



United States Environmental Protection Agency
 Region 10
 1200 Sixth Avenue, Suite 900
 Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE UNDER THE
 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 GENERAL PERMIT

FOR OIL AND GAS EXPLORATION, DEVELOPMENT AND
 PRODUCTION FACILITIES
 IN STATE AND FEDERAL WATERS IN COOK INLET, ALASKA

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4 (the Act or CWA), the following discharges:

<u>Discharge Number</u>	<u>Discharge Description</u>
001	Drilling Fluids and Drill Cuttings
002	Deck Drainage
003	Sanitary Wastes
004	Domestic Wastes
005	Desalination Unit Wastes
006	Blowout Preventer Fluid
007	Boiler Blowdown
008	Fire Control System Test Water
009	Non-Contact Cooling Water
010	Uncontaminated Ballast Water
011	Bilge Water
012	Excess Cement Slurry
013	Mud, Cuttings, Cement at Seafloor
014	Waterflooding Discharges
015	Produced Water and Produced Sand
016	Completion Fluids
017	Workover Fluids
018	Well Treatment Fluids
019	Test Fluids

are authorized from Offshore and Coastal Subcategories of the Oil and Gas Extraction Point Source Category (40 CFR Part 435, Subparts A and D) to Cook Inlet, Alaska, and in accordance with the effluent limitations, monitoring requirements, prohibitions, and other conditions set forth herein.

This Permit is issued on *November 21, 2011*

This Permit shall become effective on *December 7, 2011*

This Permit and the authorization to discharge shall expire at midnight, **July 2, 2012**.

The permittee shall reapply for a permit in accordance with Section I.D.3. prior to the expiration date of this permit if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this *27th* day of *October* 2011.



Michael A. Bussell
Director, Office of Water & Watersheds

Only pages affected by the re-proposal of the limitations

described in the Fact Sheet

are included in this final permit action

The page numbers correspond to the pages in the permit as a whole.

The grey-shaded effluent limits highlighted in the following tables
are the limits that are reaffirmed by EPA.

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. 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
(Effluent Limits from AKG-31-5000)**

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 ^{note3}	67 ug/l	130 ug/l	1/Month ^{note 2}	Grab
Mercury ^{note3}	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 ^{note3}	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
(Effluent Limits from AKG-31-5000)

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 2}	Grab
Mercury ^{note3}	0.5 ug/l	0.8 ug/l	1/Month ^{note 2}	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 ^{note 2}	Grab

Table 7-B3. Platform Anna
(Effluent Limits from AKG-31-5000)

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 ^{note 2}	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
(Effluent Limits from AKG-31-5000)

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	78 mg/l	143 mg/l	1/Month	Grab
TAqH ^{note 1}	–	–	1/Month	Grab
Total Ammonia	–	–	Quarterly	Grab
Copper ^{note3}	1429 ug/l	2867 ug/l	1/Month ^{note 2}	Grab
Mercury ^{note3}	3.7 ug/l	9.2 ug/l	1/Month ^{note 2}	Grab
Manganese ^{note3}	7.2 mg/l	14.4 mg/l	1/Month ^{note 2}	Grab
Silver ^{note3}	7.3 ug/l	11.0 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note3}	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
(Effluent Limits from AKG-31-5000)

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 ^{note3}	435 ug/l	873 ug/l	1/Month ^{note 2}	Grab
Mercury ^{note3}	0.3 ug/l	0.4 ug/l	1/Month ^{note 2}	Grab
Manganese ^{note3}	7.1 mg/l	14.2 mg/l	1/Month ^{note 2}	Grab
Silver ^{note3}	173 ug/l	347 ug/l	1/Month ^{note 2}	Grab
Zinc ^{note3}	6.7 mg/l	14.3 mg/L	1/Month ^{note 2}	Grab
WET	172 TUc	345 TUc	1/Quarter ^{note 2}	Grab

Table 7-B6. Platform Dillon
(Effluent Limits from AKG-31-5000)

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
(Effluent Limits from AKG-31-5000)

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
(Effluent Limits from AKG-31-5000)

Parameter	Effluent Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Frequency	Sample Type
TAH ^{note 1}	0.09 mg/l	0.14 mg/l	1/Month	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.