



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

Reply to
Attn Of: OWW-130

JUN 27 2007

Certified Mail – Return Receipt Requested

Bill Britt
Alaska Team Lead, HES
Union Oil Company of California
909 West 9th Ave.
Anchorage, Alaska 99501

Nina Hutton
Vice President – EH&S
XTO Energy
810 Houston Street
Fort Worth, Texas 76102

RE: Cook Inlet NPDES General Permit (AKG-31-5000)

Dear Mr. Britt and Ms. Hutton:

In a letter dated June 15, 2007, you requested clarification concerning the ammonia monitoring requirement in Section II.G.1, Table 7-B of the Cook Inlet Oil & Gas NPDES General Permit, NPDES Permit No. AKG-31-5000 (Permit). The U.S. Environmental Protection Agency (EPA) has reviewed the Response to Comments document that was prepared for the Permit. This review initiated a minor modification process on the Permit, pursuant to 40 C.F.R. § 122.63(a).

As explained in Response #209 of EPA's Response to Comments document, total ammonia concentrations were compared to applicable total ammonia criteria. See *also* Attachment A to the Response to Comments document. No reasonable potential is shown for ammonia and thus effluent limits were not established in the final permit. However, as further explained in Response #209, monitoring for total ammonia is required to determine whether reasonable potential exists such that ammonia effluent limits would need to be included in the next reissued permit. In referring to "unionized ammonia" in the Permit, EPA made a typographical error; EPA intended to require monitoring for total ammonia, not unionized ammonia. EPA has chosen to correct this typographical error. The enclosed pages of the permit (Tables 7-B1 through Table 7-B8) have been modified by replacing "unionized" with "total." Please replace the pages of the permit with these modified sheets.

If you have any questions regarding this modification of your permit, please contact me at (206) 553-7151 or Hanh Shaw of my staff at (206) 553-0171.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Gearheard".

Michael F. Gearheard, Director
Office of Water & Watersheds

Enclosures

cc: Sharmon Stambaugh – ADEC
Mike Stahl – ConocoPhillips Alaska, Inc.

Table 7-A: Effluent Limitations and Monitoring Requirements for Produced Water and Produced Sand

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Sample Frequency	Sample Type
Flow Rate (mgd)	Report	Report	1/Week	Estimate
Produced Sand	No Discharge	No Discharge	--	--
Oil and Grease	29 mg/l	42 mg/l	1/Week	-- note 1
pH < 1 MGD note 3	6.0 to 9.0 S.U.		1/Month	Grab
pH > 1 MGD note 3	6.0 to 9.0 S.U.		1/Week	Grab
Free Oil	Report note 2		1/Day	Visual note 2

Footnotes

- 1 The sample type shall be either grab, or a 24-hour composite which consists of the arithmetic average of the results of 4 grab samples taken over a 24-hour period. If a sample is unavailable to be analyzed and the permittee has explained the reason in the DMR, averaging of the remaining samples is permitted. If only one sample is taken for any one month, it must meet both the daily and monthly limits. Samples shall be collected prior to the addition of any seawater to the produced water waste stream. See Section II.G.6.b of this permit
- 2 See Section II.G.6.b of this permit
- 3 based on the previous month's monthly average discharge rate.

Table 7-B: Facility Specific Incremental Water Quality Based Limits and Monitoring Requirements**Table 7-B1: Granite Point Treatment Facility and Platform**

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH note 1	14 mg/l	20 mg/l	1/Month	Grab
TAqH note 1	--	--	1/Month	Grab
Total Ammonia	--	--	Quarterly	Grab
Copper ^{me3}	67 ug/l	130 ug/l	1/Month note 2	Grab
Mercury ^{no,e3}	3.1 ug/l	7.9 ug/l	1/Month note 2	Grab
Manganese ^{note3}	6.1 mg/l	12.3 mg/l	1/Month note 2	Grab
Silver ^{noLe1}	37 ug/l	74 ug/l	1/Month note 2	Grab
Zinc ^{note3}	1.5 mg/l	3.1 mg/L	1/Month note 2	Grab
WET	1341 TUc	2691 TUc	1/Quarter note 2	Grab

Table 7-B2: The East Foreland Facility

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	24 mg/l	32 mg/l	1/Month	Grab
TAqH ^{note 1}	–	–	1/Month	Grab
Total Ammonia	–	–	Quarterly	Grab
Copper ^{note3}	60 ug/l	90 ug/l	1/Month ^{note}	Grab
Mercury ^{note3}	0.5 ug/l	0.8 ug/l	1/Month ^{note}	Grab
Manganese ^{note3}	7.9 mg/l	15.8 mg/l	1/Month ^{note 2}	Grab
Silver ^{note3}	46 ug/l	149 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note3}	3.1 mg/l	6.1 mg/L	1/Month ^{note 2}	Grab
WET	1209 TUc	2425 TUc	1/Quarter ^{note2}	Grab

Table 7-B3: Platform Anna

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	109 mg/l	183 mg/l	1/Month	Grab
TAqH ^{note 1}	–	–	1/Month	Grab
Total Ammonia	–	–	Quarterly	Grab
Copper ^{note3}	53 ug/l	79 ug/l	1/Month ^{note 2}	Grab
Mercury ^{note3}	3.8 ug/l	9.5 ug/l	1/Month ^{note 2}	Grab
Manganese ^{note3}	7.4 mg/l	14.8 mg/l	1/Month ^{note2}	Grab
Silver ^{note3}	687 ug/l	1378 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note3}	22 mg/l	57 mg/L	1/Month ^{note 2}	Grab
WET	574 TUc	1152 TUc	1/Quarter ^{note 2}	Grab

Table 7-B4: Platform Bruce

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	78 mg/l	143 mg/l	1Month	Grab
TAqH ^{note 1}	–	–	1/Month	Grab
Total Ammonia	–	–	Quarterly	Grab
Copper ^{noM³}	1429 ug/l	2867 ug/l	1/Month ^{note 2}	Grab
Mercury ^{note 3}	3.7 ug/l	9.2 ug/l	1/Month ^{note 2}	Grab
Manganese ^{note 3}	7.2 mg/l	14.4 mg/l	1/Month ^{note 2}	Grab
Silver ^{note 3}	7.3 ug/l	11.0 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note 3}	28 mg/l	47 mg/L	1/Month ^{note 2}	Grab
WET	2149 TUc	4312 TUc	1/Quarter ^{note 2}	Grab

Table 7-B5: Platform Baker

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	128 mg/l	257 mg/l	1/Month	Grab
TAqH ^{note 1}	–	–	1/Month	Grab
Total Ammonia	–	–	Quarterly	Grab
Copper ^{no1 **}	435 ug/l	873 ug/l	1/Month ^{note 2}	Grab
Mercury ^{noC³}	0.3 ug/l	0.4 ug/l	1/Month ^{note 2}	Grab
Manganese ^{noLe³}	7.1 mg/l	14.2 mg/l	1/Month ^{note 2}	Grab
Silver ^{noLe³}	173 ug/l	347 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note 3}	6.7 mg/l	14.3 mg/L	1Month ^{note 2}	Grab
WET	172 TUc	345 TUc	1/Quarter ^{note 2}	Grab

Table 7-B6: Platform Dillon

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	31 mg/l	42 mg/l	1/Month	Grab
TAqH ^{note 1}	--	--	1/Month	Grab
Total Ammonia	--	--	Quarterly	Grab
Copper ^{note3}	9.3 ug/l	14.0 ug/l	1/Month ^{note 2}	Grab
Mercury ^{note3}	1.2 ug/l	2.5 ug/l	1/Month ^{note 2}	Grab
Manganese ^{note3}	2.3 mg/l	4.6 mg/l	1/Month ^{note 2}	Grab
Silver ^{note3}	28 ug/l	55 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note3}	1.2 mg/l	2.3 mg/L	1/Month ^{note 2}	Grab
WET	293 TUC	588 TUC	1/Quarter ^{note 2}	Grab

Table 7-B7: Trading Bay Production Facility

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	18 mg/l	27 mg/l	1/Month	Grab
TAqH ^{note 1}	--	--	1/Month	Grab
Total Ammonia	--	--	Quarterly	Grab
Copper ^{note3}	47 ug/l	117 ug/l	1/Month ^{note 2}	Grab
Mercury ^{note3}	0.6 ug/l	1.0 ug/l	1/Month ^{note 2}	Grab
Manganese ^{note3}	25 mg/l	50 mg/l	1/Month ^{note 2}	Grab
Silver ^{note3}	23 ug/l	47 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note3}	0.9 mg/l	1.9 mg/L	1/Month ^{note 2}	Grab
WET	283 TUC	568 TUC	1/Quarter ^{note 2}	Grab

Table 7-B8: Tyonek A

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	0.09 mg/l	0.14 mg/l	1Month	Grab
TAqH ^{note 1}	--	--	1/Month	Grab
Total Ammonia	--	--	Quarterly	Grab
Copper ^{note3}	328 ug/l	1033 ug/l	1/Month ^{note 2}	Grab
Mercury ^{note3}	0.05 ug/l	0.10 ug/l	1/Month ^{note 2}	Grab
Manganese ^{note3}	0.1 mg/l	0.2 mg/l	1/Month ^{note 2}	Grab
Silver ^{note3}	205 ug/l	411 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note3}	8.4 mg/l	17.0 mg/L	1/Month ^{note 2}	Grab
WET	268 TUc	537 TUc	1/Quarter ^{note 2}	Grab

Footnotes:

- 1 For analysis of TAH and TAqH, all analytical requirements cited in the Alaska Standards, 18 AAC 70.020(b) are applicable.
- 2 See Section II.G.6.a of this permit
- 3 All metals limits are in total recoverable form, except mercury which is total.

2. The operator of the Trading Bay Production Facility shall install a diffuser within two years of the effective date of the permit.
3. **Rerouting Platform Discharge to a Shore-Based Facility.** In situations where the platforms are not able to treat produced water and a bypass (as defined in Section VII.G) may occur, the Anna, Bruce, and Granite Point platforms may route their produced water discharge to the Granite Point Tank Farm/Treatment Facility for treatment and discharge. Platforms A, C, Baker, and Dillon may route their produced water discharge to the East Forelands Production Facility. The permittee must provide a written submission with the next DMR that describes why rerouting was necessary, and the anticipated time that rerouting is expected to continue. The permittee must cease rerouting as soon as possible.
4. **Trading Bay Production Facility Groundwater.** Trading Bay is authorized to discharge treated ground water extracted pursuant to State Compliance Order #91-23-01-053-02 as part of the produced water waste stream. The produced water limitations and monitoring requirements apply to the combined waste stream of treated ground water and produced water.