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MAR 20 2012

DNMS

**Martin Todd Farish**  
CSP  
P.O. Box 196105, NSK-45  
Anchorage, AK 99519-6105  
(907) 659-7646 (phone)  
N1169@conocophillips.com

Certified Mail  
Return Receipt Requested  
7010 1060 0000 5094 0955

March 12, 2012

US NRC Region IV  
Attn: Carol Hill, Licensing Assistant  
1600 East Lamar Boulevard  
Arlington, TX 76011-4511

Dear Ms. Hill,

Attached please find an application to amend License #50-27783-01 to include the addition of a Tracerco Profiler fixed gauge at ConocoPhillips Alaska's Alpine Oilfield.

The fixed gauge contains an Am-241 source with a maximum activity of 1.29 Ci. This does not exceed either the maximum activity per source or maximum activity per device as specified on License #50-27783-01.

If you have any questions, or need additional information, please give me a call at (907) 659-7646.

Sincerely,

Martin Todd Farish, CSP

Attachment

Safety/Radiation/6.13/Alpine

577162

## APPLICATION FOR MATERIALS LICENSE AMENDMENT

March 12, 2012

US NRC Region IV  
ATTN: Carol Hill, Licensing Assistant  
1600 East Lamar Boulevard  
Arlington, TX 76011-4511

1. **This is an application for an amendment to License # 50-27783-01:**

Addition of a new fixed gauge

2. **Name and mailing address of applicant:**

ConocoPhillips Alaska, Inc.  
700 G Street  
P. O. Box 100360  
NSK 45  
Attention: Todd Farish  
Anchorage, AK 99510-0360

3. **Address where licensed material will be used or possessed:**

ConocoPhillips Alaska, Inc.  
Alpine Oil Field  
Alpine, AK

4. **Name of person to be contacted about this license:**

Martin Todd Farish

**Telephone Number:**

907.659.7646

5. **Radioactive Materials:** 43 sources at 30 mCi each

Isotope	Manufacturer & Model No. of Source Assemblies	Maximum Activity	Manufacturer & Model No. of Gauge
Am-241	Isotope Products Laboratory Model AM1.G10	1.29 Ci	Tracerco Profiler PRI 146 (ZP 1200-T)

6. **Purpose for which licensed material will be used:**

Install a fixed gauge to delineate levels of crude oil, gas, and water in the Alpine primary separator by mapping the densities of each phase.

7. **Individual responsibility for radiation safety program and their training experience:**

Martin Todd Farish, CSP  
Completed Radiation Safety Officer training.

## APPLICATION FOR MATERIALS LICENSE AMENDMENT

### 8. **Training for individuals working in or frequenting restricted area:**

Initial training for the safe operation and required periodic maintenance (to include leak testing of the source) will be performed by the installer/distributor, Tracerco. This training will be given to the authorized users of the unit.

Personnel working in the vicinity of the Alpine Primary Separator will be instructed in basic hazards of radiation, the location and function of the device, safety precautions, and procedures in the event of an emergency. Training will be tailored to be commensurate with the individual's assignment in the vicinity of the fixed gauge. Additional training will be provided to both authorized users and other personnel that will routinely be working in the vicinity of the Alpine Tracerco Profiler. This training will be computer based with a subject matter consisting of general radiation safety, safety precautions, ConocoPhillips commitment to ALARA, and emergency procedures.

Initial documentation from the manufacturer and experience with an identical installation indicate that under routine conditions of handling, storage, and use of this device, it is unlikely that personnel will receive a dose in excess of established regulatory exposure limits.

### 9. **Facility and Equipment:**

The location of the fixed gauge is compatible with the conditions of normal use and consideration of use as stated on Supplier Operation & Maintenance Manual for Tracerco Profiler.

#### Radiological Safety:

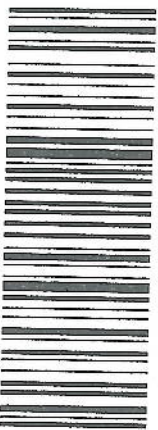
It is our normal practice to supply all equipment as specified except the radioactive sources. These will normally be shipped to site prior to commissioning by Tracerco Services engineers. The sources will be shipped in a suitable type "A" container to ensure that the sources are safely packed and shielded for transport. When received on site, the sources will be kept in a secured area until the arrival of Tracerco Services commissioning engineers, who will install the source array into its dip pipe. Prior to arrival of the sources, the site registration will be amended to include the additional sources. Tracerco Services Radiation Protection Advisor (RPA) may be contacted for advice with regard to licenses, registration, etc.

The Profiler contains Americium-241 sources. The sources emit a low energy (60keV) gamma ray that is easily shielded. When the profiler is operational, there will be no measurable dose rate outside of the vessel from the sources, even when the vessel is empty. The sources are all contained within a single arming rod, which is locked into place and must not be removed by unauthorized persons. For vessel entry during shutdown operations, the arming rod can be locked shut. This is achieved by pushing down on the lever at the neck of the profiler and inserting a padlock into the hole provided. This action withdraws the sources behind a shield and reduces the dose rate to less than 7.5 microsieverts/hr ( $\mu\text{Sv}$ ) at 10 cm. Because it is not possible to receive an effective body dose  $> 7.5$  microsieverts/hr ( $\mu\text{Sv}$ ), a controlled area is not required. During operational periods, the lever will not be locked in the open position but may be wired or pinned to prevent accidental movement.

### 10. **Radiation Safety Program:**

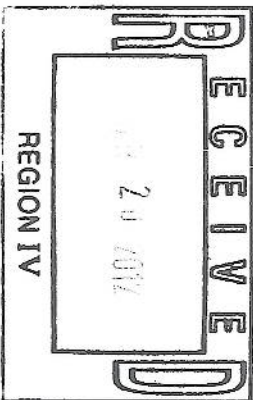
This additional device will be added to the existing operating and emergency procedures for this facility.

# Phillips



7010 1060 0000 5094 0955

RETURN RECEIPT  
REQUESTED



UNITED STATES POSTAGE  
PRIMEV BONNES  
02 1A  
0004625492  
MAILED FROM ZIP CODE 99501  
MAR 15 2012  
\$06.40

2012

US NRC Region IV  
Attn: Carol Hill, Licensing Assistant  
1600 East Lamar Blvd  
Arlington, TX 76011-4511



DATE  
03/20/2012

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE  ConocoPhillips Alaska, Inc. ATTN: Martin Todd Farish Radiation Safety Officer P.O. Box 196105 (NSK-45) 700 G Street Anchorage, Alaska 99519-6105	LICENSE NUMBER 50-27783-01
	MAIL CONTROL NUMBER 577162
	LICENSING AND/OR TECHNICAL REVIEWER ch

This is to acknowledge the receipt of your:

LETTER and/or  APPLICATION      DATED: 03/12/2012

The initial processing, which included an administrative review, has been performed.

AMENDMENT     TERMINATION     NEW LICENSE     RENEWAL

- There were no administrative omissions identified during our initial review.
- This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.
- Your application for a new NRC license did not include your taxpayer identification number. Please fill out NRC Form 531, located at the following link:

<http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf>

Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387

A copy of your action has been emailed to our License Fee and Accounts Receivable Branch, in our Headquarters office in Rockville, MD. You will be contacted separately if there is a fee issue involved.

Your application has been assigned the above listed **MAIL CONTROL NUMBER**. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region IV  
U. S. Nuclear Regulatory Commission  
DNMS/NMSB - B  
1600 E. Lamar Boulevard  
Arlington, TX 76011-4511  
(817) 200-1103 or (817) 200-1140

*Emailed 3/20/12*

BETWEEN:

Accounts Receivable/Payable  
and  
Regional Licensing Branches

[ FOR ARPB USE ]  
INFORMATION FROM LTS

Program Code: 03120  
Status Code: Pending Amendment  
Fee Category: 3M 3P  
Exp. Date: 08/31/2014  
Fee Comments:  
Decom Fin Assur Reqd: N

### License Fee Worksheet - License Fee Transmittal

#### A. REGION

##### 1. APPLICATION ATTACHED

Applicant/Licensee: CONOCO PHILLIPS ALASKA, INC.  
Received Date: 03/20/2012  
Docket Number: 3036627  
Mail Control Number: 577162  
License Number: 50-27783-01  
Action Type: Amendment

##### 2. FEE ATTACHED

Amount: \_\_\_\_\_

Check No.: \_\_\_\_\_

##### 3. COMMENTS

Signed: \_\_\_\_\_

*Carl L Hill*

Date: \_\_\_\_\_

*3/20/12*

#### B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / / )

1. Fee Category and Amount: \_\_\_\_\_

##### 2. Correct Fee Paid. Application may be processed for:

Amendment: \_\_\_\_\_

Renewal: \_\_\_\_\_

License: \_\_\_\_\_

3. OTHER \_\_\_\_\_

\_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_