS) because of the uncertainties regarding the availability of suitable geologic formations. The document did note that newer technology may also make injection of drill cuttings and produced water more available. Currently, one operator (Forest Oil) injects produced water and does not discharge drilling muds or cuttings. Additionally,

- Unocal/Chevron has applied for and been issued Underground Injection Control (UIC) permits for eight Class I wells (final integrity testing has not yet been completed). The Trading Bay Class I UIC wells are permitted for injection of 922,000 barrels of waste over 10 years.
- A recent report from Cook Inletkeeper cites availability of additional grind and inject facilities available on the Kenai Peninsula.
- As oil production declines, percentage of produced water to oil increases. Constituents and toxicity of produced water are documented.
- In the Cook Inlet operators' mixing zone applications to the State of Alaska, they projected a 50-160% increase in the volume of produced water to be discharged at the platforms or onshore facilities over the next 5 years.

Rationale

In the TSD on page 5-230, EPA notes that the economic analysis estimated that 1 of 13 platforms would close, and 2 additional platforms would incur severe economic impacts from applying Coastal BAT to Cook Inlet. Given the increased value of oil, the ongoing operations of this legacy field, the escalating concerns pertaining to subsistence foods and commercial fisherman regarding cumulative effects and toxicity associated with drilling muds, cutting and produced water, the potential for increased exploration and additional redevelopment within the existing field, Region 10 requests that the ELG exemption for Cook Inlet be added into the 2008 program plan.

During the 2004 review EPA noted that the agency will examine the economic and technological progress of injection technologies in future annual reviews of this sector. This commitment was made in the TSD document to the petitioners and R10 urges that this commitment be met through a reevaluation at this time. The intensity and range of resource use in Cook Inlet, the value of the resources and the complex economics of the Cook Inlet oil and gas industry coupled with increased public and tribal scrutiny and concern with this historical exemption can only be addressed and resolved through the ELG evaluation process.

The Region recognizes the resources required to complete such an evaluation and would like to offer our assistance to complete this work. Region 10 recognizes that during the 2004 planning cycle there was limited Discharge Monitoring Report (DMR) data in the Permit Compliance System (PCS) database to evaluate. Over the past year the Region has completed entry of data for Cook Inlet operators into PCS that spans from the present time back to 2004.

Please feel free to contact Mike Lidgard, Manager of the NPDES Permits Unit at (206) 553-1755. The Region 10 contact for this effort.

cc: Carey A. Johnston, OW