HCR

22

<TARGET><BILL>HCR 22</BILL><SUBJECT>HCR 22</SUBJECT><COMM>HRES28</COMM></TARGET>

HOUSE COMMITTEE REPORT

(9)
Date Referred to Committee: February 26, 2014 **FURTHER REFERRALS:**

Date of Committee Action: 4/16/14

The RESOURCES Committee considered: **HCR 22**

HOUSE CONCURRENT RESOLUTION NO. 22
Urging the governor to take all action necessary to keep in-state oil refiners in operation and to keep oil refining operations in the state competitive.

HCR 22-IN-STATE REFINERIES

Recommends it be replaced with [ ] HCS *or* [X] CS *for* HCR 27 (RES)
For Senate Bills with new title: [ ] Technical Title [ ] New Title: HCR_____ **[ ] Same Title [X] New Title**

[ ] attach amendments
[ ] add new referral to _____Committee
[ ] Letter of Intent_____Committee

List of Abbrev for Depts.:
ADM
CED
COR
CRT
EED
DEC
DFG
GOV
DHS
LWF
LAW
LEG
MVA
DNR
DPS
REV
DOT
UA

***NEW* FISCAL NOTES**
*FN# is assigned by Chief Clerk's Office

*FN#	List by Dept(s):	Fiscal	Indet.	Zero
	LEG			X

***PREVIOUS* FISCAL NOTES**

FN#	List by Dept(s):	Fiscal	Indet.	Zero

Signing with recommendations	Printed Last Name	DP	DNP	NR	AM
	Johnco	✓			
					X
	Hawker	★			
	Tarr			X	
Paul R Seaton	SEATON	X			
Chair:					
Chair:	FEIGE	X			

Alaska State Legislature
House of Representatives
Representative Tammie Wilson

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Rep.Tammie.Wilson@akleg.gov

House Concurrent Resolution 22

"Urging the governor to take all action necessary to keep in-state oil refiners in operation and to keep oil refining operations in the state competitive"

Flint Hills will begin decommissioning the extraction unit integral to gasoline production on May 1, 2014 and decommissioning of the balance of crude unit two on June 1, 2014, which impacts production of jet fuel, heating fuel, asphalt and some specialty fuels. It is vital that the State work expediently with any potential buyers.

The refiners along TAPS have no choice but to buy Alaska North Slope (ANS) crude, and ANS currently is one of the highest-priced crude oils in the country. The State has the power to directly address the problem of high ANS crude prices by selling royalty oil to in-state refiners at prices that would broadly serve the State and its residents by helping to preserve and foster local refining capacity.

Sulfolane was found to be highly effective in separating high purity aromatic compounds from hydrocarbon mixtures using liquid-liquid extraction. This process is widely used in refineries. The discovery in late 2009 of sulfolane in drinking water wells near the North Pole Refinery has led to an extensive investigation of contaminated groundwater. The plume is nearly 2.5 miles wide and 3 miles long, one of the largest in the state. Flint Hills Resources has responded to residents by providing an alternate drinking water source. The State needs to expediently determine a long-term solution for North Pole residents so that they may be guaranteed clean drinking water.

I ask for your support of HCR 22 by urging the governor to take all action necessary to keep in-state oil refiners in operating and competitive.

Fiscal Note

State of Alaska
2014 Legislative Session

Bill Version: HCR 22
Fiscal Note Number:
() Publish Date:

Identifier: HCR22-LEG-SESS-03-15-14
Title: IN-STATE REFINERIES
Sponsor: T.WILSON
Requester: House Resources

Department: Alaska Legislature
Appropriation: Legislative Operating Budget
Allocation: Session Expenses
OMB Component Number: 782

Expenditures/Revenues

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2015 Appropriation Requested	Included in Governor's FY2015 Request	Out-Year Cost Estimates				
OPERATING EXPENDITURES	**FY 2015**	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
Total Operating	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Fund Source (Operating Only)

None							
Total	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Positions

Full-time							
Part-time							
Temporary							

Change in Revenues							

Estimated SUPPLEMENTAL (FY2014) cost: 0.0 *(separate supplemental appropriation required)*
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY2015) cost: 0.0 *(separate capital appropriation required)*
(discuss reasons and fund source(s) in analysis section)

ASSOCIATED REGULATIONS

Does the bill direct, or will the bill result in, regulation changes adopted by your agency?
If yes, by what date are the regulations to be adopted, amended or repealed?

Why this fiscal note differs from previous version:

Initial Version

Prepared By: Jessica Geary, Finance Manager — Phone: (907)465-6626
Division: Legislative Affairs Agency — Date: 03/15/2014 12:06 PM
Approved By: Pamela Varni, Executive Director — Date: 03/15/14
Agency: Legislative Affairs Agency

FISCAL NOTE ANALYSIS

STATE OF ALASKA **BILL NO.** HCR 22
2014 LEGISLATIVE SESSION

Analysis

This legislation has zero fiscal impact on the Legislative Affairs Agency.

NORTH POLE REFINERY SALE PROPOSAL

February 25, 2014

On-Site

1. The buyer would take over on-site remediation responsibilities.
2. FHR would recognize the liability being assumed by the buyer through a purchase price reduction.
3. The State would release FHR from liability for on-site contamination and protect it from contribution claims.
4. The State would return to its earlier cleanup level of 350 ppb for on-site groundwater and 943 ppb for on-site soil.
    a. These are the numbers the State was using before anyone knew that sulfolane had migrated off-site.
    b. Using these numbers is justified because:
        i. No one will be drinking the groundwater on-site or off-site (see below).
        ii. The groundwater remediation system captures sulfolane tainted water, no matter the level, before it moves off-site.
        iii. The buyer needs to be able to estimate the liability it is assuming.
        iv. The buyer needs to be able to operate the sulfolane unit to produce gasoline without the fear that an incident will result in a massive cleanup liability driven by a drinking water standard that is so low (14 ppb). Accommodating a buyer's needs in this regard won't endanger the public because no one will be drinking the water.

Off-Site

1. All parties need certainty as to what the future will hold for the off-site contamination.
    a. North Pole residents need a long term solution for drinking water. The State has seen fecal coliform contamination in North Pole residential groundwater wells, so removing sulfolane from the water won't make it fit to drink.

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b. A buyer needs certainty that it won't be assuming liability for off-site contamination that it didn't cause.

c. FHR needs certainty that a sale of the refinery won't result in the company paying for any spills the buyer has in the future

d. The State needs certainty as to what FHR will contribute to a long-term solution.

e. The City of North Pole and contractors need certainty that they can move soil and dewater construction sites without bearing unnecessary expense.

2. A long term solution for North Pole residents is a public water system, together with institutional controls such as municipal ordinances, restrictive covenants, easements or comprehensive plans that prohibit or limit access to the groundwater for use as drinking water.

3. FHR would:

   a. Pay 10% of the cost of extending a public water system, up to a maximum of $25MM. This is a reasonable allocation because:

      i. FHR has been paying 100% of the costs up to this point (over $70MM, with $25MM of that uninsured).

      ii. Alaska law apportions liability to the parties who owned the facility or the land at the time the discharge occurred.

      iii. There is no question that the off-site sulfolane came from spills that happened when Williams owned the refinery and the State owned the land.

      iv. The State has seen fecal coliform contamination in North Pole residential groundwater wells, meaning that there is a water quality issue outside of sulfolane.

   b. Be released and protected from contribution claims for off-site contamination.

4. The State would release a buyer and protect it from contribution claims for off-site contamination existing before closing, except to the extent, and only to the extent, the buyer has additional releases that impact groundwater off-site or fails to operate the on-site groundwater remediation system.

Sec. 46.03.822. Strict liability for the release of hazardous substances. (a) Notwithstanding any other provision or rule of law and subject only to the defenses set out in (b) of this section, the exception set out in (i) of this section, the exception set out in AS 09.65.240, and the limitation on liability provided under AS 46.03.825, the following persons are strictly liable, jointly and severally, for damages, for the costs of response, containment, removal, or remedial action incurred by the state, a municipality, or a village, and for the additional costs of a function or service, including administrative expenses for the incremental costs of providing the function or service, that are incurred by the state, a municipality, or a village, and the costs of projects or activities that are delayed or lost because of the efforts of the state, the municipality, or the village, resulting from an unpermitted release of a hazardous substance or, with respect to response costs, the substantial threat of an unpermitted release of a hazardous substance:

(1) the owner of, and the person having control over, the hazardous substance at the time of the release or threatened release; this paragraph does not apply to a consumer product in consumer use;

(2) the owner and the operator of a vessel or facility, from which there is a release, or a threatened release that causes the incurrence of response costs, of a hazardous substance;

(3) any person who at the time of disposal of any hazardous substance owned or operated any facility or vessel at which the hazardous substances were disposed of, from which there is a release, or a threatened release that causes the incurrence of response costs, of a hazardous substance;

(4) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by the person, other than domestic sewage, or by any other party or entity, at any facility or vessel owned or operated by another party or entity and containing hazardous substances, from which there is a release, or a threatened release that causes the incurrence of response costs, of a hazardous substance;

(5) any person who accepts or accepted any hazardous substances, other than refined oil, for transport to disposal or treatment facilities, vessels or sites selected by the person, from which there is a release, or a threatened release that causes the incurrence of response costs, of a hazardous substance.

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arctic slope regional corporation

THE ALASKA REFINING INDUSTRY
A PATH TO SUSTAINABILITY
February 2014

BACKGROUND

For nearly two years, ASRC and Petro Star have engaged in discussions with members of the Parnell Administration and the Alaska legislature concerning the growing number of issues faced by the Alaska refining industry. The recent announcement by Flint Hills that it is closing its North Pole refinery has generated discussion across the state that has focused on how best to preserve surviving Alaska refiners. Petro Star Inc., with small refineries at North Pole and in Valdez, is the only Alaska-owned refinery in the state, and Petro Star's owner, Arctic Slope Regional Corporation, is deeply interested in insuring that its doors remain open for business.

In past discussions we have stressed that the economic climate in the refining industry is suffocating in-state refiners. This continues to be true. Many of the concerns we will discuss in this whitepaper are not new; a few were created by Flint Hills' announcement. We have organized them solution-by-solution.

Flint Hills' drastic announcement underscores that the refining industry in Alaska is not healthy. Many of its ills can be directly traced to the high price Alaska refiners must pay for raw materials, a problem that is exacerbated for refiners along TAPS like Petro Star, which must pay enormous "TAPS Quality Bank" fees to re-inject their return oil into TAPS.

In 2013, the average combined costs of ANS crude oil and Quality Bank by themselves represented nearly ninety-five percent (95%) of the value of commercial jet fuel ***delivered*** to the Port of Anchorage.

The Quality Bank is discussed last in this whitepaper only because it is primarily federally regulated and the State has limited options to control it. We therefore are asking the Legislature and Parnell Administration to do what is possible, but always be mindful that until the Quality Bank is fixed, the refiners along TAPS will be profoundly disadvantaged.

IN-STATE REFINERS NEED CHEAPER CRUDE OIL

The refiners along TAPS have no choice but to buy ANS crude, and ANS currently is one of the highest-priced crude oils in the country. Indeed, ANS prices are so high that several refineries in the Pacific Northwest – including one owned by a North Slope

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producer – are investing in the infrastructure necessary to transport Bakken crude from North Dakota by rail to their refineries rather than purchase ANS and other waterborne crudes delivered by tankers.

The State has the power to directly address the problem of high ANS crude prices by selling royalty oil to in-state refiners at prices that would broadly serve the State and its residents by helping to preserve and foster local refining capacity.

SUPPORT PSI & GVEA COOPERATIVE EFFORTS

The Golden Valley Electric Association operates the pipeline that connects the Flint Hills and Petro Star refineries in North Pole to TAPS. This pipeline was significantly expanded to accommodate increased volumes of oil required by Flint Hills' predecessors, MAPCO and Williams, all while Petro Star increased its capacity only very modestly. Approximately 15% of GVEA's pipeline revenue came from Petro Star last year, and the rest came from Flint Hills. GVEA and Petro Star are working together to try to fashion a solution for this lost revenue, and very likely will be returning to the Legislature to seek support for a resolution that will allow both parties to continue to efficiently serve the Interior.

ASSIST PSI & ARR WITH TRANSPORTATION INFRASTRUCTURE

Petro Star and the Alaska Railway currently are in discussions to decide on what infrastructure improvements would be necessary to allow Petro Star to move fuel from its Valdez Refinery to the Interior and points north more efficiently than by truck. Flint Hills' announcement has added tremendous urgency to these discussions because closure of the Flint Hills refinery will both add to the need for more Petro Star product in the Interior and greatly diminish the Alaska Railroad's customer base—an effect with ramifications throughout Alaska. Petro Star and the Alaska Railroad are working together to decide how best to address these issues and will need help from the Legislature to implement whatever is the best solution.

REFINERS ALONG TAPS NEED RELIEF FROM THE TAPS QUALITY BANK.

The TAPS Quality Bank was designed to compensate for the impact of refinery return streams on the price of ANS crude, but it has grown to be the second highest cost to TAPS refiners—exceeded only by crude oil purchases. In 2013, Petro Star's Quality Bank expense exceeded ***all*** the operating costs at both its refineries, including labor and refinery fuel.

Petro Star has paid over $525 million in penalties over the last nine years, and nearly half that amount in the past three years alone: The Quality Bank is getting worse at the same time market conditions are getting worse for Alaska refiners and its effects are devastating. Over these past three years, most of the margin between Petro Star's crude oil price and the price it received for its refined products like commercial jet fuel was paid out in Quality Bank penalties.

In sum, the TAPS Quality Bank has been transformed from a mechanism to adjust for minor impacts to crude oil value into a huge profit center for Alaska's major oil producers and the state government (through its royalty oil and tax collections from major oil producers). Faced with the combination of exorbitant Quality Bank fees and high crude costs, Petro Star and ASRC have had to put on hold capital projects that would grow Petro Star's business in Alaska and benefit consumers statewide just when these are needed most.

For these reasons, we appeal to legislators to urge the Governor to strive for a fair settlement of the pending TAPS Quality Bank proceedings. Because the Quality Bank is primarily federally regulated, this is the principal way that the Legislature can help to solve the problems it presents.

Ideally, a settlement would restore Quality Bank penalties to more fair and sustainable levels. Relief from the same excessive Quality Bank fees that penalize the refiners would have the major additional benefit of encouraging the production of heavy oil on the North Slope, as the current Quality Bank penalizes heavy oil resources just as it does refinery return oil streams.

Critically, a more equitable Quality Bank would help to forestall further attrition of instate refining capacity and the negative consumer and economic impacts that would inevitably follow.

CONTACTS:

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U.S. Energy Information Administration

Frequently Asked Questions

When was the last refinery built in the United States?

There were a total of 143 operable petroleum refineries in the United States as of January 1, 2013.

The "newest" refinery in the United States began operating in 2008 in Douglas, Wyoming. However, the newest refinery with atmospheric distillation capacity greater than 100,000 barrels per day began operating in 1977 in Garyville, Louisiana.

Ground was broken in March 2013 for construction of a new refinery in North Dakota. The 20,000-barrel-per-day (bbl/d) Dakota Prairie facility is scheduled to be built in 20 months.

Capacity has also been added to existing refineries through upgrades or new construction. The most recent examples include:

- In 2012, Motiva upgraded its refinery in Port Arthur, Texas, making it the largest refinery in the U.S. with a capacity of 600,250 barrels per calendar day.
- In 2009, Marathon upgraded its Garyville, Louisiana refinery. As of January 1, 2013, the capacity is more than double its original 1977 capacity.

The newest refineries currently operating in the United States are as follows:

Year Built	First Operated	Location	Original Owner	Original Capacity	Current Owner	2011 Capacity	Type
2008	2008	Douglas, WY	Interline Resources	3,000	Antelope Refining	3,800	Simple
1998	1998	Atmore, AL	Goodway	4,100	Goodway	4,100	Simple
1993	1993	Valdez, AK	Petro Star	26,300	Petro Star	55,000	Simple
1991	1992	Ely, NV	Petro Source	7,000	Foreland	2,000	Simple
1986	1987	North Pole, AK	Petro Star	6,700	Petro Star	19,700	Simple
1985	1986	Anchorage, AK	ARCO	12,000	ConocoPhillips	15,000	Simple
1981	1982	Thomas, OK	OK Refining	10,700	Ventura	12,000	Simple
1979	1980	Wilmington, CA	Huntway	5,400	Valero	6,300	Simple
1978	1979	Vicksburg, MS	Ergon	10,000	Ergon	23,000	Simple
1978	1979	North Slope, AK	ARCO	13,000	BP Exp AK	10,500	Simple
1978	1978	North Pole, AK	Earth Resources	22,600	Flint Hills	127,987	Simple
1977	1978	Lake Charles, LA	Calcasieu	6,500	Calcasieu	78,000	Simple
1976	1977	Garyville, LA	Marathon	200,000	Marathon	522,000	Complex
1976	1977	Krotz Springs, LA	Gold King	5,000	Alon	80,000	Complex
1975	1975	Corpus Christi, TX	Saber	15,000	Valero	200,000	Complex
1967	1967	Good Hope, LA	Kirby Industries	6,500	Valero	205,000	Complex

Learn more:

Sulfolane Investigation Update

Provided by the Technical Project Team to inform the North Pole community on recent developments in the investigation and remediation of soil and groundwater contamination related to the North Pole refinery.

December 2013

Additional sampling continues to provide more pieces of the puzzle

Scientists have a better picture of the sources of sulfolane and petroleum contamination after last summer's sampling at the Flint Hills Resources Alaska's (FHRA) North Pole refinery site, and they've learned more about the extent of the contamination. It's all work that will help design ways to clean up and control the contamination.

Last summer's work should provide enough information to transition from the site characterization to the feasibility study, steps that are set in state law as part of the cleanup process, assuming the data collected to date is sufficient. FHRA and the Alaska Department of Environmental Conservation (DEC), and their contractors, will analyze the results this winter.

Site Characterization

In complex contaminated sites, site characterization is usually a multiple-year process, and it has been so for this site. The site characterization step, which began in November 2009, was extended to include last summer's work because there were still unknowns about how sulfolane moves and reacts in Interior Alaska's unique environment and geology, such as the permafrost. That extension meant that the schedule for the site needed to be revised. (See *Cleanup timeline* graphic, p. 5.)

A field technician performs groundwater sampling from a monitoring well at Flint Hills Resources' North Pole refinery in 2013. Results from this sampling will be included in the site characterization report that FHRA will submit to DEC in December 2013. (FHRA photo)

Under the revised schedule, FHRA is to submit reports this winter (2013-2014) on the data that was collected last summer. The feasibility study (explained in the "Feasibility study" section, p. 5) is scheduled to be completed in the fall of 2014, and the final cleanup plans are set to be complete in the spring of 2015.

The investigation of sulfolane contamination in North Pole has been unprecedented for any contaminant in Alaska due to the distance that sulfolane has traveled – the plume is roughly 3½ miles long, 2½ miles wide and at least 300 feet deep – and the number of private drinking water wells that it has affected. (Health officials since 2010 have advised people to not drink water impacted by sulfolane.)

*(Continued, see **Cleanup process**, p. 4)*

In this Issue

North Pole Open House on Sulfolane

Tuesday, January 14, 2014 • 5–7 p.m.

at the North Pole City Hall
125 Snowman Lane

Come meet with staff overseeing the investigation and remediation of the sulfolane groundwater plume in North Pole. The open house is designed to update the community on the project and answer questions.

For more information, call DEC at (907) 451-2182.

Report from Flint Hills

By FHRA

The summer and fall of 2013 was a busy time for Flint Hills Resources Alaska (FHRA). The company's employees, along with its consultants and contractors such as Rolling Stone Inc., Slayden Plumbing & Heating, Great Northwest Inc., Homestead Drilling, GeoTek Alaska Inc., ARCADIS, Shannon & Wilson Inc., Barr Engineering, Arctic Home Living and others, have worked hard on a number of projects both on and off the refinery property.

So far this year, 17 homes and businesses have had a long-term water solution provided, bringing the total of long-term solutions installed in the community to 303. FHRA also conducted an additional door-to-door survey of homes inside the city limits of North Pole in the affected area to ensure people are aware of the Alaska Department of Health and Social Services' recommendation to use non-impacted water for the watering of vegetable gardens. FHRA worked with homeowners in the few cases that were identified to be without a garden water source (other than a well impacted by sulfolane) to enable them to have access to a water source for gardening activities. The goal of this survey was to make sure residents were aware of the gardening recommendation and to facilitate access to an adequate source for each gardener.

One project that received quite a bit of attention from the community was the permafrost mapping survey. This work was conducted by a company that specializes in the technology and process of permafrost mapping. This survey included a helicopter carrying a survey instrument from a cable and flying in a grid pattern over designated areas both in and outside the plume area. The instrument measured electromagnetic fields to collect information about the depth and thickness of permafrost beneath the ground surface. Understanding permafrost formations helps the technical teams working on the groundwater project to better understand groundwater movement and aid in the prediction of future plume behavior.

As part of the onsite investigation phase, there were about 80 monitoring wells installed and about 240 soil and water samples collected over the summer and fall. This work produced water and soil data that are being analyzed. This information will be included in the site characterization report that will be submitted to the Alaska Department of Environmental Conservation in December 2013.

(Above) A soil sample taken on the refinery's property on Aug. 21, 2013. Analyses of these and other samples were conducted for sulfolane, benzene and other contaminants of concern. This information will be included in the site characterization report that FHRA will submit to DEC in December 2013. (FHRA photo)

(Right) A Flint Hills contractor drills into the ground to install a new monitoring well, one of 80 installed this summer. (FHRA photo)

From the Project Manager's Desk

It's been a year since I started managing the sulfolane investigation. My experience started with a number of challenges, most of them of a technical nature. However, one of the main challenges I encountered was how to reach out effectively to you – the people of North Pole who live, work, or own property in or near the plume area.

I began by putting myself in your shoes and asking, "What would I like to know?" What came to mind was that I'd want to know, first, "Who's making sure that the water I drink is safe?" And second, "Who can I ask for information when I need it?"

That's why, when I introduced myself in our February 2013 newsletter, I wanted to make sure that you know I'm here to answer your questions. Many of you contacted me. Then, last May, we asked for your feedback in a questionnaire we mailed to your homes. Thank you all for your questions and feedback! Your feedback during this process is extremely valuable.

Another enormous challenge I've encountered is understanding the distribution of the sulfolane contamination – a challenge our entire technical team faces. Over the past several years, during our site characterization and investigation process, new unknowns and difficulties have emerged. The first step was to determine the extent of the plume to ensure all impacted residents were protected.

Now the challenges have evolved to include, among many others, understanding:
(1) how the plume got that far and that deep,
(2) why some wells are so much more impacted than others,
(3) how the permafrost impacts the groundwater flow and sulfolane distribution,
(4) how sulfolane degrades,
(5) if it can be cleaned up, and
(6) what the most efficient and effective method to clean it up would be.

Flint Hills Resources Alaska (FHRA) will deliver a draft of the 2013 Site Characterization Report at the end of the year. When that happens, the technical team will be at a point in the cleanup process where we must move toward developing remediation (cleanup) alternatives, considering everything we know about the contamination and everything that we don't know. We'll do that using a conceptual site model – a way of integrating all the site information. The conceptual site model will tell us if there's missing data that needs to be collected at the site. It will also facilitate the selection of remedial alternatives to be evaluated in the next step of the process (as described the **Cleanup Process** article on p. 5, "Feasibility study" section).

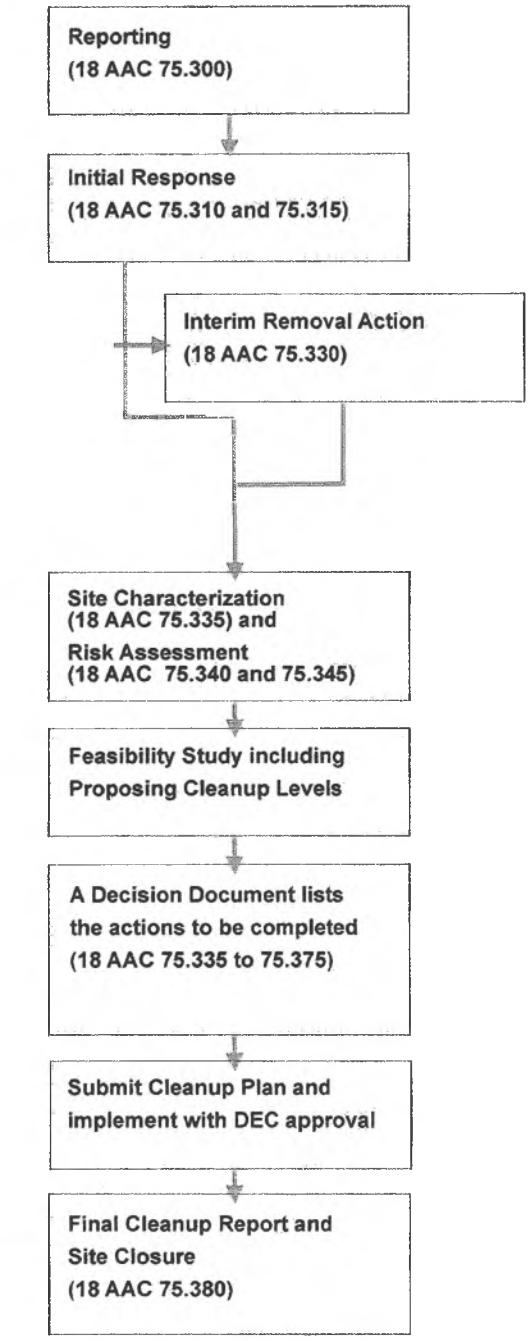
On DEC's behalf, I thank you for your patience and understanding throughout this process. The cleanup process is one that can be filled with uncertainties; it is our job to make the best effort to reduce those uncertainties to acceptable levels. See you at the Jan. 14 Open House!

Sincerely,

Tamara Cardona

Technical Project Team (TPT) Project Manager
Contaminated Sites Program, Spill Prevention & Response Division
Alaska Department of Environmental Conservation
Phone: **(907) 451-2192**, Email: **tamara.cardona@alaska.gov**

Cleanup process of the Alaska Department of Environmental Conservation



"18 AAC 75.xxx" refers to Title 18 of the Alaska Administrative Code of Regulations, Chapter 75, and its specific sections, where these steps are mandated and described.

Cleanup process, *Continued from Page 1*

To understand how sulfolane behaves in the environment, scientists have gone far beyond typical soil and groundwater sampling.

FHRA's work last summer included installing and sampling additional monitoring wells:

- On the refinery property and offsite in the plume area to better define sulfolane source areas,
- At offsite "hot spots" (areas that have higher concentrations than others), and
- At the groundwater plume boundaries (areas where elevated levels of sulfolane decrease below DEC's site-specific cleanup level of 14 parts per billion sulfolane for groundwater).

There are some residential wells in the plume area that draw water from below permafrost. FHRA began sampling some of those deep wells regularly last summer. There aren't any monitoring wells that go below the permafrost.

Some of the work FHRA did last summer that is far beyond "typical" soil and groundwater sampling includes:

- Using geophysical surveys to estimate the various locations and depths of the permafrost,
- Collecting very detailed soil samples to get a picture of where the sulfolane is stored in soil, and
- Doing other testing to understand where the contaminated groundwater flows.

The company also increased its ability to recover sulfolane from the groundwater below the refinery site, as well as a number of other activities. (See **Report from Flint Hills** article, p. 2.)

Also last summer, a DEC contractor collected samples from seven gravel pits and the Badger Slough in the plume area to see if sulfolane was present. The sampling showed that it was not present in surface water. (See **Gravel Pits** article, p. 6.)

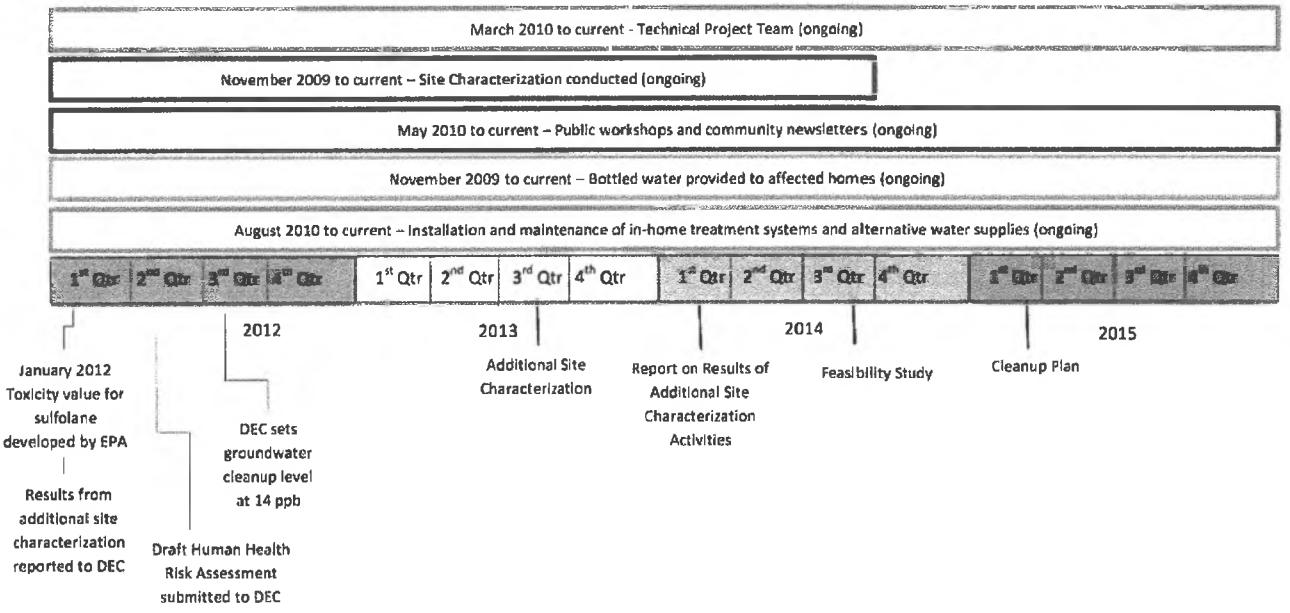
Last summer's work, and previous site characterization work, was based on the following goals:

- Eliminate exposure to the community for as long as it takes to clean up the site.
- Identify all the sources of sulfolane.
- Establish a monitoring network that measures sulfolane migrating off the refinery.

Risk assessment

A risk assessment is part of the site characterization; it's the step in which information is gathered about the site and how people may be exposed to contamination. (See the "Cleanup Process" diagram at left.) Regulators use the risk assessment, as well as other information, to determine the final cleanup levels. DEC in 2012 set the final cleanup level for sulfolane in groundwater at the site at 14 parts per billion,

Cleanup timeline for the North Pole Refinery, sulfolane contamination*



*Timeline reflects final deliverables.

ich means that groundwater with more than 14 parts per billion sulfolane must be remediated.

Interim action

Since site characterization takes time, interim actions may be taken to ensure that people and the environment are safe during the process. Interim actions are especially important for large areas of contamination or sites with a chemical about which limited information is known. Both instances apply in the case of the refinery sulfolane plume.

DEC's goals during interim actions are similar to those during the site characterization:

- Eliminate the current exposure to sulfolane,
- Achieve and maintain control of the sources of contamination,
- Eliminate releases or leaking issues,
- Minimize the potential for new spills,
- Aggressively respond to and clean up any new spills that may occur.

The interim actions at the site have included FHRA providing alternative sources of drinking water to people in homes with sulfolane in their wells. On the refinery property, the interim actions include FHRA's "pump and treat" system that pumps contaminated groundwater and treats it by removing sulfolane and petroleum contamination. The pump and treat system has operated at the refinery since 2001; it has been upgraded since then as recently as last summer.

Feasiblity study

Once the site characterization allows an adequate understanding of the contamination, the next step is the feasibility study, where FHRA researches, evaluates and recommends to DEC one or more cleanup techniques based on criteria in federal regulations set by the U.S. Environmental Protection Agency: protectiveness, practicality, effectiveness, conformity with state and federal regulations, and consideration of comments from the public.

When the feasibility study is complete and DEC approves it, cleanup techniques will be determined, based on the previous steps: site characterization, the feasibility study and established cleanup level.

Cleanup plan

Next, FHRA will develop a cleanup plan, subject to DEC approval as well. The plan takes into account current and future use of the site; the degree of treatment; and protection of human health and safety and the environment. How FHRA will minimize the spread of contamination and monitor the extent of contamination in the future are also part of the cleanup plan.

To date, DEC has asked FHRA to meet the goal of zero contaminant migration offsite and to implement aggressive treatment at the refinery.

Throughout the whole cleanup process, DEC seeks public participation. So far, that has included a site-specific website, regular newsletters, open houses, public meetings, group email list postings, mailings, surveys and fact sheets. DEC encourages the public to remain engaged as the cleanup process transitions from the site characterization phase into the cleanup phase.

Gravel pits: Sulfolane not detected

Surface water samples collected this summer from seven gravel pits and the Badger Slough north of the Flint Hills Resources Alaska (FHRA) refinery showed no evidence of sulfolane. One sediment and one groundwater sample showed very low concentrations.

The samples were collected from areas within the sulfolane groundwater plume to see if sulfolane could be detected in the gravel pits that are directly above contaminated groundwater, said Jane Paris, a senior hydrogeologist with ERM, an Alaska Department of Environmental Conservation (DEC) contractor.

DEC did the sampling to ensure that when the gravel is being mined, sulfolane-impacted gravel would not be transferred to another area, possibly contaminating that area. Pond No. 6 (see aerial map, p. 7) is the only gravel pit in the sulfolane plume that's currently being mined for gravel.

DEC also did the sampling to ensure that it was safe to eat the fish in Kimberly Lake – the only place in the plume area that the Alaska Department of Fish and Game stocks with fish.

The results show that the surface water does not contain sulfolane and there's no danger in moving gravel to other areas.

The results also show that there's no sulfolane in any part of Kimberly Lake, so sulfolane is not expected to accumulate in the lake's plants and animals, including fish, said Stephanie Buss, a toxicologist and DEC contractor.

"As far as sulfolane, eating fish from Kimberly Lake is not expected to be a health concern," said Ali Hamade, an Environmental Public Health program manager with the Alaska Department of Health and Social Services.

To do the sampling, DEC identified 11 gravel pits or ponds – some were dug years ago as gravel pits but gravel was never extracted – in the area of the sulfolane groundwater plume north and northwest of the refinery. Landowners gave permission for seven of the 11 to be sampled.

Of the seven ponds, including Kimberly Lake, the technicians sampled three locations at each of six of the gravel pits, in one location at one pit, and three locations at Badger Slough. All together, there were 22 surface water samples, 22 sediment samples and nine for groundwater.

The two samples that showed sulfolane aren't a cause for concern, Paris said. One was in a sediment sample. It had 10.9 parts per billion sulfolane, which is lower than DEC's screening level* of 38 parts per billion for sulfolane in soil. DEC doesn't have a screening level for sediment, so the level for soil is used for comparison. The difference between sediment and soil is that sediment is located in areas where it's saturated by water most of the time, such as the bottom of a pond.

The results show that the surface water does not contain sulfolane and there's no danger in moving gravel to other areas.

The results also show that there's no sulfolane in any part of Kimberly Lake...

"As far as sulfolane, eating fish from Kimberly Lake is not expected to be a health concern."

—Ali Hamade, Environmental Public Health program manager DHSS

The other sample with a sulfolane detection came from shallow groundwater. It had 20.6 parts per billion sulfolane. That's above the DEC's cleanup level for the site of 14 parts per billion, but it's lower than known sulfolane levels in deeper groundwater in the same area. Drinking water wells in that area are currently under FHRA's alternate water supply program.

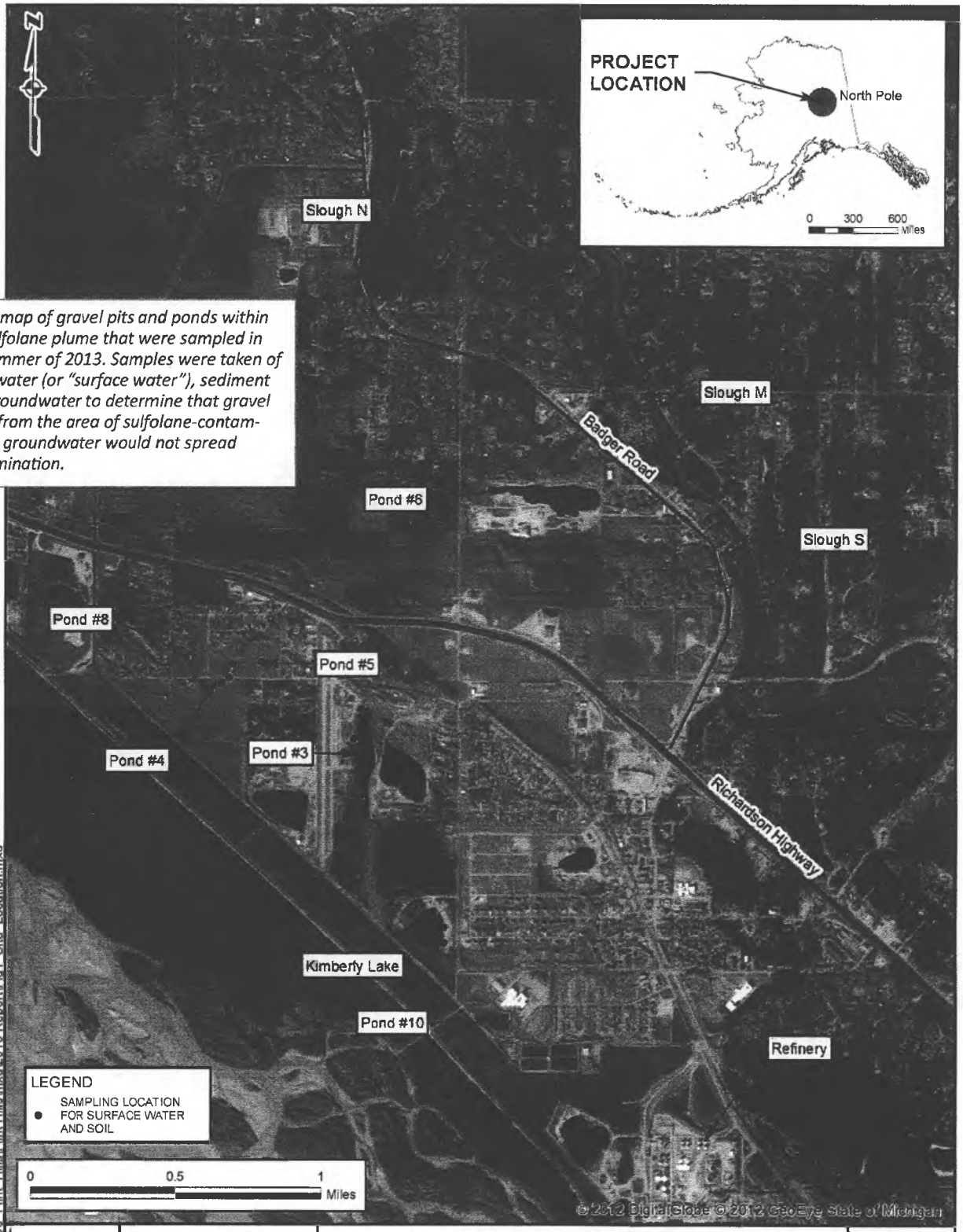
For each area that was sampled, the technicians first took a surface water sample several feet out from shore.

For the sediment samples, the technicians dug a hole in the bank of the gravel pit a couple of feet from the water. They dug down about a foot until they hit water. Then they scooped out saturated soil (sediment) from the side or bottom of the hole, below the water at the bottom of the hole. They used new scoops for every sample to avoid cross-contamination.

For the groundwater samples, the technicians dug a pit 2 to 3 feet below the ground surface until they hit about 6 inches of water, and took a sample of that.

"We're pleased that the results show there are no concerns about mining gravel in the sulfolane plume or fishing in the ponds," Paris said. "Things can and do change over time, of course, so we'll keep our eyes on the plume movement to decide if later we need to conduct more sampling."

** Screening levels or criteria are risk-based levels that are used initially at a site before site-specific data is available; the levels are very conservative because there are so many unknowns about the site.*



Aerial map of gravel pits and ponds within the sulfolane plume that were sampled in the summer of 2013. Samples were taken of pond water (or "surface water"), sediment and groundwater to determine that gravel taken from the area of sulfolane-contaminated groundwater would not spread contamination.

M:\GIS\Projects\0149896_Flint_Hills\Flint Hills\mxd\2013 Report\Fig1_Site_Location.mxd

Source: **********

ERM
825 W. 8th Ave., Anchorage, AK 99501, (907) 258-4880

DATE: JUNE 2013
CHKD: J.P.
DRWN: S.M.C.
PROJ. No.: 0149896

SITE LOCATION

GRAVEL PITS & BADGER SLOUGH
GRAVEL PITS SURFACE WATER AND GRAVEL SAMPLING REPORT
North Pole, Alaska

FIGURE 1

DEC hears from North Pole residents

The Alaska Department of Environmental Conservation (DEC) has heard from 172 people who answered an agency survey questionnaire, responding with questions and comments on topics ranging from concerns about the health effects of sulfolane to impacts on property values and how to plan for a water supply while building a new home in the sulfolane plume area.

DEC mailed out the survey in June to 1,092 North Pole residents who live in or near the plume, using the Fairbanks North Star Borough address records, and had 59 returned as undeliverable. The survey asked people to answer questions such as whether they know if their property is in the sulfolane plume, what water they're using for drinking and gardening, and what they'd like to know about the sulfolane investigation.

> **"We heard from people we've never heard from. The information that we've gleaned from people's responses is extremely valuable to the project... Thank you so much to everyone who took the time to respond."**
>
> *—Tamara Cardona, DEC's project manager*

Tamara Cardona, DEC's project manager for the North Pole refinery site, said the response to survey has been very positive.

"We heard from people we've never heard from. The information that we've gleaned from people's responses is extremely valuable to the project," she said. "Survey responses are still trickling in. Thank you so much to everyone who took the time to respond."

Of the 172 people who answered the survey,123 said they live in the plume area. Most of the 172 said they work, live, recreate, visit, own property and/or have friends or family in the plume area.

DEC has followed up individually with the roughly 50 people who asked questions or said they had concerns.

Of the people who have property in the plume area, about 30 percent said they're on city water, and 15 percent said they don't have a well. Of those who have a well, less than 1 percent said they don't have an alternate water supply.

Of the people who said they have an alternate water supply, 24 percent have a granular-activated carbon filter water treatment system and 17 percent have bottled water delivered. Less than 1 percent have a tank and get drinking water delivered, either arranging it themselves or through Flint Hills Resources.

Of the 92 respondents who said they live in the plume area and garden, 25 percent use untreated well water to water their gardens, and 11 percent use city water, tank water from a Flint Hills-installed tank or something else, such as rainwater. Less than 1 percent use treated well water.

Some of the respondents didn't know if they live in the plume area. DEC has contacted those residents and told them whether they live in the plume.
For people who aren't sure whether they live in the plume, they should contact Tamara Cardona (907-451-2192, Tamara.Cardona@alaska.gov).

If you live in the plume area and your well hasn't been tested yet, please contact Shannon Price in the Flint Hills Groundwater Office (907-488-0723, Shannon.Price@fhr.com) as soon as possible to have your well tested.

(See the Project Contacts box below for more contact information.)

Project Contacts

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City of North Pole
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(907) 488-8584, mayor@northpolealaska.com

Fairbanks North Star Borough
Mayor Luke Hopkins
(907) 459-1300, mayor@co.fairbanks.ak.us

dec.alaska.gov/spar/csp/sites/north-pole-refinery

NORTH POLE REFINERY - PROJECT HOME

Updated: Feb. 7, 2014

PUBLIC NOTICE ANNOUNCEMENT REGARDING THE CLEANUP LEVEL FOR SULFOLANE

Deadline for public comment: February 10, 2014
See the Public Notice, issued Jan. 17th, 2014

Flint Hills Resources Alaska has filed a request with the Commissioner of DEC for an *adjudicatory hearing*. This request challenges the establishment of a site-specific alternative cleanup level (ACL) for sulfolane in groundwater of 14 parts per billion (ppb). Flint Hills proposes 362 ppb as the ACL instead. The hearing request is a result of DEC's Conditional Approval of the Revised Draft Human Health Risk Assessment for the refinery. DEC's Conditional Approval established 14 ppb as the groundwater ACL acceptable for the protection of human health and the environment. A higher cleanup level as requested by Flint Hills would allow a higher concentration of sulfolane to remain in the groundwater without being cleaned up.

Along with the request for an *adjudicatory hearing*, Flint Hills has also requested a *stay* (or hold) on the completion of certain scheduled activities, including the feasibility study and cleanup plan, until the *adjudicatory* hearing is decided. **Related documents are available from the DEC public notice page at the link above or these links below:**

* **Flint Hills Refinery Request for Adjudicatory Hearing** (1.5MB PDF)
* **DEC's Acknowledgment Letter to Flint Hills** (84KB PDF)

The DEC Commissioner's Office issued an important public notice on January 17, 2014. The public notice of Flint Hills' requests for *adjudicatory hearing* and a *stay* allows for the public to provide written responses to the Commissioner's Office within 20 days of the public notice commenting on whether the commissioner should grant or deny Flint Hills' *adjudicatory hearing* and the *stay* requests.

For information on how to comment, click here to see the Public Notice.

PROJECT LINKS

- Project Home
- Frequently Asked Questions
- Site History
- Technical Project Team
- Site Characterization
- Human Health and Toxicology
- Drinking Water
- Emerging Contaminants
- Documents
- Maps
- Communication
- Glossary
- Feedback
- Contact Information

SUMMARY

The discovery in late 2009 of sulfolane in drinking water wells near the North Pole Refinery, about 15 miles east of Fairbanks, has led to an extensive investigation of contaminated groundwater. The plume is nearly 2.5 miles wide and 3 miles long, one of the largest in the state. Flint Hills Resources of Alaska, the current refinery owner, responded quickly to offer affected residents an alternate drinking water source. Sulfolane, an emerging contaminant, was at first not officially listed as a hazardous chemical, and its long-term health effects from exposure have not yet been studied. This event has been unprecedented for the Contaminated Sites Program due to the number of properties affected with private drinking water wells and the size of the plume. For an overview in more detail, see Frequently Asked Questions.

STATE-DIRECTED PRIORITIES ARE TO:

- Eliminate exposure to sulfolane.
- Pursue aggressive on-site remediation.
- Eliminate off-site contaminant migration.
- Achieve and maintain source control:
  - Maintain an inspection process that eliminates releases or leaking issues and minimizes the potential for new spills.
  - Aggressively respond to and clean up any new spills.
- Understand the size and shape of the contaminant plume and its potential for future movement in order to develop a comprehensive and protective cleanup plan.

- Complete an evaluation of risk that accounts for all exposure pathways and cumulative risk.

LOOK AT WHAT'S HAPPENING

- DEC Sulfolane Investigation Update - December 2013.
- New map showing sulfolane plume monitoring results for the 1st quarter of 2013.
- New document: Groundwater Monitoring Report 1st quarter 2013.
- Fact sheet on Health Recommendations and Next Steps (June 2013).
- Updated Frequently Asked Questions (June 4, 2013).
- Also available: Site Characterization Addendum (December 2012), Site Characterization Work Plans for 2013, and Interim Remedial Action Plan Addendum (January 2013).
- National Toxicology Program Accepts Sulfolane, Initiates Toxicity Studies
- Developing a Groundwater Cleanup Level for Sulfolane
- TPT Meeting Summaries
- Laboratory Key Elements for Sulfolane Analysis in Water, Soil and Plants

OTHER PROJECT NEWS

- DHSS Sulfolane Health Consultation and Press Release
- ATSDR Sulfolane Health Consultation
- North Pole Garden Sulfolane Sampling Results and Press Release

Past newsletters, TPT updates and other information can be found on the Documents page.

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arctic slope regional corporation

THE ALASKA REFINING INDUSTRY
A PATH TO SUSTAINABILITY
February 2014

BACKGROUND

For nearly two years, ASRC and Petro Star have engaged in discussions with members of the Parnell Administration and the Alaska legislature concerning the growing number of issues faced by the Alaska refining industry. The recent announcement by Flint Hills that it is closing its North Pole refinery has generated discussion across the state that has focused on how best to preserve surviving Alaska refiners. Petro Star Inc., with small refineries at North Pole and in Valdez, is the only Alaska-owned refinery in the state, and Petro Star's owner, Arctic Slope Regional Corporation, is deeply interested in insuring that its doors remain open for business.

In past discussions we have stressed that the economic climate in the refining industry is suffocating in-state refiners. This continues to be true. Many of the concerns we will discuss in this whitepaper are not new; a few were created by Flint Hills' announcement. We have organized them solution-by-solution.

Flint Hills' drastic announcement underscores that the refining industry in Alaska is not healthy. Many of its ills can be directly traced to the high price Alaska refiners must pay for raw materials, a problem that is exacerbated for refiners along TAPS like Petro Star, which must pay enormous "TAPS Quality Bank" fees to re-inject their return oil into TAPS.

In 2013, the average combined costs of ANS crude oil and Quality Bank by themselves represented nearly ninety-five percent (95%) of the value of commercial jet fuel ***delivered*** to the Port of Anchorage.

The Quality Bank is discussed last in this whitepaper only because it is primarily federally regulated and the State has limited options to control it. We therefore are asking the Legislature and Parnell Administration to do what is possible, but always be mindful that until the Quality Bank is fixed, the refiners along TAPS will be profoundly disadvantaged.

IN-STATE REFINERS NEED CHEAPER CRUDE OIL

The refiners along TAPS have no choice but to buy ANS crude, and ANS currently is one of the highest-priced crude oils in the country. Indeed, ANS prices are so high that several refineries in the Pacific Northwest – including one owned by a North Slope

Corporate Headquarters • PO Box 129 • Barrow, Alaska 99723-0129 • 907.852.8533 or 907.852.8633 • FAX 907.852.5733

producer – are investing in the infrastructure necessary to transport Bakken crude from North Dakota by rail to their refineries rather than purchase ANS and other waterborne crudes delivered by tankers.

The State has the power to directly address the problem of high ANS crude prices by selling royalty oil to in-state refiners at prices that would broadly serve the State and its residents by helping to preserve and foster local refining capacity.

SUPPORT PSI & GVEA COOPERATIVE EFFORTS

The Golden Valley Electric Association operates the pipeline that connects the Flint Hills and Petro Star refineries in North Pole to TAPS. This pipeline was significantly expanded to accommodate increased volumes of oil required by Flint Hills' predecessors, MAPCO and Williams, all while Petro Star increased its capacity only very modestly. Approximately 15% of GVEA's pipeline revenue came from Petro Star last year, and the rest came from Flint Hills. GVEA and Petro Star are working together to try to fashion a solution for this lost revenue, and very likely will be returning to the Legislature to seek support for a resolution that will allow both parties to continue to efficiently serve the Interior.

ASSIST PSI & ARR WITH TRANSPORTATION INFRASTRUCTURE

Petro Star and the Alaska Railway currently are in discussions to decide on what infrastructure improvements would be necessary to allow Petro Star to move fuel from its Valdez Refinery to the Interior and points north more efficiently than by truck. Flint Hills' announcement has added tremendous urgency to these discussions because closure of the Flint Hills refinery will both add to the need for more Petro Star product in the Interior and greatly diminish the Alaska Railroad's customer base—an effect with ramifications throughout Alaska. Petro Star and the Alaska Railroad are working together to decide how best to address these issues and will need help from the Legislature to implement whatever is the best solution.

REFINERS ALONG TAPS NEED RELIEF FROM THE TAPS QUALITY BANK.

The TAPS Quality Bank was designed to compensate for the impact of refinery return streams on the price of ANS crude, but it has grown to be the second highest cost to TAPS refiners—exceeded only by crude oil purchases. In 2013, Petro Star's Quality Bank expense exceeded ***all*** the operating costs at both its refineries, including labor and refinery fuel.

Petro Star has paid over $525 million in penalties over the last nine years, and nearly half that amount in the past three years alone: The Quality Bank is getting worse at the same time market conditions are getting worse for Alaska refiners and its effects are devastating. Over these past three years, most of the margin between Petro Star's crude oil price and the price it received for its refined products like commercial jet fuel was paid out in Quality Bank penalties.

In sum, the TAPS Quality Bank has been transformed from a mechanism to adjust for minor impacts to crude oil value into a huge profit center for Alaska's major oil producers and the state government (through its royalty oil and tax collections from major oil producers). Faced with the combination of exorbitant Quality Bank fees and high crude costs, Petro Star and ASRC have had to put on hold capital projects that would grow Petro Star's business in Alaska and benefit consumers statewide just when these are needed most.

For these reasons, we appeal to legislators to urge the Governor to strive for a fair settlement of the pending TAPS Quality Bank proceedings. Because the Quality Bank is primarily federally regulated, this is the principal way that the Legislature can help to solve the problems it presents.

Ideally, a settlement would restore Quality Bank penalties to more fair and sustainable levels. Relief from the same excessive Quality Bank fees that penalize the refiners would have the major additional benefit of encouraging the production of heavy oil on the North Slope, as the current Quality Bank penalizes heavy oil resources just as it does refinery return oil streams.

Critically, a more equitable Quality Bank would help to forestall further attrition of instate refining capacity and the negative consumer and economic impacts that would inevitably follow.

CONTACTS:

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Parnell absolves future owners of North Pole refinery of liability for groundwater contamination

Matt Buxton / mbuxton@newsminer.com | Posted: Friday, February 28, 2014 12:37 pm

JUNEAU—Gov. Sean Parnell has decided that the state won't consider a new owner of the Flint Hills refinery in North Pole liable for the groundwater contamination stemming from years of chemical spills at the site. A company official, meanwhile, indicated a number of parties are reportedly looking to buy the soon-to-close plant.

Parnell's announcement was heralded as good news for the Interior economy but left questions about the long-term environmental clean up and mitigation of soil and groundwater contamination in the North Pole area unanswered.

Earlier this week, Flint Hills spokesman Jeff Cook sent a letter to Interior lawmakers saying that the company has had "a number of inquiries from parties interested in purchasing our North Pole Refinery and keeping it in operation" but said he needed assurances from the state that a prospective buyer won't have to pay for the clean up.

"These conditions will require a dedicated and timely effort by Governor Parnell and his administration, along with encouragement and support from all those interested in seeing the refinery continue in operation," Cook wrote in the letter.

Among the conditions, Flint Hills notes "a buyer needs certainty that it won't be assuming liability for off-site contamination that it didn't cause."

Parnell responded Thursday afternoon with a post on his official Facebook page, saying that in the interest of "tackling the important issue of refinery capacity in our state" that a new buyer won't need to worry about the cleanup costs.

"Today, I agreed the state would be willing to absolve a third-party purchaser of the Flint Hills Refinery from environmental liability to the state relating to historic spills at the site," he wrote.

The announcement drew a barrage of mostly negative Facebook comments from people concerned whether or not the sulfolane that leaked into the North Pole area's soil and groundwater would be addressed.

Parnell responded Friday morning that he will still be holding Flint Hills and the previous owner, Williams Alaska, under which most of the spills are believed to have occurred, liable.

Flint Hills announced the closure of its plant earlier this year, with a planned decommissioning to begin on May 1. Company officials cited the sulfolane spill as a key factor in its decision. The plant closure would eliminate about 90 local jobs and bring a steep decline in freight revenue for the Alaska Railroad.

Lawmakers and the state have struggled with determining who's ultimately responsible for the cleanup. Flint Hills has paid $75 million to date, $25 million of which was not from insurance, according to Cook's letter. Flint Hills has also been unable in court to hold Williams Alaska responsible because the statute of limitations has expired.

Some lawmakers have also wondered if the state is responsible because it owned the refinery land during part of Williams' operations, a point that Cook mentioned in his letter.

Parnell spokeswoman Sharon Leighow said in an email statement that Parnell will soon be filing a legal complaint to try to settle the issue of who's responsible for the cleanup.

"Governor Parnell is exploring all options to ensure a healthy instate refining industry while also making sure Alaskans are healthy. The Department of Law is preparing to file a complaint to determine ultimate responsibility amongst the potentially responsible parties for the contamination," she wrote. "We expect that to be filed in the next couple of weeks."

In an update to the Legislature last week, the Department of Environmental Conservation said it's pursuing Williams Alaska in addition to Flint Hills for the cleanup. It said that Flint Hills would be responsible for continuing to provide clean water to the affected properties if the company finds it's impossible to clean up the spill.

Cook's letter mentions that Flint Hills would be willing to put up 10 percent of the cost for a public water system, up to a maximum of $25 million.

Alaska Department of Environmental Conservation Deputy Commissioner Lynn Kent said the state is still pursuing cleanup efforts and that Parnell's announcement doesn't affect the state's efforts.

"The cleanup of the contamination doesn't change because property changes hands," she said.

Kent added that it's too early to say whether a piped water system is the correct answer to the spill. Whether or not it's feasible to clean up the spill is unknown, she said.

"Flint Hills doesn't independently decide the feasibility, but sometimes it's not practicable to chase a groundwater plume," she said. "The department's biggest concern is making sure that people aren't exposed to the contamination with groundwater at their source. Flint Hills has provided bottled water to residents; that's one method of ensuring that people get clean water. A piped water system would be another."

Kent said under state law a piped water system is not a requirement and that a company only needs to provide clean water as long as the contamination is a problem. She added that many of the affected properties aren't inside the city of North Pole boundaries and would either need to be annexed or form their own service area, and "we can't assume that people want a piped water system."

North Pole Rep. Doug Isaacson, the former North Pole mayor, said he was pleased to hear the news about the possibility of new owners and operators for the plant. He said he's urged Parnell to continue to take strong action to ensure that operations will continue.

"The plant is viable," he said. "We have several factors we still have to take care of to make sure they have a practicable price for fuel and a clear path forward in the environmental cleanup factors. The governor addressed the environmental, but the royalty contract is going to be another discussion."

Contact staff writer Matt Buxton at 459-7544. Follow him on Twitter: @FDNMpolitics.

Parnell: Market led Flint Hills to shut down production at refinery

Matt Buxton/mbuxton@newsminer.com | Posted: Thursday, February 6, 2014 12:23 am

JUNEAU — Gov. Sean Parnell said he believes Flint Hills shut down its jet fuel and gasoline production because of the market, not the soil and groundwater contamination the refinery cited in its initial announcement.

Speaking with reporters Wednesday, Parnell said he believes overall market forces, such as declining pipeline throughput, were the driving forces in the company's decision to halt refining, not the state's spill cleanup regulations.

"It's an accumulation of the costs of doing business, and to put one reason out there as the reason is not being accurate or truthful, based on what I heard from the company," Parnell said.

Flint Hills' announcement of the closure pinned blame on the cost of mitigating and cleaning up the sulfolane spill left by previous owners.

Parnell said it likely played a role but that the changing market is more likely at blame.

"Business decisions like that are an accumulation of factors and certainly the liability exposure played a role, but they also mentioned other forces," he said. "Those refineries are built when there's a lot of supply and the price is lower. Over time, production declines, the price and cost increases."

Flint Hills spokesman Jeff Cook admitted there were several economic factors involved in the refinery's decision to close but said it was a combination of those factors as well as DEC's unfair enforcement that ultimately brought about the decision.

In addition to the sulfolane requirements, Cook blamed state royalty oil premiums that he said unfairly target in-state refineries as well as the cost of re-injecting oil into the pipeline and the overall cost of Alaskan crude oil compared to other areas.

Cook said the state was penalizing in-state refineries by forcing them to pay more than $150 million more for royalty in-kind oil from Alaska than out-of-state refineries were forced to pay.

Cook went on to say that the state Department of Environmental Conservation, which has been overseeing the cleanup, hasn't been a willing party to negotiate.

When asked if there is some sort of change, the administration should make to royalty oil or environmental regulations to allow the plant to allow the refinery to reopen, Parnell stood by his administration's handling of the environmental clean up.

"My direction had came to this: ensuring that (the state's officials) were being reasonable in their legal strategy but protecting the public interest," he said.

When asked what, if anything, needs to change to allow the plant to reopen, Parnell said the market.

"More production," he said. "More production makes it more possible and more economic to have a plant like this. That's the bottom line."

Staff writer Weston Morrow contributed to this report.

ADN.com

Previous Story
Next Story

John Havelock: State stands to gain by purchase of North Pole refinery

By JOHN HAVELOCKFebruary 24, 2014

Why doesn't the state buy the Fairbanks-North Pole refinery? If it closes, which the Koch brothers who own the refinery say is their plan, dozens of jobs will be lost in the Fairbanks area. Since most of the refined product is shipped on the Alaska Railroad to the Anchorage International Airport, the loss of this freight will mean dozens of jobs are lost on the Alaska Railroad too. The secondary effects of job losses are well known. If the total loss is just 100 jobs, that's $5,000,000 or more in annual losses to the state's economy and more jobs lost from dollars that no longer roll over in the economy. Additional costs to the state from job losses include unemployment insurance and meeting some family distress situations. Millions in lost revenue to the Alaska Railroad mean the Railroad will be in a poorer position to take on another important societal task now on the drawing board: the opening of a commuter service to Wasilla and the Valley. The commuter service will make life safer for hundreds of Valley residents and create more jobs.

The cost to the state for this purchase should be nominal. Of what value to the Koch brothers is a closed refinery? It is a liability since the owners are obliged to tear the refinery down and restore the land.

Apart from impact on the state's economy, the state has an independent interest in maintaining Alaska's only refinery. A maritime strike, an international event that sent refined crude prices skyrocketing, a weather emergency or other unforeseen event could endanger or cut off alternative supplies coming in from abroad.

The existence of an Alaskan refinery may provide a base for expansion of oil processing or use within Alaska. The Koch brothers are owners of the refinery for the purpose of turning a profit. Apparently it is not turning a profit. Direct profitability is not as important to the state as it is to the Koch brothers because the state can see other values to the economy and an outlet for the use of the state's royalty share of TAPS oil. There is also the possibility that changes in the economic environment may make the refinery eventually profitable, a worthwhile speculation for the state but not for the Koch brothers.

There is some indication that the Anchorage International Airport triggered this turn of events because the managers of the Airport, the primary users of the refined product, determined that they could make the airport more profitable by buying fuel imported from abroad, brought up Cook Inlet in tankers. The airport conducts a huge business refueling the thousands of aircraft that carry passengers but mostly freight, in the trans-Pacific and Asia-Europe routes.

The airport is a public facility, like the state owned railroad, subject to determinations of overall benefit to the public interest of the state. The question must be asked: is the marginal value to the Airport of a reduced price of fuel purchased by it worth the damage to the economy caused by its cessation of purchases from Alaska's only refinery?

Increased tanker traffic in Cook Inlet is not to be encouraged. It happened so long ago that few people remember but we have already had one spectacular tanker collision and fire right off the Anchorage port. In the course of its investigation of the wreck of the Exxon-Valdez, the State noted that Cook Inlet, with is rocks, tides, currents and ice was a far more dangerous waterway than the passage through Prince

William Sound to Valdez. An oil spill in Cook Inlet could be as equally devastating to the fisheries and marine environment as the Exxon-Valdez.

The state is now pondering an investment of billions of dollars in a gas pipeline of speculative value. The purchase of an existing refinery involves a financial exposure of less than one percent of that proposal for more certain results. Of course there are many factors that cannot be plumbed in a brief news column but the state should at least consider funding the railroad to purchase the refinery.

John Havelock is a former Alaska attorney general. He lives in Anchorage.

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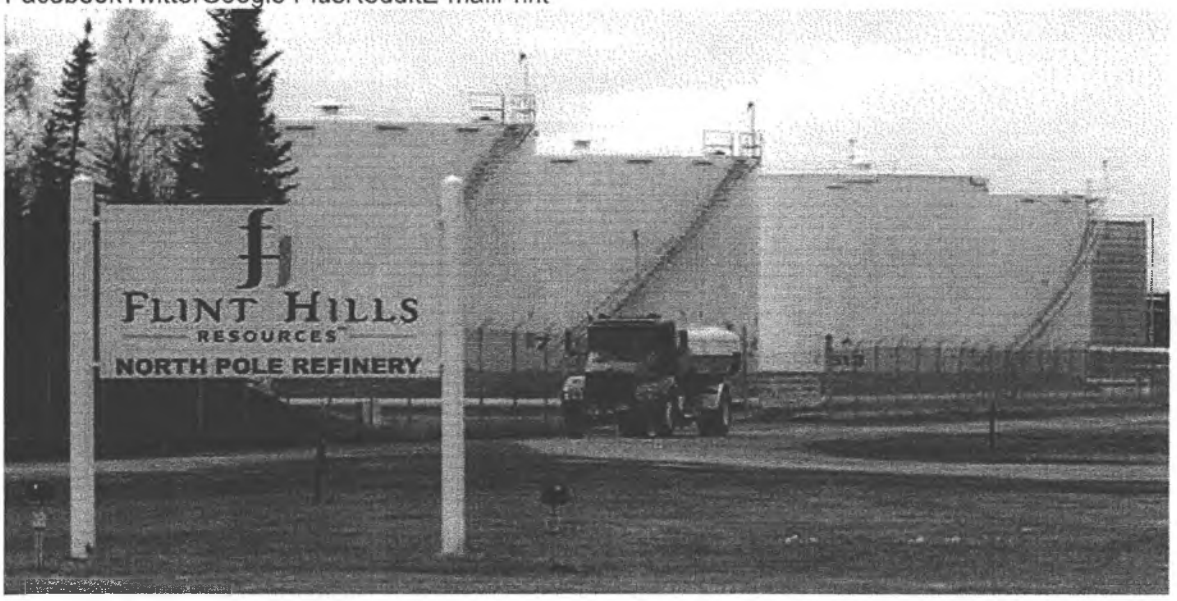
Flint Hills to shut North Pole refinery; about 80 jobs ending

By LISA DEMER

ldemer@adn.comFebruary 4, 2014



A fuel transport leaves the Flint Hills Resources North Pole Refinery on Monday, May, 12, 2008.

SAM HARREL — FAIRBANKS DAILY NEWS-MINER FILE PHOTO

The Flint Hills oil refinery in North Pole will reduce operations over the next several months and then shut down, and the company is blaming the high cost of doing business in Alaska and expensive issues with contamination that it says it inherited from the prior owner.

Flint Hill Resources Alaska LLC announced Tuesday it would shut down one of its two remaining units on May 1, ending its production of gasoline, and will shutter the second unit no later than June 1, ending production of jet fuel and other products. Two other units had closed earlier.

The refinery closure will cost the Fairbanks North Star Borough a top employer and taxpayer and Stevens Anchorage International Airport one source of locally produced jet fuel. But the impact on the Alaska Railroad, which now ships Flint Hills fuel, was unclear.

Flint Hills says it will hold onto its terminals and will bring in gasoline and jet fuel from Outside.

"We'll continue to meet our existing contracts," said Flint Hills spokesman Jeff Cook. "We have a tank farm and terminal in Anchorage and we have a tank farm and terminal in North Pole. So we'll be able to bring fuel in by rail or truck into Fairbanks and by water into Anchorage."

Flint Hills is owned by Koch Industries Inc., the Kansas-based multinational corporation.

It employs 126 people and will keep 35 in North Pole and 10 in Anchorage, Cook said. Employees are being encouraged to apply for jobs at other Flint Hills facilities and the company will cover their moving costs, he said. Those who don't stay with Flint Hills will get severance packages. People will be able to stay on the job until Nov. 1, he said.

Gov. Sean Parnell said he directed the Department of Labor and Workforce Development to help affected workers find new jobs, collect unemployment benefits and get career counseling.

Freight trains typically transport Flint Hills fuel south to Anchorage five days a week in 30 tank cars at a time, said Alaska Railroad spokesman Tim Sullivan.

"Flint Hills has been a very important customer of ours and we are currently assessing what that will mean to the railroad," he said.

Alyeska Pipeline Service Co. now buys a refinery byproduct piped in from Flint Hills to keep the crude warm in winter and reduce risk of ice and wax problems in the trans-Alaska pipeline. But Alyeska also has other ways of keeping the oil warm, said spokeswoman Michelle Egan.

A fuel consortium of airlines and carriers at the Anchorage airport three years ago expanded its fuel storage facility to buy from more suppliers, so the shutdown will have minimal impact, said Paul McElroy, Alaska Airlines spokesman.

"It may seem ironic that it's become cheaper for international carriers to import fuel to Anchorage than to have it refined and shipped from North Pole, but airlines are going to look for where they can get fuel most cheaply, and not whether it's from Alaska," Gunnar Knapp, director of the Institute of Social and Economic Research at the University of Alaska Anchorage, said in an email.

North Slope crude used to trade at a discount but now costs more than other U.S. oil, Cook said.

"So we've got higher oil costs. We've got no natural gas in Fairbanks so our energy costs for electricity and fuel require about three times what Lower 48 refineries have," he said.

Plus, a new tank farm near Anchorage being financed with an Alaska Industrial Development and Export Authority loan will be able to bring in cheaper fuel that Flint Hills can make, he said.

AIDEA, a state corporation, announced in July that its board had agreed to take on 90 percent of a $15.5 million loan to a company called Central Alaska Energy LLC to build a new, seven-million gallon tank farm at Port MacKenzie, across Knik Arm from Anchorage.

State Rep. Doug Isaacson, R-North Pole and a former mayor there, said he was livid over the closure and predicted ripple effects, including the railroad losing a main source of revenue.

"We have made it more expensive to refine instate than we have accommodated out of state. Instead of giving a $15 million benefit for an in-state refiner, we've paid $15 million to help support the import of refined fuel from out of state," he said.

The loan was one of many the agency provides to help Alaska businesses and didn't affect the Flint Hills closure, said Karsten Rodvik, AIDEA spokesman.

"This Point Mac tank farm is not even built yet and is not scheduled to be in operation until late this year," he said Tuesday evening.

Flint Hills also is dealing with a costly, serious and ongoing environmental issue.

Mike Brose, vice president of Flint Hills and the refinery manager, said in a written statement that the closure also relates to contamination caused when Williams Companies Inc. owned the refinery and the state owned the land underneath it.

"So far, neither Williams nor the state of Alaska have accepted any responsibility for the cleanup. With the already extremely difficult refining market conditions, the added burden of excessive costs and uncertainties over future cleanup responsibilities make continued refining operations impossible," Brose said in the statement.

The refinery has changed hands several times since opening in August 1977. Williams bought it from MAPCO in 1998.

The Koch brothers bought the refinery operation and terminals in 2004. Inspections at the time did not find evidence that sulfolane, an industrial solvent used in gasoline production, had migrated off the property, Cook said. That discovery came in October 2009, he said.

Kristin Ryan, director of spill response and prevention for the Department of Environmental Conservation, said in an interview Tuesday night that sulfolane was dumped on the property by Williams and at a time it wasn't considered a dangerous chemical.

In tracking other contaminates, DEC discovered the sulfolane had extended far beyond the plant boundaries, she said. Studies on rats and guinea pigs suggest that it could harm the immune systems of humans, though more research is needed.

The plume was eventually found to cover much of North Pole, she said.

Flint Hills provides a water treatment system, bulk water tanks or bottled water for 300 affected property owners, Cook said.

"That cost is going to be there regardless and they've committed to staying involved in providing safe drinking water to the public, so their costs aren't going away," Ryan said.

Reach Lisa Demer at ldemer@adn.com or 257-4390. Daily News reporter Richard Mauer contributed to this story.

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PENINSULA CLARION

Flint Hills closure puts fuel market in flux

Posted: February 8, 2014 - 9:34pm | Updated: February 8, 2014 - 9:38pm

By TIM BRADNER Morris News Service-Alaska

Alaska Journal of Commerce

Flint Hills Resources will cease refining operations at its North Pole refinery near Fairbanks this spring, the company announced Feb. 4 in a press release.

The extraction unit at the refinery will be shut down on May 1, ending gasoline production. Crude Oil Processing Unit No. 2 will shut down shortly thereafter, depending on operational requirements, but no later than June 1, according to the company.

Flint Hills will continue marketing activities in Interior Alaska, the company said.

The closure of Unit No. 2 will end production of jet fuel and all other refined products. The company will continue to market fuels through its terminals in Anchorage and Fairbanks. Supply for those terminals will come from other sources, Flint Hills announced.

The loss of refinery jobs will have an impact on Fairbanks. Flint Hills now employs 126 in Alaska and after the closure 35 will remain in Fairbanks and 10 in Anchorage to work at the company's fuel terminal, Flint Hills spokesman Jeff Cook said.

There will be major changes in Interior fuel markets, the refinery has been a major supplier of gasoline, jet fuel, diesel and other products, including to major military installations.

Those fuels will have to be supplied from Southcentral Alaska.

"This has been a difficult decision made after a long, thorough and deliberative process," said Mike Brose, a company vice president and the refinery manager.

The refinery has faced difficult economic conditions in recent years, mainly the loss of jet fuel sales to air carriers in Anchorage due to fuel imports and less demand. However, Brose said the financial liability of soil and groundwater contamination left by previous owners were a major factor in the decision.

"Our company has spent an enormous amount of money and resources addressing soil and groundwater contamination that was caused when Williams owned the refinery and the State of Alaska owned the land underneath it," Brose said in the press release.

"So far, neither Williams nor the State of Alaska have accepted any responsibility for the cleanup. With the already extremely difficult refining market conditions, the added burden of excessive costs and uncertainties over future cleanup responsibilities make continued refining operations impossible."

Gov. Sean Parnell said he spoke with top company officials Feb. 4, the day the closure was announced.

"I was told market forces were the major factor, but that contamination issues that seemed unresolvable played a big part. It was an accumulation of economic issues. It isn't accurate to say it was any thing," he said.

The governor said had met with Flint Hills last fall regarding groundwater contamination issues at the refinery. "It is the state's responsibility to ensure safe groundwater and Flint Hills has done a good job in supply drinking water to people who are affected."

In that meeting the company expressed displeasure that Williams Companies has not stepped up to its responsibility on contamination, but also displeasure at the state's hard line on the groundwater contamination, the governor said.

"I spoke to the Commissioner of Environmental Conservation, Larry Hartig, and the Attorney General to make sure we are being reasonable but also instructed them to ensure we are protecting the public from groundwater contamination," Parnell said.

One other small refinery operates in the Interior region, a plant owned and operated by Petro Star Inc.

The state of Alaska has been supplying Flint Hills with state-owned royalty oil. The returned residual oil is a major source of heat for crude oil flowing through the Trans-Alaska Pipeline System to Valdez — the southern terminus of the pipeline.

During the winter, the crude temperature in TAPS drops as it flows south of Prudhoe Bay, creating potential operating problems for the pipeline, but the oil is warmed when Flint Hills returns residual oil to the pipeline. The refinery near Fairbanks is approximately at the halfway point of the 800-mile pipeline.

"We are not totally dependent on this (returned oil), however, as we have other ways of adding heat to the pipeline," said Michelle Egan, a spokeswoman for Alyeska Pipeline Service Co.

Alyeska is now warming the oil itself by recirculating crude at Pump Stations 7 and 9, and will soon add new capabilities to add heat at Pump Station 5, she said.

The returned oil to TAPS from Flint Hills is of less benefit to Alyeska in any event because Flint Hills has installed facilities to extract much of the heat as a source of energy for refinery operations.

"The oil returned is cooler than it was, so it is less important to them," said Kevin Banks, commercial manager at the state Division of Oil and Gas, who monitors crude oil issues for state royalty purposes.

Flint Hills has been drawing about 82,000 barrels per day to 84,000 barrels per day from TAPS, with about 22,000 to 25,000 barrels per day used to make products, according to state documents prepared in September 2013 for sales of state royalty oil. The balance is returned to TAPS as residual oil.

At those throughput volumes Flint Hills would produce about 143,000 gallons of gasoline per day, 41,000 gallons of home heating oil per day and 68,000 to 194,000 gallons per day of various products such as naphtha, asphalt, a small volume of high sulfur diesel and other products, according to the state documents prepared by the Division of Oil and Gas.

The closure of the refinery has implications for the state-owned Alaska Railroad Corp. The railroad has recently been shipping about 3.5 million gallons of jet fuel per week on five trains, according to railroad spokesman Tim Sullivan.

"(Flint Hills) has been a very important customer to us and we're still trying to review what this means for the Alaska Railroad," Sullivan said.

Banks, at the Division of Oil and Gas, said that some of the fuel shipped south on the railroad by Flint Hills will be offset by fuel shipped north to replace the refinery's supply in Interior markets, but that the northbound shipments of gasoline, diesel and jet fuel probably won't offset the loss of jet fuel shipped south for the railroad.

Ted Stevens International Airport manager John Parrott said that since 2009, Flint Hills-refined jet fuel has accounted for about one-third of the roughly 600 million gallons of fuel used by airlines in Anchorage annually. In 2007, before the recession slowed flight activity at the airport, Flint Hills fuel made up about 600 million of the 900 million gallons consumed at the airport during the year, he said.

That 300 million-gallon drop equates almost exactly to the capacity of Tower 3 at the refinery, a unit that was shut down by Flint Hills, Parrott said.

Tim Bradner can be reached at tim.bradner@alaskajournal.com. Journal reporter Elwood Brehmer contributed to this article.

Barbara Barnes

From:	Cook, Jeff <Jeff.Cook@kochps.com>
Sent:	Tuesday, February 25, 2014 2:57 PM
To:	'mayor@northpolealaska.com'; Sen. John Coghill; Sen. Pete Kelly; Sen. Click Bishop; Rep. Doug Isaacson; Rep. Tammie Wilson; Rep. Pete Higgins; Rep. Lance Pruitt; Rep. Cathy Munoz; Rep. Paul Seaton; jbinkley@alaska.net; 'Evans, Bob'; 'Jim Dodson'; 'Lisa Herbert'; 'Kara Moriarty'; 'Rachael Petro'; 'olearyb@akrr.com'; 'lindskoogw@akrr.com'; 'Jon Cook'; 'mayor@co.fairbanks.ak.us'; Linda Leary (lleary@acsalaska.com); 'jj@lynden.com'; 'dguay@colaska.com'; 'bcamilli@colaska.com'; 'jesse.vanderzanden@alaska.gov'; erasmuson@gci.net
Cc:	Nichols, Mark; Cook, Jeff; Brose, Michael J.; Sharrah, Marisa; Tiemstra, Darren; Hallock, Alan; Tape, Linda; Pearson, Travis; Smith, David (KR&ES); Go, Tim; Corrigan, Sheryl; Smock, Kimberly
Subject:	Conditions needed to proceed with a sale of the Flint Hills Resources North Pole Refinery
Attachments:	FHRA North Pole Refinery Sale.pdf; AS46.03.822(a) Haz Substance liability.docx

All,

Flint Hills Resources Alaska (FHRA) has had a number of inquiries from parties interested in purchasing our North Pole Refinery and keeping it in operation. There is one Alaska based group that has shown particular interest. In our discussions with them, we provided the attached sale proposal outlining conditions that would have to be accomplished in order for FHRA to sell the refinery to another operator. These conditions will require a dedicated and timely effort by Governor Parnell and his administration, along with encouragement and support from all those interested in seeing the refinery continue in operation.

Time is of the essence. We will begin decommissioning the extraction unit integral to gasoline production on May 1, 2014, and decommissioning of the balance of crude unit two on June 1, 2014, which impacts production of jet fuel, heating fuel, asphalt and some specialty fuels. Having a buyer in place as close to May 1, 2014, as possible will provide the best assurance of continued operation of the refinery. In addition to the sale proposal document, I have attached applicable State law on cleanup responsibility so you will understand key FHRA positions outlined in the proposal agreement.

We appreciate your interest in keeping the refinery in operation and urge your support at the various levels of State government that will need to act for this to be accomplished. Thank you, and let me know if you have questions.

Jeff Cook, Regional Director External Affairs

Koch Companies Public Sector

Flint Hills Resources North Pole Refinery

907-488-5104 office

907-322-2146 cell

Sec. 46.03.822. Strict liability for the release of hazardous substances. (a) Notwithstanding any other provision or rule of law and subject only to the defenses set out in (b) of this section, the exception set out in (i) of this section, the exception set out in AS 09.65.240, and the limitation on liability provided under AS 46.03.825, the following persons are strictly liable, jointly and severally, for damages, for the costs of response, containment, removal, or remedial action incurred by the state, a municipality, or a village, and for the additional costs of a function or service, including administrative expenses for the incremental costs of providing the function or service, that are incurred by the state, a municipality, or a village, and the costs of projects or activities that are delayed or lost because of the efforts of the state, the municipality, or the village, resulting from an unpermitted release of a hazardous substance or, with respect to response costs, the substantial threat of an unpermitted release of a hazardous substance:

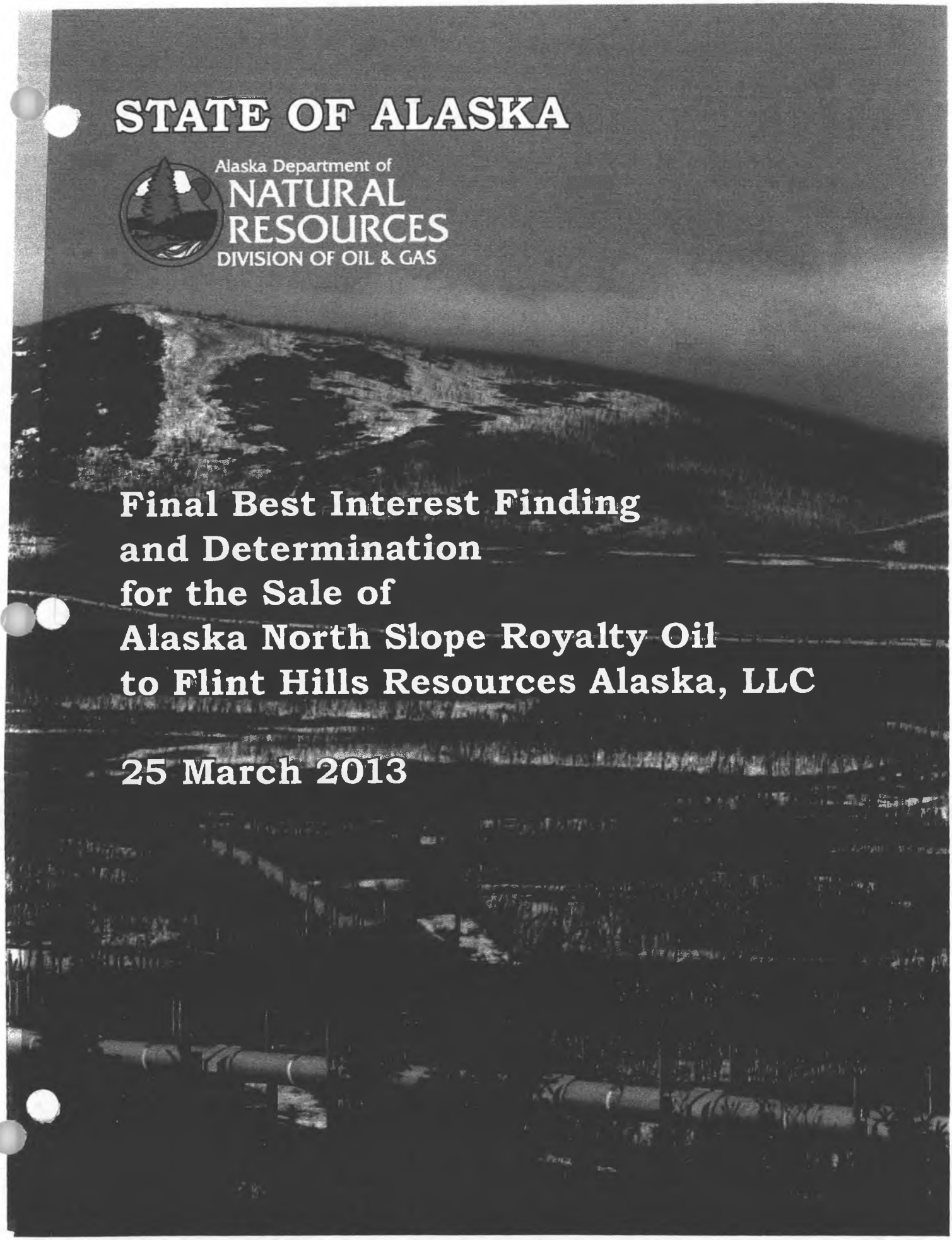
(1) the owner of, and the person having control over, the hazardous substance at the time of the release or threatened release; this paragraph does not apply to a consumer product in consumer use;

(2) the owner and the operator of a vessel or facility, from which there is a release, or a threatened release that causes the incurrence of response costs, of a hazardous substance;

(3) any person who at the time of disposal of any hazardous substance owned or operated any facility or vessel at which the hazardous substances were disposed of, from which there is a release, or a threatened release that causes the incurrence of response costs, of a hazardous substance;

(4) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by the person, other than domestic sewage, or by any other party or entity, at any facility or vessel owned or operated by another party or entity and containing hazardous substances, from which there is a release, or a threatened release that causes the incurrence of response costs, of a hazardous substance;

(5) any person who accepts or accepted any hazardous substances, other than refined oil, for transport to disposal or treatment facilities, vessels or sites selected by the person, from which there is a release, or a threatened release that causes the incurrence of response costs, of a hazardous substance.



STATE OF ALASKA

Alaska Department of
NATURAL RESOURCES
DIVISION OF OIL & GAS

Final Best Interest Finding and Determination for the Sale of Alaska North Slope Royalty Oil to Flint Hills Resources Alaska, LLC

25 March 2013

Final
Best Interest Finding and Determination
for the
Sale of Alaska North Slope Royalty Oil
to
Flint Hills Resources Alaska, LLC

Division of Oil and Gas

Alaska Department of Natural Resources

March 25, 2013

Table of Contents

I. Introduction

The Commissioner of the Department of Natural Resources (DNR), on behalf of the State of Alaska, has negotiated a long-term contract to sell the State's North Slope royalty oil to Flint Hills Resources Alaska, LLC (FHR) and Flint Hills Resources, Inc. (as guarantor), both of which are subsidiaries of Koch Industries, Inc. FHR has owned and operated a commercial refinery in North Pole, Alaska, since its purchase of the asset from Williams Alaska Petroleum Inc. in 2004. The North Pole, Alaska, refinery operated by FHR is the State's only current North Slope royalty in-kind customer and has continuously purchased North Slope royalty in-kind from the State since it began refining operations in 1979.

The State proposes this sale of royalty in-kind oil to meet in-state need for crude and facilitate continued operations of the North Pole refinery with the attendant benefits to Alaskans, particularly those Alaskans in the Interior. The negotiations that have resulted in the attached proposed contract have been carried out under the procedures for a non-competitive disposition of royalty oil set out in 11 AAC 03.030 – 11 AAC 03.070. Consistent with its obligations under 11 AAC 03.026(b), under the terms of this contract, the State will receive a price for its royalty oil that will be no less than the amount the State would have received, on average, if it elected to keep its royalty in-value.

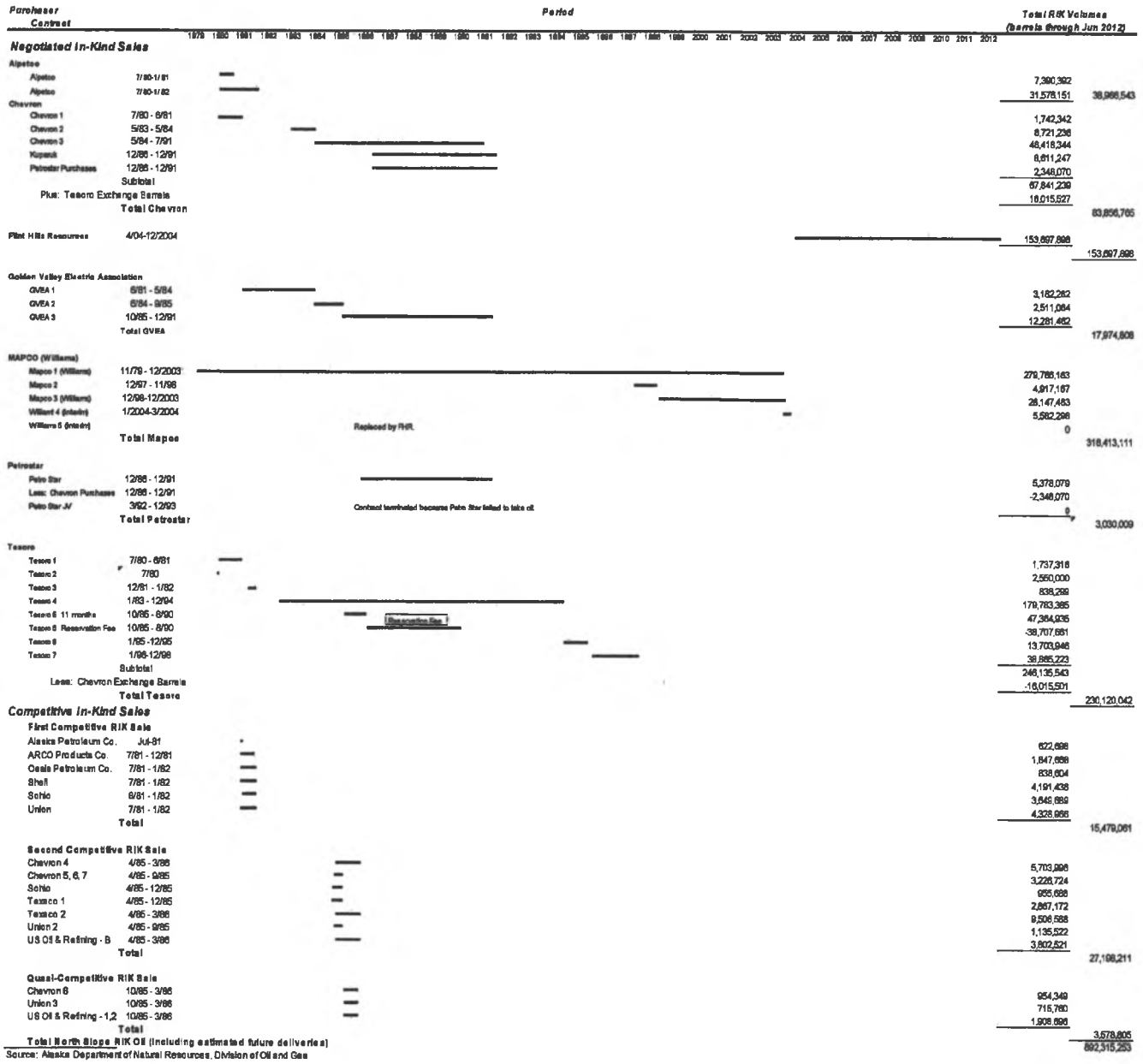
This "Final Best Interest Finding and Determination for the Sale of North Slope Royalty Oil to Flint Hills Resources Alaska, LLC" (Final Finding and Determination) provides a summary of the State's royalty in-kind contract with FHR. After an in-depth consideration of the potential economic, environmental, and social impacts, and the various requirements for sale of the State's royalty oil, with a focus on the criteria specified under the terms of AS 38.05.183(e) and AS 38.06.070(a), the Commissioner finds that a negotiated long-term contract for the sale of the State's royalty oil to FHR is in the State's best interest.

II. Royalty in Kind Background

The State of Alaska owns the mineral estate, including oil and gas, under State-owned lands. To monetize the value of this estate, the State has entered into lease agreements with third parties who explore for, develop, and produce oil and gas from these lands. The State receives a royalty share of 12-1/2 to much as 33-1/3 percent of the oil and gas produced from these leased lands on the North Slope. The State may take its royalty either "in-kind" (RIK) or "in-value" (RIV). When the State takes its royalty as RIV, the lessees who produce the oil market the State's share along with their own production and pay the State the value of its royalty share. When the State takes its royalty share as RIK, it assumes ownership of the oil, and the commissioner disposes of it through sale procedures, either "competitive" or "non-competitive," under AS 38.05.183.

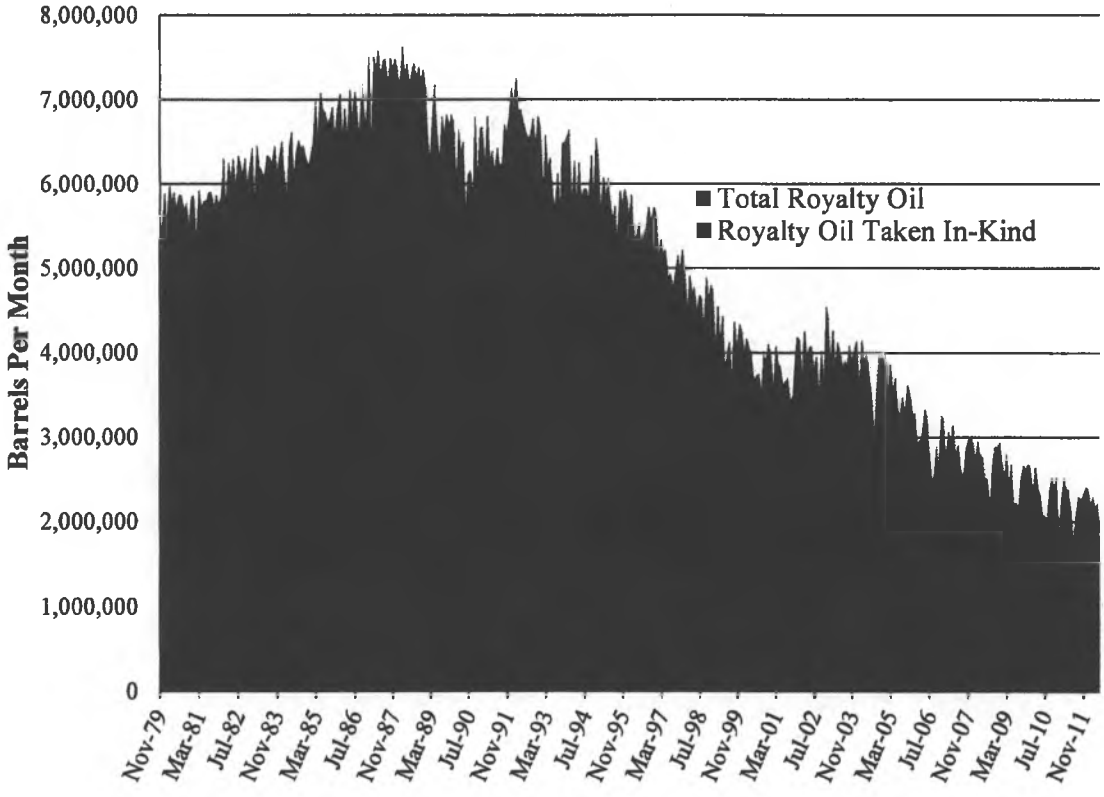
Between November 1979 and June 2012, the state disposed of 45.5 percent of its North Slope royalty oil through in-kind sales. Through the combination of both competitive and non-competitive RIK sales, the State has sold its North Slope royalty oil to in-state refineries, and occasionally has auctioned its North Slope royalty oil to customers in the Lower 48. Figure 1 summarizes the many North Slope RIK contracts since 1979 and Figure 2 illustrates the monthly volumes of royalty oil committed to these contracts during this period.

Figure 1. Royalty In-Kind Sales History



Source: Alaska Department of Natural Resources, Division of Oil and Gas

Figure 2. North Slope Historic Total Royalty Volume and In-Kind Volumes (Oil and NGLs)



Source: State of Alaska Division of Oil and Gas

A. The Current Royalty In-Kind Contract with Flint Hills Resources

When the Prudhoe Bay field began production, the State entered into a 25-year contract to sell North Slope royalty oil to Earth Resources, Inc. who later assigned the contract to Mapco Alaska, Inc. who then built the refinery at North Pole, Alaska. Under this 25-year Earth Resources royalty oil contract supplied the North Pole refinery with an average of 35,000 barrels of royalty oil per day. In 1997, the State and Mapco Alaska, Inc. negotiated a one-year contract for approximately 13,000 barrels per day to augment the supply of royalty oil delivered under the 25-year contract. In 1998, the State and Mapco "extended" this one-year contract by negotiating a new five-year contract that was subsequently approved by the Legislature. This five-year contract provided an average of 22,800 barrels per day in addition to the 35,000 barrels per day delivered under the old 25-year contract. Later in 1998, Mapco sold its Alaskan assets and assigned both the 25-year contract and the 5-year contract to Williams. Under these contracts, the State was obliged to deliver only royalty oil produced from the Prudhoe Bay Unit. These two contracts expired on December 31, 2003.

Following the expiration of the 1978 and 1998 RIK contracts on December 31, 2003, the State continued to supply the North Pole refinery with royalty oil under a short-term contract between

the State and Williams which expired on March 31, 2004.[1] The State executed a second short-term RIK contract with Williams to provide the refinery with an uninterrupted supply of royalty oil through September 30, 2004[2] to enable continued operation of the refinery while Williams and FHR finalized the sale of the asset to FHR. Concurrent with the sale of the North Pole refinery to FHR, DNR and FHR concluded negotiations that ultimately resulted in the current RIK contract. The current ten-year contract with FHR[3], scheduled to expire on March 31, 2014, is now the sole RIK contract for Alaska North Slope oil.

B. Royalty Oil Available For Taking In-kind

The volume of royalty oil the state receives depends on the volume of oil produced from State-owned lands. The continuing production decline observed on the North Slope is well-known and well-documented. As the volume of North Slope oil declines, the volume of North Slope royalty oil available for taking as RIK will also decline. The proposed contract obliges the State to deliver a maximum of 30,000 barrels per day to FHR between April 1, 2014 and March 31, 2019.[4]

In an environment of declining production, in order to meet this obligation an increasingly large share of royalty oil must be committed to RIK. In fact, one key concession secured by DNR during negotiation of the proposed contract was a five year contract term. FHR had sought a ten-year contract term that would have obligated the State to commit the vast majority of its royalty oil to a single party (i.e., FHR). Such a ten-year term would have greatly increased the State's volumetric risk, would have similarly increased the State's exposure to substantial loss in the event of non-performance on the part of FHR, and would have greatly circumscribed the State's ability to sell North Slop royalty oil to other potential RIK buyers.

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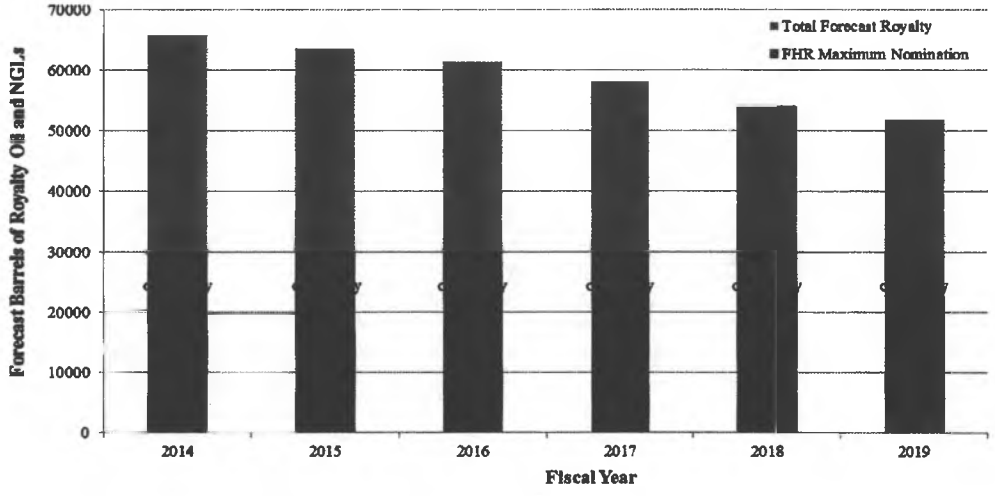
[1] See Alaska Department of Natural Resources. October 1, 2003. "Best Interest Finding and Determination for the Sale of Alaska North Slope Oil" for a copy of this short-term contract.

[2] See Alaska Department of Natural Resources. December 29, 2003. "Best Interest Finding and Determination for the Sale of Alaska North Slope Oil" for a copy of this second short-term contract.

[3] See Alaska Department of Natural Resources. February 12, 2004. "Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Flint Hills Resources Alaska, LLC" for a copy of this ten-year contract.

[4] The contract includes a proposed term extension that will, at the Commissioner's discretion and with legislative approval, allow the State to renegotiate a new contract with FHR.

Figure 3. Total Expected Royalty Oil and NGL Volume and Expected Share Committed to FHR



Source: State of Alaska Division of Oil and Gas

Figure 3 shows the expected royalty production for the North Slope from fiscal year 2014 to fiscal year 2019, as well as the maximum nomination volume under the proposed contract. This total royalty production forecast is derived from the Alaska Department of Revenue's recent production forecast and is the royalty share of an aggregation of three distinct forecasts: expected royalty production from wells that are currently producing, expected royalty production from projects that are under development, and expected royalty production from projects that are under evaluation.[5] In fiscal year 2014, the State is expected to receive approximately 66,000 barrels per day of royalty oil and natural gas liquids (NGLs) from the North Slope.[6] By fiscal year 2019, royalty oil and NGLs production is expected to decline to just under 52,000 barrels per day.[7] If FHR purchases the maximum volume allowable under the proposed contract, the State will be required to provide FHR with 45.5 percent of its average daily forecast North Slope royalty in fiscal year 2014, growing to 57.7 percent by fiscal year 2019.

When considering the volume of royalty oil that will be available to the state for taking in kind, there are two additional key considerations. First, expected royalty oil production is based on a forecast. Even the best forecasts will undoubtedly be incorrect, with the magnitude of the error greatest in out-years. Historically, the State's production forecast from which the royalty forecast is derived has been quite optimistic, with realized production often falling well below forecasted levels.[8] As can be gleaned from the above numbers, the State's royalty forecast would need to be seriously deficient during the term of the contract for the state to struggle to meet its volume obligation. However, it should be noted that the state has reserved the right to

[5] See Department of Revenue, Revenue Sourcebook, Fall 2012, p. 41-42 for a discussion of the three distinct forecasts.
[6] 60,000 barrels per day from wells that are currently producing, and 6,000 barrels per day from projects that are under development
[7] Approximately 38,500 barrels per day from wells that are currently producing, 11,500 barrels per day from projects that are currently under development, and 2,000 barrels per day from projects that are currently under evaluation
[8] The Department of Revenue, which develops the North Slope production forecast, has recently transitioned to a new, less optimistic forecasting approach.

nominate no more than 85 percent of its North Slope total royalty as RIK through the term of the proposed contract.

Second, royalty forecasts provide an expected daily production volume for the entire year. However, there is substantial seasonality in the observed level of production from the North Slope, with daily production peaking during winter months and declining to lowest levels during summer months. Between 2008 and 2011, typical summer production volumes were 17 percent lower than the yearly average. Based on this observed decline, if FHR nominates 30,000 bpd of royalty oil, the state will be committed to delivering nearly 55 percent of daily summer royalty production in fiscal year 2014. By fiscal year 2019, this grows to nearly 70 percent of summer royalty production.

C. Price and Consumption of Energy in Alaska

In 2010, on a per capita basis, Alaskans spent more on energy than residents of any other state, with average per person expenditures of $8,807 on energy throughout the year.[9] Of this $8,807, nearly 16 percent[10] would be spent purchasing the most expensive gasoline in the nation.[11] Not only is our gasoline the most expensive in the nation, but our diesel and home heating fuel are also among the most expensive in the nation. When compared to residents of other states in the union, Alaskans pay the second highest average price for distillate fuel oil[12], averaging $23.39 per million BTUs.[13]

As seen in Table 1, just as the cost of refined petroleum is quite high in Alaska, so is the cost of non-petroleum energy. In 2010, retail electricity in Alaska cost $43.29 per mmbtu (14.77 cents per kilowatt hour), the fifth highest cost of any state in the nation. From a price perspective, Alaskan natural gas is competitive with the rates borne by those Outside. At $9.98 per mmbtu at the meter, consumers in nineteen states pay more for natural gas than Alaskans. While access to competitively priced, clean-burning natural gas is a boon for those Alaskans with access to natural gas infrastructure, outside of Southcentral Alaska, very few Alaskan consumers have access to this fuel.

[9] http://www.eia.gov/beta/state/?sid=US

[10] $1,307 per capita

[11] Tied with Hawaii, http://www.eia.gov/beta/state/seds/data.cfm?incfile=sep_sum/html/rank_pr_mg.html

[12] Distillate fuel oil is a class of refined petroleum products consisting of No. 1, No. 2, and No. 4 fuel oil (i.e., home heating oil); and No. 1, No. 2, and No. 4 diesel.

[13] BTU is an acronym for British Thermal Unit which is defined as the amount of energy required to raise the temperature of one pound of water at 60 degrees Fahrenheit and one atmosphere by one degree Fahrenheit.

Table 1. Alaska Total End-Use Price Estimates, 2010

Fuel	Price	Rank
Coal	3.43	21 of 44
Distillate Fuel Oil	23.29	2 of 51
Gasoline	27.17	1 of 51
Kerosene-type Jet Fuel	16.81	5 of 51
Liquefied Petroleum Gas	26.79	20 of 51
Natural Gas	9.98	20 of 51
Other	28.72	7 of 51
Residual Fuel Oil	13.69	4 of 47
Retail Electricity	43.29	5 of 51

Source: U.S. Energy Information Administration State Energy Data 2010: Prices and Expenditures
Notes: Prices are given in millions of BTUs.
Natural gas as it is consumed, including supplemental gaseous fuels that are commingled with natural gas.
Other category includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and other petroleum products.
Rank is Alaska's position among the fifty states and the District of Columbia (or the number thereof utilizing the fuel), lower numbers indicate a higher position in the price distribution.

As noted, Alaskans spend more per person for energy than residents of any other state. This high rate of per capita expenditure on energy is driven not only by price, but also by volume consumed. Table 2 gives the statewide consumption of various forms of energy during the first decade of the twenty-first century. Table 3 then gives a further disaggregation of the consumption of distillate fuel in Alaska.[14,15] Despite its rarity outside of Southcentral Alaska and portions of Fairbanks, on a per capita BTU basis, natural gas was the most common fuel used in the homes of Alaskans. In 2010, the typical Alaskan consumed an average of 26.4 million BTU of natural gas in their residence.

[14] It should be noted that the data sources and estimation strategies for Table 2 and Table 3 differ. Stemming from these differences the volume of distillate fuel oil sales, particularly by sector, differ somewhat.
[15] The values given in Tables 2 and 3 are point estimates, the associated standard errors are not shown. All comparisons are simple comparisons of the presented point estimates and do not consider the uncertainty associated with the estimate. Put differently, observed differences should not be interpreted as statistically significant.

Table 2. Alaska Energy Consumption Estimates

	Physical Units			Billion British Thermal Units			Thousands of BTU Per Capita		
	2000	2005	2010	2000	2005	2010	2000	2005	2010
Residential									
Coal	58	40	61	898	631	934	1,432	946	1,315
Electricity	1,855	2,062	2,093	6,329	7,034	7,142	10,095	10,547	10,056
Wood	77	46	45	1,540	920	902	2,456	1,379	1,270
Kerosene	13	31	15	76	176	83	121	264	117
Liquefied Petroleum Gases	125	158	154	480	606	589	766	909	829
Distillate Fuel Oil	1,731	1,619	1,548	10,086	9,431	9,019	16,088	14,141	12,699
Natural Gas	15,987	18,029	18,714	16,418	18,098	18,806	26,188	27,136	26,479
Commercial									
Coal	466	465	494	7,262	7,252	7,553	11,583	10,873	10,635
Distillate Fuel Oil	1,155	1,006	1,980	6,729	5,857	11,535	10,733	8,782	16,241
Fuel Ethanol	1	6	18	2	19	61	3	28	86
Electricity	2,418	2,695	2,830	8,251	9,195	9,655	13,161	13,787	13,594
Kerosene	0	1	16	2	5	92	3	7	130
Liquefied Petroleum Gases	96	98	151	368	375	578	587	562	814
Motor Gasoline	64	168	158	332	877	822	530	1,315	1,157
Natural Gas	26,485	16,903	15,920	27,201	16,968	15,998	43,387	25,441	22,525
Industrial									
Coal	1	2	4	13	25	57	21	37	80
Distillate Fuel Oil	2,266	1,912	2,509	13,202	11,138	14,615	21,058	16,700	20,578
Fuel Ethanol	0	3	10	1	12	33	2	18	46
Electricity	1,037	1,156	1,324	3,537	3,944	4,518	5,642	5,914	6,361
Liquefied Petroleum Gases	0	6	53	1	22	183	2	33	258
Natural Gas	341,872	356,102	255,642	351,106	357,469	256,892	560,038	535,979	361,702
Other Petroleum Products	3,805	5,724	4,356	23,077	34,304	26,121	36,809	51,434	36,778
Motor Gasoline	25	102	85	129	533	442	206	799	622
Residual Fuel Oil	0	0	4	0	0	28	0	0	39
Electrical Power Generation									
Total Electricity Consumed	5,310	5,913	6,247	18,118	20,174	21,315	28,899	30,248	30,011
Fuel Consumed to Produce Electricity									
Coal	500	398	410	8,283	6,087	5,958	13,212	9,127	8,389
Distillate Fuel Oil	415	538	489	2,415	3,134	2,850	3,852	4,699	4,013
Natural Gas	35,570	39,284	39,732	35,672	39,506	39,963	56,899	59,234	56,268
Residual Fuel Oil	670	696	306	4,213	4,377	1,923	6,720	6,563	2,708
Transportation									
All Petroleum Products	37,801	46,407	36,904	212,243	261,179	207,307	338,542	391,604	291,887
Distillate Fuel Oil	5,308	7,509	7,234	30,917	43,741	42,138	49,315	65,584	59,330
Jet Fuel	25,872	31,940	22,726	146,698	181,100	128,857	233,993	271,536	181,430
Liquefied Petroleum Gases	0	4	1	0	14	3	0	21	4
Lubricants	98	83	77	596	503	469	951	754	660
Motor Gasoline	5,884	6,583	6,662	30,658	34,348	34,764	48,902	51,500	48,947
Residual Fuel Oil	118	12	40	742	74	255	1,184	111	359
Aviation Gasoline	521	277	163	2,632	1,399	822	4,198	2,098	1,157
Non-petroleum Products	7,425	2,874	4,057	7,743	3,426	5,918	12,351	5,137	8,333
Fuel Ethanol	49	219	748	168	761	2,593	268	1,141	3,651
Natural Gas	7,376	2,655	3,309	7,575	2,665	3,325	12,083	3,996	4,682

Source: Energy data from Energy Information Administration, State Energy Data System: 1960-2012
Population data from U.S. Census Bureau, Population Division

Notes: Other Petroleum Products include asphalt and road oil, kerosene, lubricants, aviation gasoline blending components, crude oil, petrochemical feedstock, motor gasoline blending components, miscellaneous petroleum products, natural gasoline, petroleum coke, plant condensate, pentanes plus, still gas, unfinished oils, unfractionated stream, and waxes.

Physical units are reported in the following units: coal is measured in thousands of short tons, natural gas in millions of cubic feet, electricity in millions of kilowatt hours, and petroleum products in thousands of barrels.

Fuel Ethanol includes denaturant in the physical units analysis, but excludes denaturant in the BTU analysis.

Table 3. Alaska Distillate Fuel Consumption Estimates

	2000	2005	2010	2011
Residential				
No 1 Distillate	36,307	36,205	36,914	32,421
No 2 Distillate	39,832	31,746	23,930	23,407
Residential Total Distillate	76,139	67,951	60,843	55,829
Commercial				
No 1 Distillate	16,120	17,677	39,693	38,473
No 2 Fuel Oil	19,526	5,729	8,511	8,846
No 2 Ultra-Low Sulfur Diesel (0-15ppm)	0	0	15,436	22,203
No 2 Low Sulfur Diesel (15-500ppm)	6,167	3,087	11,585	208
No 2 High Sulfur (501+ ppm)	8,953	15,709	2,587	123
Other Distillate	31	0	3	0
Commercial Total Distillate	50,796	42,201	77,815	69,853
Industrial				
No 1 Distillate	16,120	13,427	11,017	28,169
No 2 Fuel Oil	6,250	210	1,605	958
No 2 Ultra-Low and Low Sulfur Diesel	30	4,295	17,057	36,439
No 2 High Sulfur	15,301	26,919	6,480	138
Industrial Total Distillate	37,701	44,850	36,159	65,704
Electrical Power Generation				
Electrical Generation Total Distillate	46,232	57,455	37,048	30,127
Off-Highway				
No 2 Diesel -- Construction	10,815	14,050	11,654	8,239
No 2 Diesel -- Other Use	10,266	3,800	2,363	1,888
Off-Highway Total No 2 Diesel	21,080	17,850	14,017	10,126
On-Highway				
Total On-Highway No 2 Diesel	90,999	172,595	166,599	169,158
Military				
No 2 Diesel	9,451	14,233	6,369	7,234
Total Military Distillate	9,524	14,401	11,691	12,409
Oil Company				
Total Oil Company Distillate	40,834	17,515	48,241	56,554
Total Distillate Sales	506,230	563,020	558,559	594,620

Source: Energy Information Administration, Distillate Fuel Oil and Kerosene Sales by End Use

As was the case with the use of energy in the residential sector, on a per capita BTU basis, natural gas was the most common fuel used in the Alaskan commercial and industrial sector. In 2010, the Alaskan commercial sector consumed approximately 22.25 million BTUs of natural gas for every resident. Based on point estimates alone, this was a 48 percent reduction in the per

capita consumption of natural gas since 2000. Like the residential and commercial sectors, the industrial sector relied very heavily on energy supplied by natural gas. However, consumption by the industrial sector exceeded that of either the residential or commercial sectors by more than an order of magnitude. In 2010, on a per capita BTU basis, the Alaskan industrial sector consumed 361.7 million BTUs of natural gas for every Alaskan resident. While quite large, this actually represented a 35.4 percent decrease in per capita natural gas consumption by the industrial sector since 2000.

While statewide energy consumption patterns are of interest in their own right, the proposed contract will have little impact on either the consumption of, or the price of, non-crude based energy products such as natural gas. If the proposed contract is to have any impact on price or consumption pattern in the state, it will most prominently impact price and availability of gasoline, jet fuel, and perhaps home heating oil.[16] While natural gas was the most common fuel used by Alaskans in their residence in 2010, the next most common fuel was distillate fuel oil in the form of heating oil, with a per capita average consumption of 12.7 million BTUs per year.

Similarly, in the commercial sector, the second most common fuel was distillate fuel oil, in the form of both diesel and heating oil. Overall, the Alaska commercial sector consumed over 11.5 trillion BTUs of distillate fuel oil in 2010. In the same year, the commercial sector in Alaska consumed 822 billion BTUs of gasoline.

Although energy in the industrial sector was dominated by natural gas (84.8 percent of BTUs consumed by the industrial sector), the next two most common fuels on a BTU basis were petroleum products (i.e., other petroleum products and distillate fuel oil). While the residential, commercial, and industrial sectors all rely on petroleum products, the utilization of refined petroleum products is greatest in the transportation sector. In 2010, Alaskans (and those in Alaska) consumed over 207 trillion BTUs of petroleum-based energy to facilitate their travels. Of these 207 trillion BTUs, 62.2 percent would be consumed in the form of jet fuel, 20.3 percent would be consumed as distillate fuel oil, and 16.8 percent would be consumed as gasoline.

D. Commercial Refining In Alaska

Alaska currently has six in-state refineries, operated by five organizations: BP, ConocoPhillips, Flint Hills Resources Alaska, Petro Star, and Tesoro. Of these six refineries, four produce refined petroleum products for the consumer market.[17] The four in-state refineries producing refined petroleum products for the consumer market are FHR's North Pole refinery, Tesoro's Kenai refinery, and Petro Star's North Pole and Valdez refineries. All four of these refineries refine Alaskan crude and supply the Alaska retail market with refined petroleum products.

FHR's North Pole refinery is strategically located on the Trans-Alaska Pipeline System (TAPS) and relies on the pipeline for all feedstock refined in the facility. At present, FHR's North Pole refinery draws approximately 82,000-84,000 barrels of Alaska North Slope crude oil (ANS) from TAPS per day. From these 82,000-84,000 barrels, the refinery will produce approximately 22,000-25,000 barrels of refined product. All crude and constituents that are not transformed

[16] As was previously discussed, the prices in Alaska for all three of these products are among the expensive in the country.
[17] BP and ConocoPhillips currently operate small topping plants on the North Slope that primarily support oil industry operations.

into refined product are injected back into TAPS.[18] At present throughput volumes, the FHR North Pole refinery produces approximately 672,000 gallons of jet fuel per day, 143,000 gallons of gasoline per day, 41,000 gallons of home heating fuel per day, and 68,000 to 194,000 gallons per day of product consisting of HAGO, LAGO, naphtha, asphalt, refining fuel, and a small volume of high-sulfur diesel.

All of this nearly one million gallons per day of refined petroleum products produced at FHR's North Pole refinery will remain in the Alaska market. Currently, FHR ships approximately 680,000 gallons of refined product per day from the Interior to Anchorage on the Alaska Railroad, with the vast majority of the southbound product being jet fuel destined for Ted Stevens Anchorage International Airport. In addition to the southward movement of refined product, FHR also rails roughly 230,000 gallons of ultra-low sulfur diesel and gasoline blendstock north into the Interior each day. In addition to its production and movement of refined product, FHR also owns 30.7 million gallons of product storage capacity in Anchorage and 19.3 million gallons of product storage in Fairbanks.

Like FHR's North Pole refinery, Petro Star's North Pole and Valdez refineries both exclusively refine ANS drawn from TAPS. The total nameplate throughput of Petro Star's refineries is substantially less than that of FHR's North Pole refinery. Petro Star's North Pole refinery has a maximum throughput capacity of 22,000 barrels per day, while the Valdez refinery has a maximum throughput of 60,000 barrels per day. Each of these refineries will refine between 25 and 30 percent of the crude drawn from TAPS into refined product. The remaining 70 to 75 percent of the volume drawn from TAPS will be re-injected into the pipeline.

In a typical year, roughly one-third of the refined product produced by Petro Star will be ultra-low and low sulfur diesel, nearly fifty percent will be jet fuel, and the remainder will consist primarily of home heating fuel. The majority of the refined product produced by Petro Star will remain in Alaska. Petro Star supplies jet fuel to both military and civilian customers, with the majority of the civilian jet fuel being consumed at Ted Stevens Anchorage International Airport. Petro Star also supplies between fifty and sixty percent of the home heating fuel that is sold in the Interior.

The final commercial refinery operating in Alaska is Tesoro's Kenai refinery in Nikiski. Unlike the other three commercial refineries in Alaska, Tesoro's Kenai refinery is not tied to TAPS. Being located off of TAPS impacts operations in two central ways. First, rather than drawing feedstock directly from TAPS, feedstock at the Kenai refinery arrives over water. The ability to accept waterborne cargos means that, unlike the other three commercial refineries in the state, the Kenai refinery has the ability to source crude from the world market. While importation of non-Alaskan crude is possible at the Kenai refinery, it is a relatively rare event. Over 90 percent of the crude refined in the Kenai facility is Alaskan crude, both Alaska North Slope and Cook Inlet crudes. Fewer than three cargos of foreign crude were imported in the past year.

[18] The "middle" of a barrel of crude is the most valuable portion of a barrel, particularly for refineries possessing the technological sophistication of Alaska's TAPS-dependent refineries. The TAPS-dependent refineries transform the middle of a barrel into refined product and return the light- and heavy-ends to TAPS. The refiner then pays a fee to the other shippers on TAPS for degrading the value of the TAPS stream.

The second key impact that being located away from TAPS has on operations at the Kenai refinery is its inability to re-inject unprocessed portions of a barrel of crude back into the pipeline. The Kenai refinery, like all commercial refineries in Alaska, does not possess the technological sophistication to transform every portion of a barrel into refined product. The portion of a barrel not refined into saleable product, the so-called "heavy ends," must be loaded onto a ship and transported to another Tesoro facility on the United States West Coast for further processing.

Tesoro's Kenai refinery has a nameplate throughput capacity of 72,000 barrels per day, but actual throughput is highly seasonal and well below the nameplate capacity. During the summer months, when demand for refined product is at its peak, the Kenai refinery processes approximately 65,000 barrels per day of crude, declining to approximately 45,000 barrels per day during the winter months. Overall, about one-quarter (24 percent) of the product refined at the Kenai refinery is gasoline, another 35 percent is jet fuel, 11 percent is ultra-low and low sulfur diesel fuel, and 30 percent are "heavy ends."

The majority of the end-use products refined at the Kenai facility will be consumed by the Alaska market. Nearly all of the jet fuel produced at the Kenai refinery will be transported via pipeline to Anchorage, with the majority of Anchorage-bound jet fuel consumed by Ted Stevens Anchorage International Airport. Tesoro will supply ultra-low sulfur diesel and gasoline to both Southcentral and Interior markets, with product transported to the Interior via the road system. Although the Kenai refinery supplies ultra-low sulfur diesel and gasoline to the Interior market, none of the heating oil consumed in the Interior is refined by Tesoro. Stemming from its access to waterborne transportation, although rare in occurrence, Tesoro also retains the ability to ship refined product out of Alaska.

E. RIK's Role in Alaskan Commercial Refining

The State of Alaska's RIK has played a critical role in the development and continued operation of the Alaskan refining sector. All four commercial refineries currently operating in the state have, at various points in time, had a RIK contract. Three of these four refineries refined royalty oil, while a royalty contract backstopped financing for the fourth.

As was discussed, the State has supplied FHR's North Pole refinery with royalty oil for the past 33 consecutive years. Between November 1979 and June 2012, the State sold over 472 million barrels of Alaska North Slope crude to the North Pole refinery currently operated by FHR. The current ten-year contract with FHR has generated mutual benefits for both FHR and the people of Alaska. Under the terms of FHR's current ten-year royalty oil contract, FHR has the option to purchase no oil from the State if the economic provisions of the contract departed from those available from other crude oil suppliers in the Alaska market. However, FHR has continued its contractual relationship with the state, albeit at lower volumes than it had first anticipated, suggesting that the current ten-year contract offers attractive economic terms unavailable from private North Slope crude oil suppliers. On the other hand, the people of Alaska have enjoyed the economic, social, and labor market benefits of petroleum products refined from Alaskan

crude by Alaskans in Alaska.[19]

As with FHR's North Pole refinery, the state has a long history selling its North Slope RIK to the Tesoro refinery in Nikiski. The state supplied the Kenai refinery with ANS crude between July 1980 and January 1982 and again between January 1983 and December 1998.[20] In total, the Kenai refinery purchased 230 million barrels of Alaska North Slope royalty oil under seven separate RIK contracts. The state is currently negotiating a new RIK contract to renew North Slope RIK sales to the Kenai refinery and expects to once again begin supplying the Kenai refinery in 2014.

The historical relationship between the sale of RIK and Petro Star's North Pole refinery is similar to the role played by royalty oil in FHR's North Pole refinery and Tesoro's Kenai refinery. The State sold North Slope royalty oil to Petro Star's North Pole refinery from December 1986 through December 1991. In total, the state supplied Petro Star's North Pole refinery with just over 3 million barrels of North Slope royalty oil under this 5 year contract.

Perhaps the most interesting role played by a royalty oil contract was the 1992 contract with Petro Star Valdez Joint Venture. In mid-1991, Petro Star and its joint venture partners contacted DNR in order to secure a royalty oil contract for a proposed refinery in Valdez. DNR ultimately negotiated a ten-year contract with Petro Star and its joint venture partners to supply the proposed Valdez refinery with up to 30,000 barrels per day of royalty oil. With this contract in hand, the joint venture secured the needed financing and constructed the Valdez refinery. The royalty contract helped the joint venture secure financing by demonstrating guaranteed access to an on-going supply of feedstock. Ultimately, Petro Star Valdez Joint Ventures never took possession of a single barrel of royalty crude under the ten-year contract, preferring, rather, to secure its feedstock from the private market.

F. Alaska's Fiscal Condition is Wedded to Oil and Gas

Both the economic and the fiscal health of Alaska are wedded to oil and gas. In 2011, the total market value of all goods and services produced in Alaska totaled $51.4 billion. Approximately, one out of every five of those dollars was generated by oil and gas.[21] Oil and gas account for an even larger share of revenues received by the State of Alaska. In fiscal year 2012, 93 percent of the state's general fund unrestricted revenue came from oil and gas.[22] In the same fiscal year, Alaska generated $2.95 billion from oil and gas royalties.[23]

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[19] See Alaska Department of Natural Resources. February 12, 2004. "Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Flint Hills Resources Alaska, LLC" for a full discussion of the benefits derived from the current contract. Later sections more fully develop the benefits associated with the proposed contract

[20] The State also supplied Tesoro's Kenai refinery with 22.1 million barrels of Cook Inlet royalty crude between January 1979 and September 1985.

[21] Gross State Product data from the United States Department of Commerce, Bureau of Economic Analysis (accessed on 8/23/2012, at http://www.bea.gov/iTable/iTable.cfm?ReqID=70&step=1&isuri=1&acrdn=1). In 2011, oil and gas GSP was not disaggregated from mining sector GSP. Between 2000 and 2010, oil and gas accounted for an average of 80.1% of mining GDP. If 2011 follows decennial averages, oil and gas generated $10.1b. If oil and gas fell at a decennial low (71.5%) as a proportion of mining industry GSP, oil and gas generated $9.0b in 2011.

[22] Alaska Department of Revenue – Tax Division, Fall 2012 Forecast, p. 13

[23] http://dog.dnr.alaska.gov/index.htm

Just as our current economic and fiscal health is deeply tied to oil and gas, so is our future. The Department of Revenue forecasts that at least 87 percent of the state's general purpose unrestricted revenue will be derived from oil and gas revenue through 2021. They also forecast that the West Coast delivered value of the state's royalty share of North Slope oil will be worth $2.7 billion in FY2013, falling to $2.0 billion in FY2021.[24]

The importance of this substantial revenue source is underscored by recent Office of Management and Budget projections of Alaska's fiscal health. Under the scenarios presented in the FY 2014 10-year Plan, the state is expected to experience a budget shortfall during fiscal year 2013. Although the results depend on the assumptions used to generate the projections, three of the four scenarios presented by the Office of Management and Budget forecast budget shortfalls to persist from fiscal year 2015 through fiscal year 2023.[25]

G. RIK Oil Sale Procedure and Schedule

Before executing a contract for the disposition of RIK, the commissioner must find that the disposition is in the best interests of the State (11 AAC 03.010). The commissioner establishes the terms, conditions, and methods of disposition of the State's RIK oil (11 AAC 03.010). There exists a statutory presumption that taking RIK (AS 38.05.182(a)) with sale to in-state customers (AS 38.05.183(d)) accomplished through competitive means (AS 38.05.183(a)) is in the state's best interest. That being said, the state has many competing interests and the state's best interest may be served through a non-competitive disposition of the state's royalty in kind.

Given the statutory presumption that the state's best interest is served through a competitive disposition of royalty oil to in-state customers, DNR first sought to determine the level of interest on the part of in-state producers and refiners in the purchase of the State's RIK. To gauge the level of interest in the market, DNR distributed an informal solicitation of interest in RIK oil in mid-August 2012. Beyond simply gauging the market's interest in RIK oil, this solicitation outlined the state's desire to obtain "special commitments" that would meaningfully address the high cost of energy in Alaska. This informal solicitation of interest was directly transmitted to six organizations: BP, ConocoPhillips, ExxonMobil, Petro Star, FHR, and Tesoro. Of these six, three possess commercial in-state refining capabilities. Beyond directly transmitting the informal solicitation of interest to these six organizations, the state also informed the market of its intent to sell RIK through announcements in both industry-specific and general media.[26]

The informal solicitation generated four responses affirming interest in purchasing the State's RIK. These affirmative responses were from BP, ConocoPhillips, FHR, and Tesoro. DNR received no indications of interest outside of these four parties; notably, Petro Star as owner of

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[24] Based on Department of Revenue, Revenue Sourcebook, Fall 2012, forecast production and price estimates during FY2013 and FY2021 and Division of Oil and Gas North Slope Royalty Forecast. It should be noted that even if market price and production forecasts are perfect, the state will not realize this full value. Royalty agreements allow for deductions of costs associated with moving the state's royalty share from the point of production to the U.S. West Coast.

[25] FY 2014 10-Year Plan, State of Alaska, Govenor's Office of Management and Budget. All four projected scenarios indicate a budget shortfall in FY2013. The balance of the State's total reserves is projected to remain positive through FY2022 in all four projected scenarios.

[26] Anchorage Daily News, Aug 19, 2012. Accessed at http://www.adn.com/2012/08/19/2593940/state-gauging-interest-in-royal.html.

Petroleum News, Aug 19, 2012. Accessed at http://www.petroleumnews.com/pnads/773411753.shtml

two commercial refineries in Alaska chose not to respond. Subsequent discussions with the interested parties that did reply revealed that BP and ConocoPhillips would both require the ability to export RIK oil from the state. In order to permit the export of RIK crude, under 11 AAC 03.010, the commissioner would be required to "determine in writing that the oil, gas, or associated substances subject to export are surplus to present and projected intrastate domestic and industrial needs."[27] Such a determination would be inconsistent with the informal solicitation of interest distributed by DNR which outlines that the State is interested in special commitments meant to "mitigate the high cost of consumer petroleum products in Alaska and **address the need for a greater supply of crude oil for use in the state**" (emphasis added).

Thus, in response to its solicitation of interest, DNR received only two affirmative responses that could potentially satisfy the criteria set out by DNR in its informal solicitation of interest. Further discussion with the two parties, Tesoro and FHR, who expressed interest consistent with the State's goals indicated that competitive bidding would be very unlikely to yield special commitments that served the State's best interest.[28] Specifically, discussions with the parties revealed that the scheme likely to be used by the parties to trade-off between price per barrel and "special commitments" would be expected to generate proposals that would not, in DNR's view, yield the greatest total benefit for Alaska. Moreover, with only two interested parties, there exists a risk that bids received from a competitive process would yield substantially less total value for the State than could be achieved by independently negotiating with each interested party. In light of the very small number of interested parties and the low probability that competitive bidding would maximize total State value, the commissioner determined that seeking a non-competitive, negotiated agreement was in the State's best interest, and therefore, waived competitive bidding.

Consistent with his obligations under AS 38.05.183(a), AS 38.06.050(a), and 11 AAC 03.040, the commissioner submitted the Preliminary Best Interest Finding and Determination for the Sale of Alaska North Slope Royalty Oil to Flint Hills Resources Alaska, LLC., dated February 20, 2013, to the Alaska Royalty Oil and Gas Development Advisory Board ("Board") for review. The Preliminary Finding and Determination represented the commissioner's formal notification to the Board of his intent to waive competitive bidding.

Notice of the publication of the Preliminary Finding and Determination and an invitation for public comment appeared in several newspapers including the Fairbanks News-Miner, the Anchorage Daily News, the Juneau Empire, and the Kenai Peninsula Clarion. A copy of the proposed RIK contract was made available from the State by contacting:

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Phone: (907) 269-8781
E-mail: kevin.banks@alaska.gov

[27] AS 38.05.183(d) place a similar requirement on the commissioner.
[28] As noted above, DNR is currently in negotiations to supply RIK to Tesoro. DNR expects to renew RIK sales to Tesoro sometime in 2014, or possibly earlier.

and it was also published on the Division of Oil and Gas website at:

http://dog.dnr.alaska.gov/

Formal written notice of the State's intent to sell royalty oil to FHR and informing the recipients of the publication of the Preliminary Finding and Determination, was given directly to the parties listed in Table 4. Included among those listed below are North Slope lessees, local public officials, and the other in-state refineries. Members of the Alaska Legislature were also notified.

Table 4. Parties Receiving Formal Written Notices

Anadarko Petroleum Corporation
ATTN: AK Land Supervisor
PO Box 1330
Houston, TX 77251

ASRC Exploration, LLC
3900 C Street, STE 801
Anchorage, AK 99503

BP Exploration (Alaska) Inc.
ATTN: Land Manager - Alaska
PO Box 196612
Anchorage, AK 99519

Chevron USA, Inc.
3800 Centerpoint Drive, STE 100
Anchorage, AK 99503

ConocoPhillips Alaska, Inc.
ATTN: Land Manager
PO Box 100360
Anchorage, AK 99510

Doyon, Limited
ATTN: SR VP Lands & Natural Resource
1 Doyon Place, STE 300
Fairbanks, AK 99701

Eni Petroleum US, LLC
1201 Louisiana, STE 3500
Houston, TX 77002

Eni US Operating Co., Inc.
1201 Louisiana, STE 3500
Houston, TX 77002

ExxonMobil Alaska Production, Inc.
ATTN: Land Resources Manager
PO Box 2180
Houston, TX 77252

ExxonMobil Alaska Production, Inc.
ATTN: Land Resources Manager
PO Box 196601
Anchorage, AK 99519

ExxonMobil Alaska Production, Inc.
ATTN: Land Resources Manager
PO Box 2024
Houston, TX 77525

Murphy Exploration (Alaska), Inc.
550 Westlake Park Blvd., STE 1000
Houston, TX 77079

Murphy Exploration (Alaska), Inc.
16290 Katy Frwy., STE 600
Houston, TX 77094

Nana Regional Corportation, Inc.
ATTN: Vice President Minerals
1001 E. Benson Blvd
Anchorage, AK 99508

Petro-Hunt, LLC
1601 Elm Street, STE 3900
Dallas, TX 75201

Pioneer Natural Resources
Alaska, Inc.
700 G Street, STE 600
Ancohrage, AK 99501

Savant Alaska, LLC
7501 Village Square Drive,
STE 102
Castle Rock, CO 80108

Mayor Luke Hopkins
Fairbanks North Star Borough
809 Pioneer Rd,
Fairbanks, AK 99701

Mayor Dan Sullivan
Municipality of Anchorage
632 W 6th Avenue, Suite 840,
Anchorage, AK 99501

Mayor Bryce Ward
City of North Pole
125 Snowman Lane
North Pole, AK 99705

Mayor Jerry Cleworth
Fairbanks City Hall
800 Cushman Street
Fairbanks, AK 99701

Mayor Pat Porter
City of Kenai
210 Fidalgo Avenue
Kenai, Alaska 99611

North Slope Borough
Mayor Charlotte E. Brower
P.O. Box 69
Barrow, AK 99723

Doug Chapados,
President/CEO
Petro Star Inc.
3900 C Street, STE 802
Anchorage, AK 99503

In making his determination, the commissioner considered the criteria listed in AS 38.05.183(e) and AS 38.06.070(a). The commissioner's analysis of these criteria is discussed in detail in following sections. As outlined in 11 AAC 03.060(a), the RIK contract must be awarded to the prospective buyer whose proposal offers maximum benefit to the citizens of the State. A copy of the proposed RIK oil sale contract is attached as Exhibit 1 to this Final Finding and Determination. The Board's report is attached as Exhibit 2, the Board's resolution to the Legislature is attached as Exhibit 3, and the public comments received by DNR concerning the proposed contract are attached as Exhibit 4.

III. Discussion of Contract Terms

A. Price

The pricing strategy in the proposed sale is meant to arrive at an equitable value for state's royalty oil at the point where ownership is transferred to FHR. In order to determine the monetary consideration the State receives for its royalty oil, the proposed sale uses a netback valuation strategy. The netback value in the proposed sale is meant to represent the value of ANS sold on the United States West Coast (USWC) as it enters the Trans-Alaskan Pipeline System (TAPS) or the regulated pipeline network upstream of TAPS Pump Station No. 1.

Each element of the netback value is discussed in greater detail below, but succinctly, there are five key elements to the netback value. The netback value begins by determining the value of royalty oil where the overwhelming majority of ANS is sold—the USWC. In order to account for the difference in value associated with transactions on the USWC versus Valdez, a location differential is subtracted (netted) out. Next, to account for the pipeline tariffs to ship royalty oil between the point of delivery on the North Slope and the North Pole refinery, pipeline tariffs are deducted. Fourth, an adjustment is made for the quality difference between the royalty oil and the value of the TAPS common stream received by the buyer. Finally, an adjustment is made to

account for the value impact caused by the difference in the metered volume of oil put into the pipeline at TAPS Pump Station No. 1 and the metered volume of oil delivered to Valdez Marine Terminal. The per-barrel monetary consideration received by the state is represented formulaically as:

ANS Spot Price – $2.15 – Tariff Allowance ± Quality Bank Adjustment-Line Loss

1. ANS Spot Price

"ANS Spot Price" is defined as the monthly average of the daily high and low assessments for the month for ANS traded at the USWC as reported by Platts Oilgram Price Report, Telerate online data reporting service, and Reuters online data reporting service.[29] The three separate price reporting agencies relied upon in the determination of the ANS spot price are three of the four most common markers for ANS value and are each widely used by industry to assess the prevailing market value of ANS. PTR determines the ANS spot price in the existing RIK sales contract and the prevailing value calculation used by Alaska's Department of Revenue (15 AAC 55.171 (m)). Given its common use by both the private and public sectors, PTR provides a credible and reliable estimate of the current market value of ANS.

If DNR or FHR determines that the true market value of ANS is no longer accurately reflected by PTR, then a good faith effort will be made to arrive at a mutually agreeable alternative source to establish the ANS Spot Price. If such a mutually agreeable alternative source cannot be identified, "the State will select the alternative source that most reliably represents the price for ANS." The ANS Spot Price calculation does not include days in which all three reporting agencies do not assess the value of ANS on the USWC.

2. $2.15 ("RIK Differential")

The $2.15 term in the price structure serves a dual role. First, the term is meant to capture the difference in the value of ANS sold on the USWC and at the Valdez terminal. The per-barrel price of ANS is lower in Valdez than the USWC because of both competitive and mechanical forces. Mechanically, a barrel destined for the USWC transacts at a lower price in Valdez because the owner foregoes the cost of transportation to the USWC. Competitively, there are only four entities that have the capacity to lift oil from the Valdez terminal. These firms may have the ability to exercise what economists call market power to negotiate contracts with a Valdez differential that is greater than the marginal cost of transportation.

The second purpose of the $2.15 term is the preservation of DNR's statutory and regulatory obligation to secure a price for its RIK that is at least equal to the volume weighted average price of RIV. While simple in statement, achieving this standard is challenging due to the way lessees report the RIV price. The RIV valuation methodology, i.e., the final value of the State's RIV, is defined by the lease contract provisions and the many royalty settlement agreements that further refined these provisions. In some cases, the price received by the State for RIV is not known until the lessees' royalty filing is audited several years after the initial filing and when the lessees refile their royalty reports. Thus, in order to satisfy its mandate, the State must choose a price

[29] Hereafter, simply PTR.

term when selling its RIK that either directly references the volume-weighted average price of RIV subject to retroactive adjustment when the lessees refile, or anticipate the monthly difference between the reported and final price of RIV

During the negotiations that resulted in the proposed contract, DNR and FHR wrestled with the problem posed by potential retroactive adjustments long after DNR had delivered its royalty oil to FHR. Indeed, the use of a price structure that does not directly reference RIV evolved from FHR's distinct aversion to retroactive adjustment. With the notable exception of the current FHR ten-year sales contract, most past RIK sale agreements contained price provisions that allowed DNR to retroactively adjust the price of royalty oil when the lessees filed their final RIV value. Such retroactive adjustments greatly complicated FHR's ability to price its refined product. To overcome this, FHR has sought contract provisions that, to the extent possible, circumscribe the ability of DNR to adjust prices for oil already delivered. This contract, like the current ten-year contract, includes a RIK Differential that the DNR and FHR mutually agreed would mitigate such retroactivity and satisfy the State's legal obligation. Put differently, the use of a price provision that does not directly reference RIV was not a unilateral imposition by DNR, but rather was FHR's preference.

The $2.15 RIK Differential will be adjusted one time after the second year of the contract. The readjusted amount will be calculated using the following method. First, for each month between January 2013 and December 2015, DNR will calculate the volume-weighted average value of its RIV as reported by BP, CPAI, and ExxonMobil at Valdez. DNR will then subtract the volume-weighted average value of its RIV at Valdez from PTR minus $2.15. Conceptually, this calculation measures how the RIK value at Valdez differs from the volume weighted average RIV value at Valdez. The thirty six resulting values will then be averaged to yield a single value measuring the average difference between RIK and volume weighted RIV at Valdez. The RIK Differential for deliveries on and after April 1, 2016 will be $2.15 plus the average difference between RIK and volume weighted RIV at Valdez, subject to the constraint that the RIK Differential will be no less than $2.00 but no more than $2.30.

3. Tariff Allowance

The Tariff Allowance provides an additional deduction from the ANS Spot Price equal to sum of the ownership-weighted average minimum interstate TAPS tariff filed with the Federal Energy Regulatory Commission (FERC), plus any tariffs paid by FHR for shipment of royalty oil on pipelines on the North Slope upstream of Pump Station No. 1. Under the proposed contract, DNR has the option of providing royalty oil from any ANS production unit, and the additional allowance for tariffs paid on pipelines upstream of TAPS Pump Station No.1 is intended to match a similar deduction taken by the lessees on RIV from those production units. Because FHR is reimbursed for the cost incurred to ship oil from the production units upstream of TAPS Pump Station No.1, DNR has the freedom to maximize value by judiciously nominating royalty oil from different combinations of North Slope production units.[30]

The Tariff Allowance is one of the elements of the price term in the proposed contract that is

[30] This capability provides further assurance that DNR will achieve its statutory and regulatory obligation to secure a price for RIK that is at least equal to the volume weighted average of RIV. See also Section III.C. below.

subject to retroactive adjustments. The Tariff Allowance may be adjusted if the tariff used in the calculation of the Tariff Allowance is changed (or subject to a refund order) by FERC at a later date.

4. Quality Bank Adjustment

The Quality Bank Adjustment is a positive or negative number that reflects the value of different streams of crude oil that are shipped in TAPS. The Quality Bank is administered by the owners of TAPS and regulated by the FERC. Oil tendered for shipment at TAPS Pump Station No. 1 is produced from several different production units and the shippers of oil of lesser value must reimburse the shippers of oil of greater value for the degradation of value of the comingled stream—the value that the shippers receive when they sell the oil. Similarly, the refineries in North Pole and Valdez also take oil out of TAPS, extract the valuable components of the oil in manufacturing petroleum products, and re-inject into the pipeline a mixture of lower valued components. The return streams from the refineries bear a quality bank payment to each of the owners of the passing TAPS stream.

The Quality Bank Adjustment in the proposed contract is calculated as the difference of the value of royalty oil where it is tendered at the point of sale—either at TAPS Pump Station No. 1 or at the entry into a pipeline upstream of TAPS Pump Station No. 1—and the value of the oil in TAPS downstream of the Petro Star Valdez refinery. The proposed contract provides an example for how the Quality Bank Allowance is calculated for RIK oil produced at Lisburne. The Quality Bank Allowance is another element of the price term in the proposed contract that is subject to retroactive adjustments. DNR may readjust the Quality Bank Allowance if the Quality Bank administrator recalculates any of the values used in the calculation of the Quality Bank Allowance.

5. Line Loss

Line loss is a per barrel amount that is calculated as

$$0.009 \times (\text{ANS Spot Price} - \$2.15 - \text{Tariff Allowance} \pm \text{Quality Bank Adjustment})$$

The line loss provision accommodates the impact on value caused by the small difference between the metered volume delivered into TAPS at Pump Station No. 1 and the metered volume delivered to the Valdez Marine Terminal.

B. Quantity

DNR seeks to sell a maximum of 30,000 barrels per day of royalty oil through the proposed sale. As discussed above, the maximum volume of oil sold under the proposed sale is set such that it is highly likely the State will be able to fulfill its quantity obligations even during periods of summer production decline. If FHR nominates the maximum under the proposed contract, this sale will account for between 45 percent and 57.7 percent of the State's total forecast volume of North Slope royalty oil during the period of the contract. However, DNR reserves the right, at

the commissioner's discretion, to limit the quantity of oil sold in the proposed sale to not more than 85 percent of the total monthly North Slope royalty oil, or not more than 95 percent of the monthly royalty oil from any single unit.[31]

The number of barrels per day outlined above represents an upper bound on the actual amount of royalty oil delivered daily under the proposed contract. On the supply side, the number of barrels of royalty oil disposed of under this contract is limited by the State's agreements with its lessees – the State's ability to nominate royalty oil is bound by production – and the commissioner's discretion to nominate no more than 85 percent of total monthly North Slope royalty oil or no more than 95 percent from any single unit. Put differently, the proposed contract permits the State to retain at least 15 percent of its royalty oil for either taking in-value or for sale to other qualified buyers.

On the demand side, the delivered volume of royalty oil may be reduced through two separate quantity adjustment provisions. First, the proposed contract allows FHR to nominate a volume of oil that falls inside of an agreed upon nomination range, initially set at a minimum of 18,000 barrels per day and a maximum of 30,000 barrels per day. This allows FHR to adjust its royalty purchase on a monthly basis in a fashion that will allow FHR to purchase a volume of royalty oil that is consistent with its expectations about future demand for refined product.

The second quantity adjustment provision in the proposed contract allows FHR to reduce the maximum quantity of royalty oil purchased from the State after the first twelve months of the contract, conditional on the approval of the commissioner and a six month notification period before the reduction. FHR may further reduce the maximum quantity after twelve months have elapsed since the last reduction, again conditional on the approval of the commissioner and a six month notification period before the reduction. After a reduction in the volume of royalty oil supplied to FHR under this provision, FHR may subsequently request to increase the volume of RIK, not to exceed 30,000 barrels per day, once again conditional on the approval of the commissioner.

In addition to the flexible quantity provision contained in the proposed contract, the buyer also retains the ability to manage for planned refinery turnarounds—extensive and routine maintenance projects that could temporarily shut-in production—and provide an additional mechanism to terminate the contract. If FHR fails to nominate or nominates zero barrels for three consecutive months, then the contract terminates. Thus, FHR can use this mechanism to terminate the contract and pursue alternative crude supply agreements.

While the buyer retained valuable quantity adjustment terms, the State secured a five year term that will mitigate volumetric concerns in the out-years of the contract. Beyond reducing the State's risk of having insufficient volumes to fulfill FHR's nomination, the shortened term will allow the State to supply other potential customers (e.g., other in-state refiners) with RIK. For example, the State is currently negotiating an RIK contract with Tesoro to supply feedstock to the Kenai refinery. The five year term in the proposed contract allows DNR greater flexibility in

[31] Unit is a term defined in regulation (11 AAC 83.395) as "a group of leases covering all or part of one or more potential hydrocarbon accumulations, or all or part of one or more adjacent or vertically separate oil or gas reservoirs, which are subject to a unit agreement." In vernacular usage, the term "unit" may sometimes be equated to the term "field."

negotiating this potential RIK contract.

C. General Discussion of Price and Quantity Terms

On the whole, the price and quantity terms in the proposed contract offer attractive terms for FHR while also protecting the State's interests. With respect to the State's interests, as discussed above, DNR has a statutory and regulatory duty to ensure that RIK generates revenue at least as great as what would have been realized for the average barrel of RIV. As discussed in detail in Section IV. A. below, DNR's analysis indicates that the proposed contract will meet this standard.

The proposed contract also allows the realization of additional revenues by preserving DNR's ability to arbitrage its royalty take. While for the purposes of exposition this document has treated all RIV barrels as fully substitutable, this is not absolutely correct. Stemming from variation in the calculation of royalty value across producers, the RIV price that would have been realized from a barrel of royalty oil varies across producers. The per-barrel pricing structure outlined in this section aims to generate a price that is, in expectation, at least equal to the volume-weighted average RIV price. However, under the proposed contract, DNR may choose to nominate RIK barrels from areas that would have yielded the lowest RIV price, which will necessarily be less than the volume-weighted average value. The difference between the RIK and RIV amount is additional revenue to the state that is preserved under the proposed contract.

Finally, it is also worth noting that while it is the state's expectation that each barrel of RIK oil will be sold for slightly more than its RIV amount, the price may not necessarily match its market value. As has been discussed, under the terms of the proposed contract the state offers FHR very flexible quantity terms, as well as supply and price certainty, that would be available from a private supplier only at a higher price. The willingness on the part FHR to enter into the proposed contract is prima facie evidence that the terms offered by the state are no more onerous than those the buyer could have negotiated in the marketplace. Moreover, given that the contract may be terminated by simply failing to nominate crude oil, FHR's continued nomination of RIK is further evidence that conditions imposed under the proposed sale are no worse than those that could have been secured had the buyer transacted with any other party.

D. Special Commitments

As was noted above, DNR's solicitation of interest generated four responses affirming interest in the State's RIK. None of these four respondents indicated a willingness to provide comprehensive special commitments. However, during the course of negotiation, DNR was able secure two special commitments from FHR. The first special commitment rewards substantial investment with a contract extension, and the other preserves a status-quo commitment from the current ten-year contract to maintain gasoline price parity between Fairbanks and Anchorage.

1. Contract Extension

If FHR undertakes a large capital project at the refinery or enters into a binding agreement to support a solution to bring natural gas from the North Slope into the Interior, FHR may request

that the contract be amended and extended for an additional five years. Perhaps most valuable from the State's perspective, a binding commitment to support a natural gas transportation system would monetize the State's North Slope natural gas, offer Interior citizens the ability to substitute away from high cost heating fuel, and improve the Fairbanks North Star Borough's ongoing air quality problem.

2. Post Truck Rack Price Parity

The second special commitment contained in the contract constrains the difference between FHR's posted gasoline truck rack prices between Anchorage and Fairbanks. This commitment has been in effect for the past ten years, and will have about the same prospective impact on the wholesale price of gasoline. FHR agrees that, for the volume of gasoline it produces at its North Pole refinery, the annual average difference between its posted truck rack price in Fairbanks and its posted truck rack price in Anchorage will not exceed one cent per gallon. This price parity provision applies only to the gasoline produced at the refinery. The substantial volume of gasoline exchanged with Tesoro and transported into the Interior for FHR, would not be subject to this provision. It should also be noted that this provision affects only the wholesale posted price of gasoline and may not translate to retail price parity between Anchorage and Fairbanks.

E. Other Contract Terms of Interest

1. Force Majeure

DNR will, to the best of its abilities under its agreements with its lessees, accommodate a temporary reduction in the volume of RIK oil delivered to FHR if the reduction is necessitated by a Force Majeure event. The volume of royalty oil will be reduced by an amount equal to the reduction in FHR's requirements that is a direct result of the Force Majeure event. FHR will, however, accept delivery of all royalty oil nominated by the state under the proposed contract. Importantly, changes in commercial or financial markets impacting the price of crude or refined petroleum do not constitute Force Majeure events. Thus, volumes cannot be altered, and performance of other contract provisions cannot be suspended, due to changes in market conditions.

2. Retroactivity

The only terms in the proposed contract subject to retroactive adjustments are the tariff allowance and the quality bank adjustment. If a tariff which has been used in the calculation of a Tariff Allowance is changed or subject to a refund order by the FERC, the Tariff Allowance will be recalculated using the changed FERC-ordered tariff, and the royalty oil price will be retroactively readjusted accordingly. Similarly, if the stream values used in the calculation of the Quality Bank Adjustment is recalculated by the Quality Bank administrator, the Quality Bank Adjustment will be recalculated and royalty oil price will be retroactively readjusted accordingly. Although FHR desired to eliminate all retroactive adjustment in the proposed contract, DNR was able to retain these two retroactive adjustments to help ensure that RIK-RIV price parity was achieved.

3. Security

When the State enters into a sale of RIK oil, the State is exposed to the risk that the buyer will default on its obligations to pay for the royalty oil delivered to, and nominated on the behalf of, FHR. There are two key elements of the "default risk" to which the state is exposed in an RIK sale. The first element is the total loss from royalty oil already delivered to FHR, the second is the so-called "denomination" risk. Under the proposed contract, DNR would be unaware of the buyer's inability, or unwillingness, to pay for oil already delivered for up to 26 calendar days after the final delivery of the month. An immediate move on DNR's part to declare the contract in default would likely require up to another 7 calendar days. Thus, the State could deliver up to 65 calendar days of royalty oil before it could declare the buyer in default (31 days of delivery, 20 calendar days to bill, 6 calendar days for payment, and 7 calendar days to declare default). The revenue from these 65 days of royalty oil would, in the absence of a security or litigation, be a total loss.

In addition to this total loss, the State is also exposed to the losses that would likely stem from a distressed sale of previously nominated royalty oil – the "denomination risk." In order to fulfill its obligations under the proposed contract, the DNR must alert upstream producers of its intent to take RIK at least ninety days ahead of the date of delivery (i.e., it must nominate oil at least ninety days in advance). Thus, should the buyer default, DNR will have nominated an additional 90 days of RIK oil consistent with its obligations under the sale contract. This additional 90 days of royalty oil must be disposed of by the State, likely at distressed prices.

In order to help insulate the State from the default risk that an RIK disposition generates, the State requires that either a letter of opinion from a financial analyst approved by the State is submitted to the State each year, or FHR provides an annually renewed, continuously maintained stand-by letter of credit equal in value to ninety days of royalty oil. In order to waive the requirement for a ninety day letter of credit, the buyer, or guarantor, must submit to a full review of the financial health of the buyer, or guarantor. If the financial analyst finds that the buyer's, or guarantor's, long term (and short term, if available) credit rating is likely to fall to, or below, Standard and Poor's BBB+ or Moody's Baa1 at any time during the next twelve months, then the state will immediately require a one-year irrevocable stand-by letter of credit. It should also be noted that the performance of Flint Hills Resources Alaska, LLC, is guaranteed by its parent Flint Hill Resources, LLC. At present, the parent has a Moody's A1 long-term obligation and P-1 short-term obligation rating, as well as an S&P A+ long-term obligation and A-1+ short-term obligation rating.[32]

4. In-State Processing – AS 38.06.070(b)

Under the proposed contract, FHR is compelled to use "commercially reasonable efforts" to manufacture refined petroleum products from the State's RIK oil in Alaska. While the spirit of this provision is attractive from the State's perspective, it is unlikely to materially impact the behavior of FHR. FHR has little alternative to in-state processing of the state's RIK oil. That

[32] A Moody's A-1 long-term obligation rating indicates low credit risk, P-1 is the highest grade short-term obligation rating. Similarly, S&P's A+ long-term obligation rating indicates a strong ability to meet long-term obligations, and A-1+ is the highest grade short-term obligation rating.

being said, if processing the State's RIK oil in Alaska is the most economic approach, then FHR will process the State's RIK oil in Alaska independent of any in-state processing provision. However, if processing the State's RIK oil in Alaska is not the most economical alternative, FHR will make a "commercially reasonable" decision to process the oil outside of Alaska.

5. Employment of Alaskans and Use of Alaska Companies

The buyer agrees to employ Alaska residents and Alaska companies to the extent they are available, willing, and at least as qualified as other candidates for work performed in Alaska in connection with the proposed sale.

6. Dispute Resolution

In the event that a dispute arises, both parties may avail themselves of the dispute resolution mechanism contained in the proposed contract. The dispute resolution mechanism can be triggered by either the State or FHR by giving notice of the dispute to the other party. Within 60 days of providing notice of the dispute, both parties shall submit their arguments and evidence to the commissioner. After having received the arguments and evidence concerning the dispute from the parties, the commissioner shall adjudicate the dispute. Both the State and FHR agree to abide by the findings of the commissioner provided that the decision is "supported by substantial evidence in light of the whole record."

7. Proration

Under the terms of the proposed contract, the State reserves the right to prorate royalty oil that has been nominated for taking RIK. DNR has reserved 15 percent of its royalty oil for taking RIV or for sale to other RIK purchasers. DNR has, similarly, reserved a minimum of 24,000 barrels per day of RIK for FHR. However, in the event that DNR is unable to supply the total volume of oil nominated by its RIK purchasers, DNR has reserved the right to prorate those volumes not specifically guaranteed to either FHR or other RIK purchasers.

IV. Analysis of State Benefits

A. The Cash Value Offered – AS 38.05.183(e)(1)

Under the terms of the proposed RIK contract, the State will receive a price for its RIK oil that is at least equal to the price it would have received if it elected to keep its royalty oil in-value. Such a cash value is consistent with the State's obligations as mandated in 11 AAC 03.026. The State has continually supplied the FHR North Pole refinery with feedstock for the last 33 consecutive years. Under the expiring ten-year royalty sale agreement with FHR, the State supplied the North Pole refinery with between 17,500 barrels per day and 77,000 barrels per day of Alaska North Slope royalty crude. Under the proposed contract, the State would supply the North Pole refinery with a maximum of 30,000 barrels per day of North Slope royalty crude oil. Based on Department of Revenue's ANS price, TAPS tariff, and up-stream deduction forecasts, this is forecasted to yield between $3.5 billion and $5.9 billion in state revenue.[33]

[33] Alaska Department of Revenue, Revenue Sources Book Fall 2012

As has been mentioned, the State is obliged to receive monetary consideration for its RIK that is at least equal to the volume weighted average monetary consideration received for its RIV. Given that the allowances upstream of Valdez are quite similar for RIK and RIV, this is tantamount to requiring that the difference between the RIK USWC destination value and the RIK differential be greater than the difference between the volume-weighted RIV USWC destination value and volume-weighted RIV marine allowance. Guaranteeing this standard, however, requires knowledge of future events that are unknowable. For this contract, the State has relied on both retrospective examination and reasonable expectations about future economic conditions to develop contractual elements such that RIK and RIV parity is reasonably expected to be realized. Based on the analyses outlined below, DNR expects the price term contained in the proposed contract will achieve RIK-RIV parity.

To estimate the difference between the expected value of the RIK sold under the proposed contract and the expected value of RIV during the proposed contract term, DNR analyzed how the proposed RIK value would have compared with the realized value of RIV over the last four years. In particular, for the period between 2008 and 2011, DNR examined the difference between the RIV value for royalty oil taken from Prudhoe Bay and the value that would have been realized for the RIK taken from the same unit had the proposed contract been in effect. DNR also simultaneously undertook a complementary approach to determining whether the State is likely to achieve RIK-RIV parity by developing reasonable expectations concerning future changes to destination value and marine transportation allowances. These reasonable expectations can then be combined with the retrospective analysis to determine whether it seems likely that the State will achieve RIK-RIV parity.

The retrospective analysis revealed that if the proposed contract had been in effect during the 2008 to 2011 period, RIV would have exceeded RIK by just less than five cents per barrel (a difference of less than 0.1 percent of the RIK price). But, the value of DNR's retrospective analysis hinges critically on the whether the historical period used in the retrospective analysis is representative of the future. The dramatic disruptions in world economic conditions between 2008 and 2011 were virtually unprecedented. The ANS USWC delivered value illustrates just how dramatic these economic changes affected world oil markets. The monthly average value for a barrel of ANS delivered to the USWC began 2008 at $91.12, rose to $134.12 by June 2008, and then fell precipitously through the last half of the year to finish 2008 at $40.03. After hitting this bottom, the value of ANS saw a steady upward march through 2011, crossing the $100 per barrel threshold in March 2011.[34] DNR's expectation is that the economic conditions that gave rise to the large swings in oil prices are very unlikely to reoccur during the term of the proposed contract. Given this, relying solely on historical analysis will not fully inform expectations concerning the future performance of the proposed contract.

As a part of its historical analysis, DNR analyzed the difference between the RIV USWC destination value and the RIV differential along with the corresponding elements embedded in the RIK price formula. With respect to destination value, it should be noted that most of the State's North Slope RIV oil has a destination value defined by provisions in the various RSAs between the State and BP, ExxonMobil, and ConocoPhillips. Each of the RSAs specifies

[34] Prices reported in Platts Oilgram.

different destination values. Presently, BP uses only the ANS USWC spot price reported in Platts. ConocoPhillips uses an average of the ANS USWC spot price reported by Platts and Reuters. ExxonMobil uses a market basket of crude values—including ANS, WTI, Isthmus (a Mexican crude), and Line 63 (a California crude)—as reported by Platts. The ExxonMobil market basket is constrained to be no greater than Platts reported ANS USWC value plus fifty cents and no less than Platts reported ANS USWC value minus fifty cents. Put succinctly, the RIV volume weighted average destination value is driven more strongly by Platts than the PTR destination value in the proposed RIK contract.

To see the import of this, one must look no further than the divergence between the RIV destination value and the RIK destination value attributable in part to the sudden shift in market conditions. The USWC delivered market value of ANS as reported by Platts Oilgram became decoupled from the market price reported by Telerate and Reuters. On a monthly average basis, between January 2005 and December 2007, the difference between the USWC value of ANS reported by Platts and the average USWC value of ANS reported by Telerate and Reuters was $-0.12, meaning that the average of the values reported by Telerate and Reuters exceeded the Platts value by nearly twelve cents. However, during the period used in the historical analysis, January 2008 to December 2011, this changes. During this period, on a monthly average basis, Platts reported ANS USWC value exceeded the average of the value reported by Telerate and Reuters by $0.72. In 2012, this disparity began to ease, with Platts reporting values that exceeded the average of the values reported by Telerate and Reuters by $0.41. Put differently, if the pattern observed in price reporting data during 2008 to 2011 had been consistent with more recent (and more distant) historical patterns, the State's retrospective analysis would have indicated that the proposed contract fulfilled the state's RIV-RIK parity obligation.

The other key term impacting the difference between RIK and RIV is the marine transportation allowances permitted under the RSAs. The producers deduct either their actual and reasonable costs or a formula-calculated proxy of their costs of transporting the State's RIV to the USWC. Many of the allowable costs associated with the transportation of RIV to the USWC are fixed costs that do not depend on the volume of oil transported. For example, the expense associated with fleet depreciation, return on capital, minimum staffing requirements, some operating costs, and overhead are affected very little by the marginal barrel of crude oil. The small cost savings associated with shipping one fewer barrel of oil is more than offset by spreading total costs across a smaller number of barrels. As the volume of North Slope oil production continues to decline over the contract period, the State can expect that the marine transportation allowance claimed by RIV shippers will trend higher, on a per barrel basis.[35] Such an interpretation is further buttressed by the increasing trend observed for the variable costs for operating vessels in the ANS trade. As an example, new rules governing the use of more expensive low-sulfur fuel were imposed on the fleet in 2012.

The data can be used to infer such a phenomenon. DNR estimates the volume-weighted average marine transportation allowance was $2.65 in 2008.[36] Estimates indicate that the marine

[35] This is very dependent on the number of vessels in the ANS fleet and how well the fleet capacity matches ANS production. ExxonMobil is presently preparing to increase its number of vessels in its ANS fleet.

[36] The reported volume-weighted average marine transportation allowances reported here were inferred from the lessee's royalty fillings to ensure that data confidentiality was preserved.

transportation allowance declined in 2009 to $2.23, but then rose in 2010 to $2.62 and rose once again in 2011 to $3.15. Current DNR estimates indicate that the marine transportation allowance in 2012 will rise again to between $3.19 and $3.24. Consistent with the view of increasing average transportation costs, the Department of Revenue forecasts that average allowable marine transportation claimed by producers for tax purposes will rise from $3.67 in fiscal year 2014 to $3.88 in fiscal year 2019. If the upward trend observed in marine transportation allowance continues, then the growth in marine transportation allowances will more than offset the five cent deficiency observed in the state's retrospective analysis.

It should also be recalled that the RIK Differential will be adjusted after the second year of the contract, subject to the constraint that it will not be reduced below $2.00 nor exceed $2.30. The readjustment helps ensure that neither the State nor FHR is unreasonably disadvantaged throughout the life of the contract by assumptions which ultimately prove incorrect. For example, if DNR's forecast concerning increasing marine transportation allowances proves to be incorrect, and during the first two years of the contract RIK fails to achieve parity with RIV, the readjustment mechanism will allow the State to mitigate this in the last three years of the contract. On the other hand, if the value agreed to by FHR ultimately results in RIK outperforming RIV in the first two years of the contract, the adjustment mechanism will increase the RIK Differential with the goal of closing the difference between RIK and RIV for the remaining three years of the contract.

B. The Projected Effects of the Sale on the Economy of the State – AS 38.05.183(e)(2)

The proposed sale will provide the State an estimated $3.5 billion to $5.9 in revenue during the course of the sale. The sale will also help facilitate the continued operation of the North Pole refinery with the economic benefits that accompany such operations. Beyond the refinery's continued production of nearly one million gallons per day of refined petroleum products for the Alaskan economy, the North Pole refinery currently operated by FHR employs over 129 full-time-equivalent positions, with 110 of these positions located in North Pole, Alaska, inside the Fairbanks North Star Borough (FNSB).[37] The Fairbanks Economic Development Corporation estimates that each of these 110 refinery positions provide an estimated $166,000 per year in income and support another eleven positions in the FNSB.[38] The refining sector, including both the FHR and Petro Star North Pole refineries, generate approximately $140 million in gross regional product in the FNSB.[39]

During the period of the proposed contract, another hidden economic benefit of the continued operation of the FHR North Pole refinery will become salient. As TAPS throughput declines, the oil in the pipeline cools more rapidly and jeopardizes the pipeline's ability to safely operate. FHR's North Pole refinery adds heat to the TAPS stream and helps mitigate TAPS low-flow issues.

The North Pole refinery draws its crude from TAPS. The refinery then fractionalizes the crude by applying heat. The resulting fractions are cooled and further processed to yield refined

[37] Private communication with FHR
[38] Fairbanks Economic Development Corporation. "FNSB Economy in 2009: Model Overviews"
[39] ibid

petroleum products. However, some portions of the heated crude cannot be processed in FHR's North Pole refinery and is reinjected into TAPS. The net effect of this reinjection is to warm the comingled stream that flows south through TAPS. A 2010 BP analysis of low TAPS throughput indicated that "for current [2010] Flint Hills Refinery operations in Fairbanks the minimum wintertime throughput is 640,000 barrels per day…[i]f Flint Hills Refinery is shut down, or if the heat currently supplied by the refinery operation is eliminated, the minimum wintertime throughput is 780,000 barrels per day."[40] It should be noted that at the time this report was in preparation, FHR was operating three crude towers. Today it operates a single crude tower, and the refinery has installed a new heat exchanger meant to capture heat from the residual crude constituents before re-injection into TAPS. Thus, FHR's role in low-flow mitigation is much less pronounced today than in 2010, but any aid in extending the longevity of Alaska's economic lifeblood is important to the State's economy.

C. The Projected Benefits of Refining or Processing the Oil in the State – AS 38.05.183(e)(3)

The proposed sale of royalty oil will help ensure continued in-state processing with its attendant price and labor market benefits. As discussed in Sections IIC and IID, products from in-state refiners supply a substantial proportion of the state's needs for refined petroleum products. Given the small and isolated nature of the Alaska market, it is probable that in the absence of in-state refining capacity, Alaskans would observe higher wholesale prices for refined petroleum products. Not only could this manifest as higher retail prices for Alaska residents who already expend more on a per capita basis for energy than residents of any other state, but the ubiquity of refined petroleum in the production and distribution of goods means such a price increase could affect the Alaska economy through smaller profit margins, higher consumer costs for non-petroleum goods, and a degraded competitive position for Alaskan goods sold Outside. The magnitude of these effects is unknown and quite hard to empirically isolate, but it is clear that it will be directly related to the size of the change in the underlying cost of refined petroleum.

The absence of the in-state refining capacity provided by FHR would also have direct, indirect, and induced labor market impacts in Alaska. FHR currently employs 129 Alaskans in high paying positions, positions that would not exist without the presence of the refinery. In-state refining also has substantial indirect effect on the Alaska labor market. For example, at its peak, FHR transported over 117 rail cars per day of petroleum products between Anchorage and the Interior on the Alaska Railroad. In spite of diminishing production, FHR's North Pole refinery today still ships 30 rail cars per day of petroleum products between Anchorage and the Interior.[41] This change in the utilization of the Alaska Railroad illustrates FHR's impact on indirect employment: the Alaska Railroad Corporation eliminated 52 positions when it reduced rail service between Fairbanks and Anchorage.[42]

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[40] Trans Alaska Pipeline System Very Low Throughput Mitigation Analysis, August 16, 2010, p. 7

[41] Private communication with FHR.

[42] Alaska Railroad Announces Layoffs, Blames Global Recession. June 19, 2012. Alaskapublic.org. Accessed at http://www.alaskapublic.org/2012/06/19/alaska-railroad-announces-layoffs-blames-global-recession/ on 08/24/2012.

D. The Ability of Prospective Buyer to Provide Refined Products or By-products for Distribution and Sale in the State with Price or Supply Benefits to the Citizens of the State – AS 38.05.183(e)(4)

FHR's North Pole refinery began producing refined petroleum products in 1977. The North Pole refinery continues to operate to this day, producing over 330 million gallons of refined product per year. Of this 330 million gallons of refined product produced by FHR per year, between sixty-four and seventy-three percent will be jet fuel. A substantial volume of this jet fuel will support operations at Ted Stevens Anchorage International Airport, the fourth busiest cargo airport in the world[43] and the economic engine that supports one out of every ten jobs[44] in Anchorage. Since 1979, the State has continually supplied the North Pole refinery with Alaska North Slope royalty oil, supplying nearly 154 million barrels[45] under the current RIK contract. There is little question that FHR's North Pole refinery can supply refined products to Alaskans.

E. The Revenue Needs and Projected Fiscal Condition of the State – AS 38.06.070(a)(1)

The current and projected fiscal condition of the State has been discussed in greater detail above, see Section IID. In short, the State's fiscal condition has been strong in recent years, but recent Office of Management and Budget projections indicate that the State could experience a budget shortfall in FY2013. Based on these same projections, ongoing budget shortfalls are likely from FY2015 through FY 2023. The sale of royalty oil under the proposed contract is projected to generate between $3.5 billion and $5.9 billion in State revenue. The proposed contract is expected to yield revenues that are at least as great as what would have realized had the State's royalty been left in value. The proposed sale may even offer a small incremental improvement to the State's fiscal picture by generating increased revenue through arbitrage. While the incremental revenue generated through the proposed sale will not offset the deficits that are projected by the less optimistic scenarios outlined by the Governor's Office of Management and Budget, the proposed sale will do no harm to the State's revenue picture.

F. The Existence and Extent of Present and Projected Local and Regional Needs for Oil and Gas Products and By-products, the Effect of State or Federal Commodity Allocation Requirements Which Might be Applicable to Those Products and By-products, and the Priorities among Competing Needs – AS 38.06.070(a)(2)

As was noted at the outset, on a per capita basis, Alaskans spend more on energy than residents of any other state. This high expenditure rate is driven in large part by the very high per unit cost paid by Alaskans for energy. Most pertinent for current purposes, Alaskans pay the highest rates in the country for gasoline, and the second highest rates in the nation for distillate fuels including diesel and home heating fuel. It is not likely that the proposed sale will materially reduce the price paid by Alaskan consumers for refined petroleum products. However, the absence of a sale would, at least in the short term, require the importation of refined petroleum products. Such importation would not decrease the price of energy.

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[43] Where busiest is measured by cargo throughput. Alaska Department of Transportation & Public Facilities, Access at http://dot.alaska.gov/anc/ on 02/19/13.
[44] Alaska Department of Transportation & Public Facilities, Access at http://dot.alaska.gov/anc/ on 02/19/13.
[45] As of June 2012

Overall, based on EIA estimates presented in Section IIC, in 2010 Alaska consumed just over 290 million gallons of gasoline and 954 million gallons of jet fuel. Assuming these numbers are representative of current consumption, FHR supplies roughly 18 percent of the gasoline consumed by Alaskans and 26 percent of the jet fuel consumed by Alaskans (or those in Alaska). Clearly, the loss of this volume of gasoline and jet fuel could generate substantial regional and state-wide need for refined petroleum products.

G. The Desirability of Localized Capital Investment, Increased Payroll, Secondary Development and Other Possible Effects of the Sale – AS 38.06.070(a)(3)

The proposed sale of RIK will, in and of itself, require no additional capital investment, induce no change in payroll, yield no secondary development and have few other consequences. During negotiations, FHR indicated that the North Slope royalty oil transacted under the proposed sale will be used in a status-quo fashion. Royalty oil will continue to be used as the primary source of feedstock to run the single crude tower still in operation at the North Pole refinery. If the State's RIK is used in such a fashion, there will be little incremental capital investment, payroll, secondary development, or other effects.

However, the proposed contract provides for the possibility of a contract extension if FHR commits to a large capital project or provides binding support for a system to transport North Slope natural gas into the Interior. Obviously, a large capital project (e.g., desulfurization facilities) would require substantial capital investment and would spur hiring, at least temporarily. Similarly, if FHR's commitment to a natural gas transportation system encouraged the construction of such a system, there would be substantial local capital investment, increased labor market demand, positive environmental spillover effects, and decreased energy costs.

H. The Projected Social Impacts of the Transaction – AS 38.06.070(a)(4)

Beyond the direct revenue impact and the possible construction of a natural gas transportation system, the proposed sale is unlikely to have any incremental social impact. However, the absence of the proposed sale could have serious social impact. For example, if the North Pole refinery ceased operations, just over 1,300 jobs would be lost in the FNSB.[46] Such a change would result, at least temporarily, in increased utilization of the social safety net. Moreover, depending on how the market responded to the loss of supply from the FHR refinery, there could be infrastructure impacts. For example, if the market fills the demand left unmet by a cessation of operations at the North Pole refinery by trucking refined product into the Interior, Interior roadways would experience increased usage.

[46] Fairbanks Economic Development Corporation. "FNSB Economy in 2009: Model Overviews"

I. The Projected Additional Costs and Responsibilities Which Could Be Imposed Upon the State and Affected Political Subdivisions by Development Related to the Transaction – AS 38.06.070(a)(5)

The proposed sale of RIK, in and of itself, is expected to generate negligible additional cost or responsibilities for the State or the FNSB. While it is possible that the sale of RIK may cause a restart of one or both of the idled refining towers in the North Pole refinery, it is expected that such a move would generate fewer than 40 new, full-time positions.[47] Such a modest change in steady state employment is unlikely to significantly affect the utilization of public services, meaningfully affect the size or distribution of population, or result in large indirect or secondary labor market effects.

However, the absence of a sale could impose substantial costs on government resources. As was noted, if FHR ceased operations, there would likely be an increase in reliance on government assistance with an accompanying increase in state and federal expenditures. From a local perspective, the labor market impact of the closing of the North Pole refinery could foreseeably result in a long run redistribution of population, likely with a net population loss in the FNSB. Such a population contraction would reduce the burden placed on local educational systems, but would also likely result in a loss of local property tax revenues.

J. The Existence of Specific Local or Regional Labor or Consumption Markets or Both Which Should Be Met by the Transaction – AS 38.06.070(a)(6)

While the proposed contract is unlikely to induce substantial new hiring, it will facilitate the continued operation of the North Pole refinery with the attendant labor market impacts. As was discussed above, the North Pole refinery employs 129 full-time-equivalent positions, 110 in North Pole and 19 in Anchorage. In 2009, the Fairbanks Economic Development Corporation estimated that a typical position in one of the refinery in the FNSB provided an average $166,011 per year per position in income, more than 2.5 times the average income in the borough.[48] Beyond direct employment effects, the cascading economic effect of each FNSB refining job is estimated to generate 11.1 additional positions typically providing $66,365 per year per position in income. Put differently, the FHR North Pole refinery and the economic activity derived from it is estimated to support 1,331 jobs in the FNSB with an expected total income very near $100 million per year ($99.3 million). The loss of the positions at the FHR refinery and the indirect and induced labor market effects could have a material impact on the economic health of the FNSB. Although the proposed contract cannot guarantee the continued operation of the FHR refinery, it will guarantee an ongoing supply of crude to the FHR refinery at North Pole.

K. The Projected Positive and Negative Environmental Effects Related to the Transaction – AS 38.06.070(a)(7)

The sale of RIK oil will, in and of itself, have no negative environmental effects and will not affect the volume of oil shipped in Alaska. If RIK oil simply replaces oil that would have been

[47] The idling of towers #1 and #3 resulted in the loss of 38 full-time positions.
[48] Fairbanks Economic Development Corporation. "FNSB Economy in 2009: Model Overviews"

purchased from the private market on a one-to-one basis, then there is no environmental impact. In such a situation, the North Pole refinery processes the same volume of feedstock to refine the same volume of product.

However, the absence of a sale may induce changes in consumption behavior that generates environmental risk. For example, if in the absence of a sale, FHR was to cease operations at the North Pole refinery, Alaskans might observe an increase in the cost of home heating oil. Such an increase could lead some Alaskans to substitute energy generated from wood for energy generated from heating oil. Such a substitution would degrade air quality. Such degradation could be particularly problematic for residents of areas with pre-existing air quality concerns, such as the Fairbanks-North Pole area. [49] On the whole, since the proposed contract is expected to maintain status quo refining behavior, it is unlikely that there will be a large net change in the state's exposure to environmental risk due to the proposed sale of royalty oil.

It should also be noted that the State transfers title and risk for RIK crude to the buyer at the point of delivery.[50] This legal construction does not change the volume of oil flowing through TAPS on a given day and does not impact environmental risk. However, it does insulate the State from the financial risk associated with an adverse environmental outcome.

L. The Projected Effects of the Proposed Transaction upon Existing Private Commercial Enterprise and Patterns of Investments – AS 38.06.070(a)(8)

The proposed contract will help facilitate the continued operation of the North Pole refinery by guaranteeing an ongoing supply of crude. The continued operation of the North Pole refinery will allow FHR to continue to supply its customers, including Ted Steven International Airport, Fairbanks International Airport, and the regional wholesale market. The continued operation of the North Pole refinery will sustain the demand that FHR generates among its vendors and servicers including, perhaps most notably, the Alaska Railroad. As was noted previously, it is possible, but certainly not probable, that the proposed sale will result in modest new investment.

The largest potential impact on existing private commercial enterprise and patterns of investments occur in the absence of a RIK sale to FHR. FHR indicates that the North Pole refinery has experienced on-going financial pressures and that refinery operations might cease in the absence of a new RIK contract. This would result in the loss of approximately 18 percent of the gasoline consumed in Alaska and 26 percent of the jet fuel consumed in Alaska. Such a loss could result in market changes that directly impact existing private commercial enterprise.

V. Public Comment

Under 11 AAC 03.020(c)(2), before the publication of a final finding and determination, the commissioner must engage in a public comment period lasting not less than least 30 days. The public comment period on the proposed RIK sale began February 20, 2013 with the public notice, publication, and dissemination of the Preliminary Finding and Determination. The public

[49] See, for example, http://www.dec.state.ak.us/air/anpms/comm/fbks1_pm.htm

[50] Put differently, the state instantaneously passes the title and risk of royalty oil from the producer to the buyer at the point of delivery.

comment period closed on March 22, 2013. During this comment period, DNR received six public comments from five different entities. Four of these six comments were received in the written form, the remaining two comments were provided orally during the February 26, 2013, Alaska Royalty Oil and Gas Development Advisory Board meeting in the Noel Wien Library in Fairbanks, Alaska. A copy or transcription of each comment is attached in Exhibit 4. All comments received expressed support for the proposed contract.

VI. Finding and Determination

A. Disposal of Royalty Oil In-kind is in the State's Best Interest

In accordance with AS 38.05.182(a), 11 AAC 03.010(b) and (d), and 11 AAC 03.060, DNR has published this Final Finding and Determination. The commissioner has determined that it is in the best interest of the State to take its royalty oil in-kind in order to supply the FHR refinery at North Pole with feedstock.

B. Competitive Bidding is Waived

Consistent with the results of the solicitation described in Section II.G. above and DNR's assessment of the potential benefits of negotiated RIK contracts, the commissioner has determined, in accordance with AS 38.05.183(a) and 11 AAC 03.030, that the best interests of the State will be served through the sale of its RIK to FHR under non-competitive procedures.

The proposed contract will protect the State's interest by earning revenue that is at least equal to the volume weighted average revenue earned by the State's royalty in-value and by facilitating continued operations at FHR's North Pole refinery. In making this Final Finding and Determination the commissioner considered that without a royalty contract there was a chance that the North Pole refinery could cease operations with the resulting negative consequences for Alaska. The commissioner also considered the State's expectation that it will to have sufficient royalty oil to supply other in-state refiners interested in the purchase of RIK. The commissioner further considered that DNR has negotiated a contract that will permit a transparent and equitable allocation of the State's royalty oil across all RIK buyers should the State's volumetric expectations be incorrect.

A copy of the Preliminary Finding and Determination was delivered to the Royalty Board as notification under AS 38.05.183(a) and 11 AAC 03.010(g)

C. The Proposed RIK Oil Sale Offers Maximum Benefits to the State

When RIK is sold through a process other than competitive bid, the commissioner shall award the disposal to the prospective buyer whose proposal offers the maximum benefits to the citizens of the State of Alaska. In making the award the commissioner must consider the criteria set out in AS 38.05.183(e) and in AS 38.06.070(a). The commissioner's in-depth review and consideration of all of the required statutory criteria is set out above in Section IV of the Final Finding and Determination. The commissioner finds that the proposed sale of North Slope royalty oil to FHR, under the terms and conditions of the attached proposed contract, offers the

maximum benefit to the state.

D. Alaska Royalty Oil and Gas Development Board

The Preliminary Finding and Determination and a copy of the proposed contract was submitted to the Alaska Royalty Oil and Gas Development Board in compliance with AS 38.05.183(c), 11 AAC 03.024, and 11 AAC 03.040, which require the commissioner to give written notice to the board of intent to waive competitive bidding in an RIK sale.

E. Legislative Approval

Under AS 38.05.183 and AS 38.06.055, legislative approval is required for RIK oil disposition with a term of more than one year. Legislation approving the sale has been prepared and submitted to the Legislature.

G. **Applicable Criteria and Weights**

For the purposes of the proposed contract, as was outline in Section IV, the commissioner considered all criteria outlined in AS38.05.183(e). The commissioner finds that the proposed sale will positively impact, or affect no harm on, all of the criteria in AS38.05.183(e). In his analysis of the proposed sale, the commissioner most heavily weighted the cash value offered, the projected effect of the sale on the economy of the state, and the ability of FHR to supply refined product to Alaskans. While all criteria in AS38.05.183(e) received non-zero weight, the other criteria discussed in Section IV received less weight.

VII. Conclusion

On careful consideration of the circumstances of the proposed sale, material information and legal requirements, the commissioner determines, in accordance with AS 38.05.183, that the best interest of the State does not require this royalty in-kind sale be made by competitive bid, and the that the proposed contract with FHR offers maximum benefits to it citizens.

Daniel S. Sullivan
Daniel S. Sullivan
Commissioner

March 25, 2013
Date

AGREEMENT FOR THE SALE OF

ROYALTY OIL

BETWEEN AND AMONG

THE STATE OF ALASKA,

FLINT HILLS RESOURCES, LLC, A DELAWARE LIMITED LIABILITY COMPANY

AND

FLINT HILLS RESOURCES ALASKA, LLC, AN ALASKA LIMITED LIABILITY COMPANY

EFFECTIVE _____, 2013

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AGREEMENT FOR THE SALE AND PURCHASE OF ROYALTY OIL

This Agreement is between the State of Alaska ("State"), Flint Hills Resources Alaska, LLC, an Alaska Limited Liability Company ("Buyer") and Flint Hills Resources, LLC, a Delaware Limited Liability Company ("Guarantor").

ARTICLE I
DEFINITIONS

As used in this Agreement, the terms listed below shall have the following meanings:

1.1 "Affiliate" is defined in Section 22.1

1.2 "ANS" means the Alaska North Slope.

1.3 "ANS Spot Price" is defined in Section 2.3.

1.4 "Assignee" is defined in Section 22.1.

1.5 "BP" means BP Exploration (Alaska) Inc. and its successors and assigns.

1.6 "Business Day" means any day, or part of a day, during which federally chartered banks are open for business in the place designated in this Agreement for payment.

1.7 "Commissioner" means the Commissioner of the Alaska Department of Natural Resources or the Commissioner's designee.

1.8 "CPAI" means ConocoPhillips Alaska, Inc. and its successors and assigns.

1.9 "Day" means a period of twenty-four consecutive hours, beginning at 12:01 a.m., Alaska Local Time.

1.10 "Day of First Delivery" is defined in Section 2.5.

1.11 "ExxonMobil" means ExxonMobil Corporation and its successors and assigns.

1.12 "Financial Analyst" is defined in Section 6.3.

1.13 "FERC" means Federal Energy Regulatory Commission.

1.14 "Force Majeure" is defined in Section 15.2.

1.15 "Leases" means the oil and gas leases issued by the State on the Alaska North Slope from which the State takes or may take Royalty Oil in-kind.

1.16 "Lessee" means a person owning a working interest in any of the Leases.

1.17 "Letter of Credit" is defined in Section 7.1.

1.18 "Letter Effective Date" is defined in Section 7.2.

1.19 "Line Loss" is defined in Section 2.3.

1.20 "Minimum Interstate TAPS Tariff" is defined in Section 2.3.

1.21 "Month" means a period beginning at 12:01 a.m., Alaska Local Time, on the first Day of the calendar Month and ending at 12:01 a.m., Alaska Local Time, on the first Day of the following calendar Month.

1.22 "Moody's" means Moody's Investor's Services, Inc., a subsidiary of Moody's Corporation, and its successors.

1.23 "Notice" means written notice in accordance with Article XVI.

1.24 "Notice Effective Date" is defined in Section 16.2.

1.25 "Opinion Letter" is defined in Section 6.3.

1.26 "Parties" means, collectively, Buyer, Guarantor and State.

1.27 "Party" means Buyer, Guarantor or State, individually.

1.28 "Person" is defined in AS 01.10.060.

1.29 "Point of Delivery" means the transfer point at which the State receives Royalty Oil in-kind from the Lessees.

1.30 "Price" is defined in Section 2.3.

1.31 "Process" is defined in Section 4.1.

1.32 "PSVR Reference Stream" is the blended TAPS stream immediately downstream from the Petro Star Valdez Refinery.

1.33 "Refinery Turnaround" means a period when Buyer, by notice to the State, may reduce the quantity of Sale Oil it nominates and purchases from the State to less than 18,000 barrels per Day because the North Pole refinery reduces the processing of Sale Oil for the purpose of performing planned or unplanned maintenance, repairs or capital improvements to the refinery.

1.34 "Quality Bank" means a system of calculations administered under the authority of the FERC that accounts for the differences in value between the individual tendered streams and the delivered co-mingled stream of TAPS.

1.35 "Quality Bank Adjustment" is defined in Section 2.3.

1.36 "RIV Marine Cost" is defined in Appendix 5.

1.37 "Royalty Oil" means the total volume of crude petroleum oil and other hydrocarbons and associated substances from the Leases, including such substances as crude oil, condensate, natural gas liquids, or return oil from crude oil topping plants, that may be blended with crude oil before the Point of Delivery and tendered as a common stream to the State as Royalty Oil that the State may take in-kind, regardless of whether the State takes the Royalty Oil in-kind.

1.38 "Royalty Settlement Agreement" means any written royalty settlement agreement.

1.39 "Sale Oil" means the oil the State has agreed to sell to the Buyer, and the Buyer has agreed to purchase from the State under this Agreement.

1.40 "Standard and Poor's" means Standard and Poor's, a division of McGraw-Hill Companies, Inc., and its successors.

1.41 "TAPS" means the Trans-Alaska Pipeline System

1.42 "Tariff Allowance" is defined in Section 2.3.

1.43 "Term" is defined in Section 9.2.

1.44 "Unit" has the meaning defined in 11 AAC 83.395(7).

1.45 "Unit Agreement" means any unit agreement for a Unit from which the State takes or may take Royalty Oil.

ARTICLE II
SALE AND PURCHASE OF ROYALTY OIL

2.1 Quantity.

2.1.1 Sale Oil Quantity. The State agrees to sell to Buyer, and Buyer agrees to purchase from the State, an initial Sale Oil quantity of a maximum of 30,000 barrels per Day and a minimum of 18,000 barrels per Day averaged for the Month of Sale Oil delivery, as nominated by Buyer in accordance with Section 2.1.5 and 2.4. The Commissioner may limit the total amount of Sale Oil for any Month to not more than 85 percent of the total Royalty Oil for the Month or not more than 95 percent of the Royalty Oil for the Month from any single Unit.

2.1.2 Monthly Sale Oil Nomination. In accordance with 2.1.1, Buyer shall nominate the quantity of Sale Oil for each Month of Sale Oil delivery by giving Notice of Buyer's Sale Oil nomination. Except when the additional notice provisions of Section 2.1.7 are invoked by Lessees, Buyer's nomination shall be effective on the first Day of the Month following expiration of a minimum of one hundred Days after the Notice of Buyer's nomination.

The State will make commercially reasonable efforts to nominate, in accordance with applicable Unit Agreements, percentages of the State's estimated Royalty Oil volume from one or more Units, at the State's discretion, that will equal the Sale Oil quantity nominated by the Buyer each Month of Sale Oil delivery. Notwithstanding Buyer's Monthly nominations, any time the total commitments for Royalty Oil under all of the State's royalty in kind contracts exceed 85 percent of Royalty Oil in a Month, Buyer agrees that the State may limit its total nomination of Royalty Oil to an amount that does not exceed 85 percent of Royalty Oil in that Month of Sale Oil delivery and may employ the proration provisions of prorate as per 2.1.3. Buyer agrees to accept the volume of Royalty Oil delivered in accordance with the State's nomination. See Appendix 1 for an illustration of the State's nomination procedure for Sale Oil nominated from the Prudhoe Bay Unit for October 2014.

2.1.3 Sale Oil Proration. Notwithstanding Section 2.1.1, Buyer agrees that for any Month of Sale Oil delivery in which the Buyer nominates more than 24,000 barrels per day of Sale Oil, and the sum total of nominations of all purchasers of the State's royalty oil including Buyer exceed 85 percent of the Royalty Oil, the State may prorate the Buyer's Sale Oil nomination in excess of 24,000 barrels per day and may prorate the nomination of other purchasers of the State's Royalty Oil. The State will prorate the Buyer' nomination for the Month of Sale Oil delivery according to the following calculation: the State will first determine if the sum of the total nominations of all of the State's royalty in-kind purchasers exceeds the total Royalty Oil multiplied by 0.85; second, if the total nomination of all the State's royalty in-kind purchasers exceeds the total Royalty Oil multiplied by 0.85, subtract 24,000 barrels per day from the Buyer's nomination and divide the result by the sum of the total nominations of all the State's royalty in-kind purchasers minus 24,000 barrels per day; third, this factor is multiplied by

24,000 barrels per day subtracted from the total Royalty Oil multiplied by 0.85; fourth, this amount is added to 24,000 to equal the Buyer's total nomination for the Month of Sale Oil delivery. An illustration of this calculation appears in Appendix I.

2.1.4 Buyer's Election to Reduce Sale Oil Quantity.

(a) Buyer may elect to reduce the initial Sale Oil quantity by giving Notice. The initial Sale Oil quantity shall remain as stated in Section 2.1.1 for 12 Months after the Day of First Delivery. Notice of a reduction shall be delivered to the State at least six Months before the effective date of the reduction. The Commissioner may approve or deny a request for a reduction in Sale Oil quantity. The reduced maximum quantity shall be 137.5 percent of the reduced minimum quantity. For example, if the reduced minimum quantity is 10,000 barrels per Day, the reduced maximum quantity shall be 13,750 barrels per Day (10,000 times 1.375=13,750).

Buyer may elect additional reductions to the Sale Oil quantity following a reduction to the initial Sale Oil quantity. A reduction cannot be effective until at least 12 Months after the effective date of the most recent reduction in quantity. Notice of an additional reduction under this paragraph (a) shall be delivered to the State at least six Months before the effective date of the additional reduction. The reduced maximum quantity shall be 137.5 percent of the reduced minimum quantity.

(b) Buyer may elect to reduce the Sale Oil quantity to zero barrels of Sale Oil per day for the Month of Delivery by giving Notice. If Buyer nominates zero barrels of Sale Oil for three consecutive Months, this Agreement shall terminate automatically, without Notice or further action by the State or the Buyer, on the last day of the third consecutive Month that the Buyer nominates zero barrels.

(c) Buyer's elections to reduce Sale Oil quantities under this Section 2.1.4 are subject to the provisions of Section 2.1.7.

2.1.5 Increase in Quantity Following Elective Reduction. Following a reduction of Sale Oil quantity under Section 2.1.2, Buyer may request an increase in the Sale Oil quantity to an amount that does not exceed the maximum Sale Oil quantity in Section 2.1.1. The increased maximum quantity must be 137.5 percent of the increased minimum quantity. An increase is not effective until at least 12 Months after the effective date of the most recent change in quantity (*i.e.*, a decrease under Section 2.1.2 or an increase under Section 2.1.3). The Commissioner may approve or deny a request for an increase in Sale Oil quantity.

2.1.6 Temporary Sale Oil Quantity Reduction in Event of Force Majeure. In the event of a Force Majeure under Article XV, Buyer may temporarily reduce the Sale Oil quantity by an amount equal to the reduction in Buyer's requirements that is a direct result of the Force Majeure event. To temporarily reduce the Sale Oil quantity in the event of Force Majeure, Buyer shall include a Notice of temporary reduction in Sale Oil quantity due to Force Majeure under this Section with Notice of Buyer's monthly Sale Oil nominations of Sale Oil. Each notice of temporary reduction due to Force Majeure shall include documentation of the nature of the Force Majeure event and quantification of the direct impact of the Force Majeure on Buyer's Sale Oil requirements for the Month of nomination. Temporary reductions in Sale Oil quantity under this Section shall be effective only to the extent that the State is able, through the State's nomination process set out in Section 2.1.2, to reduce the volume of Royalty Oil that the State receives for the Month of Sale Oil delivery. Buyer shall accept delivery of the total volume of Royalty Oil delivered to the State in accordance with the State's nominations of Royalty Oil.

2.1.7 Additional Notice Provisions. Buyer acknowledges that the Leases from which the State must nominate Royalty Oil require 90 Days' notice to the Lessee prior to decreasing the State's nomination of Royalty Oil to be taken in-kind in any Month. Buyer acknowledges that if a Lessee invokes the Force Majeure provisions of its Royalty Settlement Agreement, the State may be required to give up to 180 Days (*i.e.*, an additional 90 Days) notice to the Lessee prior to decreasing the State's nomination of Royalty Oil to be taken in-kind in any Month. If a Lessee invokes the Force Majeure terms of its Royalty Settlement Agreement as a result of a reduction in Buyer's nomination in the event of Buyer's Force Majeure, Refinery Turnaround, or for any other reason, Buyer's reduced nomination shall not become effective until the end of the additional 90 Day notice period. If a Lessee invokes the Force Majeure terms of its Royalty Settlement Agreement and extends the notice period an additional 90 Days, the State agrees to make commercially reasonable efforts to reduce the volume of its Royalty Oil nominations.

2.1.8 No Guarantee of Sale Oil Quantity. The State shall exercise its rights under the Leases and Royalty Settlement Agreements to request that Royalty Oil be delivered as Sale Oil. The State can deliver Sale Oil only to the extent it receives Royalty Oil from the Lessees. The quantity of Royalty Oil available to the State may vary and may be interrupted from time to time depending on a variety of factors, including the rate of production from the Leases. The State disclaims, and Buyer waives, any guarantee, representation, or warranty, either express or implied, that a specific quantity of the total, daily, monthly, average, or aggregate Royalty Oil will be delivered as Sale Oil.

2.1.9 No Guarantee of Source of Sale Oil. The State will deliver, as Sale Oil, Royalty Oil produced from the Leases and delivered to the State as Royalty Oil in-kind. The

availability to the State of Royalty Oil in-kind in any Month may vary depending on a variety of factors, including the rate of production from the Leases. The State disclaims and Buyer waives, any guarantee, representation, or warranty, either express or implied, that Sale Oil delivered and sold by the State in any Month is from a certain Lease, Unit, or other area.

2.1.10 State's Warranty of Title. The State warrants that it has good and marketable title to the Royalty Oil delivered and sold as Sale Oil.

2.2 Quality.

2.2.1 No Guarantee of Quality of Sale Oil. The Royalty Oil the State delivers to Buyer as Sale Oil shall be of the same quality as the Royalty Oil delivered to the State at the Point of Delivery. The quality of the Royalty Oil delivered to the State may vary from time to time. The State disclaims, and Buyer waives, any guarantee, representation, or warranty, either expressed or implied, of merchantability, fitness for use, or suitability for any particular use or purpose, or otherwise, and of any specific, average, or overall quality or characteristic of Sale Oil. Buyer specifically waives any claim that any liquid hydrocarbons, including such substances as crude oil, condensate, natural gas liquids, or return oil from the crude oil topping plant, delivered with the Sale Oil, are not Sale Oil for purposes of this Agreement.

2.3 Price of the Sale Oil. The price per barrel of Sale Oil delivered from each Unit by the State to the Buyer each Month shall be equal to

ANS Spot Price - $2.15 - Tariff Allowance + Quality Bank Adjustment - Line Loss.

"ANS Spot Price" means the monthly average of the daily high and low assessments for the Month of Sale Oil delivery for ANS oil traded at the United States West Coast as reported by Platts' Oilgram Price Report, Telerate online data reporting service, and Reuters online data

reporting service. The ANS Spot Price calculation will not include days on which prices are not reported for all three reporting services, such as weekends or holidays. If any of these publications ceases to report daily assessments for ANS oil traded at the United States West Coast, the Parties agree to calculate the ANS Spot Price using the data from the remaining reporting services. If either Buyer or State makes a good faith determination that the ANS Spot Price no longer accurately represents the price for ANS oil traded at the United States West Coast, Buyer and State will attempt in good faith to arrive at a mutually agreeable alternative source to establish, or substitute for, the ANS Spot Price. If Buyer and the State arrive at a mutually agreeable alternative source, that source shall be used to determine the ANS Spot Price beginning the Month following the Month in which any of these publications ceased to report daily assessments for ANS oil traded at the United States West Coast. If Buyer and the State are unable to agree on an alternative source, the State will select the alternative source that most reliably represents the price for ANS oil traded at the United States West Coast based on the best information reasonably available to the State, and that source shall be used to determine the ANS Spot Price beginning the Month following the Month in which any of these publications ceased to report daily assessments for ANS oil traded at the United States West Coast. Any dispute between the Buyer and State concerning the ANS Spot Price under this section shall be administered in accordance with Section 13.1.

The $2.15 component used in the calculation of the Price of Sale Oil ("RIK Differential") shall be adjusted by a maximum of ± $0.15 per barrel one time for deliveries of Sale Oil on and after April 1, 2016. The RIK Differential will be adjusted as follows: for each Month from January 2013 through December 2015, calculate the volume-weighted average destination value minus the cost of marine transportation reported each Month on the royalty filings of BP,

ExxonMobil, and CPAI for the Months January 2013 through December 2015; subtract this amount from the difference between the ANS Spot Price and $2.15 each Month for the same period; calculate the January 2013 through December 2015 average of these monthly differences; add this average to adjust the RIK Differential for deliveries of Sale Oil on and after April 1, 2016, such that the adjusted RIK Differential shall not be more than $2.30 or less than $2.00. The adjustment of the new RIK Differential will be based on data provided by BP, ExxonMobil, and CPAI and documented in their royalty filings, including all revisions to that data that are available to the State at the time the State prepares the statement of account for the April 2016 Month of delivery.

"Tariff Allowance" means the sum of (1) the average, weighted by ownership, of the Minimum Interstate TAPS Tariff (Pump Station No. 1 to Valdez Marine Terminal) on file with the Federal Energy Regulatory Commission ("FERC") for each owner in effect on the Day the Sale Oil is tendered by the State to Buyer; and (2) any tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No. 1. "Minimum Interstate TAPS Tariff" means the effective TAPS tariff on file with the FERC for each carrier on a given Day, excluding incentive tariffs. If the Minimum Interstate TAPS Tariff that has been used in the calculation of a Tariff Allowance is changed or subject to a refund order by the FERC, or if Buyer pays a revised amount for tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No. 1, the Tariff Allowance will be recalculated using the changed FERC-ordered Minimum Interstate TAPS Tariff or the revised amount for tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No.1, the Sale Oil Price will be adjusted accordingly, and the resulting refund to the State (or credit to Buyer) will be made in accordance with Article III. If a FERC-ordered tariff is suspended or enjoined from implementation, the Tariff Allowance shall not be recalculated until

the suspension or injunction is lifted and the FERC order is implemented and goes into effect. If Buyer pays a revised amount for tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No.1, the Tariff Allowance shall be recalculated when the revised amount is paid or refund is received by Buyer and applied to Sale Oil that has been delivered to Buyer beginning on the effective date of the revision. Buyer shall at the request of the Commissioner provide the necessary documentation in the form of invoices, etc. from the TAPS and upstream pipeline carriers of revised payments and refunds and any interest paid or received as a consequence of the revised payments.

The "Quality Bank Adjustment" is a per-barrel amount, positive or negative, that accounts for the difference in quality between the oil produced from the units on the North Slope and the co-mingled ANS TAPS stream downstream of the PSVR connection. The Quality Bank Adjustment for a Unit's stream will be calculated each Month as the difference between the stream value for the PSVR Reference Stream and the stream value at the Point of Delivery. The stream value and PSVR Reference Stream are reported by the TAPS quality bank administrator. If the stream value or the PSVR Reference Stream is recalculated by the Quality Bank administrator, the Quality Bank Adjustment shall be recalculated and the Price shall be adjusted in accordance with Article III to apply to Sale Oil that has been delivered to Buyer beginning on the effective date of the adjustment.

"Line Loss" is a per barrel amount equal to (0.0009) x (ANS Spot Price – $2.15 – Tariff Allowance + Quality Bank Adjustment).

Appendix 2 is an illustrative example of the calculation of the Price of Sale Oil. If there is a conflict between Appendix 2 and Section 2.3, Section 2.3 shall control.

2.4 Delivery of Sale Oil.

2.4.1 Day of First Delivery. The State will make first delivery of the Sale Oil to Buyer at the Point of Delivery on April 1, 2014.

2.4.2 Subsequent Deliveries. After the first delivery, the State shall tender the Sale Oil to Buyer at the Point of Delivery immediately upon the receipt of the Royalty Oil from the Lessees at the Point of Delivery.

2.5 Passage of Title and Risk of Loss. Title to, and risk of loss of, the Sale Oil shall pass from the State to Buyer for all purposes when the State tenders delivery of the Sale Oil to Buyer at the Point of Delivery. Buyer shall bear all risk and responsibility for the Sale Oil after passage of title.

2.6 Indemnification After Passage of Title. Buyer shall indemnify and hold the State harmless from and against any and all claims, costs, damages (including reasonably foreseeable consequential damages), expenses, or causes of action arising from or related to any transaction or event in any way related to the Sale Oil after title has passed to Buyer. If Buyer suffers damages or losses caused by third parties and related to the Sale Oil, the State agrees to cooperate with the Buyer to permit Buyer to attempt to recover such damages of losses. The State will cooperate with the Buyer to permit Buyer to attempt to recover such damages or losses. The State will, on request, assign the State's claims to Buyer and cooperate in Buyer's pursuit of State assigned claims.

2.7 Transportation Arrangements. Buyer shall make all arrangements for transportation of the Sale Oil from the Point of Delivery, to, through and away from the TAPS, and all pipelines upstream from Pump Station No. 1, and shall be responsible for meeting any linefill and storage tank bottom requirements related to transportation of the Sale Oil after

passage of title, except that the State shall be responsible for meeting any linefill requirements for pipelines upstream of Pump Station No. 1. If Buyer provides the necessary data, the State shall meet its linefill requirements by passing title to Sale Oil to Buyer at the Point of Delivery but not invoicing Buyer for the portion of Sale Oil required for linefill until that portion of Sale Oil has been delivered to Buyer at Pump Station No. 1. For purposes of invoicing, Buyer and State agree that the linefill upstream of Pump Station 1 that has not been invoiced will be deemed to be the last barrels injected at the Point of Delivery. On the State's request, Buyer shall provide the State with evidence of the arrangements for transportation of the Sale Oil from the Point of Delivery, through and away from TAPS, and all pipelines upstream from Pump Station No. 1, and evidence of arrangements for resale, exchange, or other disposal of the Sale Oil. Buyer's failure to provide information, evidence, or assurances requested by the State shall, at the State's election and after Notice to Buyer, constitute a material default under this Agreement.

ARTICLE III
INVOICING AND PAYMENT

3.1 Monthly Invoices. On or before the twentieth calendar Day of each Month after the first Month of delivery of Sale Oil, the State shall send to Buyer, via facsimile transmission or electronic mail, a statement of account with an invoice for the total amount due for the estimated quantity of Sale Oil delivered to Buyer during the immediately preceding Month of Sale Oil delivery and the estimated Price applicable to those deliveries, and the amount of any adjustments for the previous Month. The State will base its estimates on the best information reasonably available to the State. The State shall adjust invoices as provided in Section 3.3.

3.2 Payment of Invoices. Buyer shall pay the total amount of each invoice, including adjustments for previous Months of Sale Oil delivery, in full, on or before the later of (1) the

third Business Day after the date of the statement of account in which the invoice is included; or (2) the twentieth calendar Day of the Month. If the third Business Day after the date of the statement of account or if the twentieth calendar Day of the Month does not fall on a Business Day then the invoiced amount is due on the immediately following Business Day. Any amount that Buyer does not pay in full on or before the payment due date calculated in accordance with this section shall accrue interest as provided in Section 3.5, and become subject to the late payment provisions of Section 3.7, and any other remedies available to the State under this Agreement and at law.

3.3 Adjustments. Buyer acknowledges that any time after an invoice is sent for a Month of Sale Oil delivery, the State may receive more accurate information concerning the ANS Spot Price, actual quantity of Sale Oil delivered to Buyer, line fill, the proper calculation of Tariff Allowance, and Quality Bank Adjustments that affect the Price of the Sale Oil. Buyer agrees that any time such information becomes available to the State, the State shall make adjustments and invoice or credit Buyer the amount of the adjustments in accordance with the process and retroactivity limits described in Section 2.3. The interest that will bear on changes to the Tariff Allowance will equal the interest paid or received by the Buyer to/from the pipeline carriers for the Sale Oil. Retroactive Quality Bank Adjustments will not bear interest.

3.4 Payment of Adjustments. The Buyer shall pay the total amount of each adjustment in full, on or before the later of (1) the third Business Day after the date of the statement of account that includes the adjustment invoice; or (2) the twentieth calendar Day of the Month. If an adjustment is due to Buyer for an overpayment, the State shall credit to Buyer the amount of the overpayment on the following Month's invoice or, if no following Month invoice is provided, the State shall refund to Buyer the amount of the overpayment by the

twentieth calendar Day of the following Month. Any amount the Buyer does not pay in full when due shall bear interest at the rate provided in Section 3.6 and become subject to the late payment provisions of Section 3.7, and any other remedies available to the State under this agreement and at law.

3.5 Adjustments After Termination. Buyer and State agree that the State shall continue to make adjustments after termination of this Agreement, and agree that the provisions of Articles III, shall survive termination of this Agreement for any reason. If following termination of this Agreement an adjustment is determined to be due to Buyer for overpayment in an amount that exceeds the amount of all sums remaining due from Buyer to the State, the State shall credit the overpayment against any sums due from Buyer to the State, and shall refund to Buyer the remaining amount of the adjustment. Any adjustments made after termination must be paid within 30 Days after the date of the invoice.

3.6 Interest. All amounts under this Agreement that Buyer does not pay in full when due, or that the State does not credit Buyer or pay in full when due, shall bear interest from the date payment is due, calculated in accordance with Section 3.4, at the rate provided by Alaska Statute 38.05.135(d) or as that statutory provision may later be amended.

3.7 Late Payment Penalty. In addition to all other remedies available to the State, if Buyer fails to make timely payment in full of any amount due, including adjustments, Buyer shall pay the State as a late payment penalty an amount equal to five percent of the total amount not timely paid, in addition to the amount not timely paid, and interest on the late payment penalty amount and the amount not timely paid as provided in Section 3.4. The Commissioner shall waive imposition of the late payment penalty if the Buyer provides substantial evidence that

the failure to make timely payment was not willful and was not due to a mistake in a chronic pattern of mistakes.

3.8 Disputed Payments. If a dispute arises concerning the amount of an invoice, Buyer agrees to pay in full all amounts when due, pending final resolution of the dispute according to the Dispute Resolution procedures in Article XIII.

3.9 Confidential Information. The State and Buyer agree that the State may invoice Buyer for, and Buyer agrees to pay, amounts that are based upon confidential information held or received by the State. If confidential information is used as the basis for an invoice, upon receipt of a written request from Buyer, the State shall furnish to Buyer a certified statement of the Commissioner to the effect that, based upon the best information available to the State, the invoiced amounts are correct. At the request and expense of Buyer, the Commissioner's certified statement will be based on an audit by an independent third party.

3.10 Manner of Payment. Buyer shall pay all invoices in full within the times specified and without any deduction, set off, or withholding. Buyer shall pay all invoices by either Automated Clearinghouse or by Federal Reserve Wire Transfer (immediate funds available) according to the instructions provided to the Buyer by the Division of Oil and Gas's Royalty Accounting Manager.

Buyer may pay an invoice in such other manner or to such other address the State has specified in an invoice or by Notice. All other payments due shall be paid in the same manner and according to the same time schedule provided in this Article. If payment falls due on a Saturday, Sunday, or federal bank holiday, payment shall be made on the next Business Day.

ARTICLE IV
IN-STATE PROCESSING

4.1 In-State Processing. Buyer agrees to use commercially reasonable efforts to process the Sale Oil at its refinery in North Pole, Alaska. "Process" means the manufacture of refined petroleum products.

4.2 Exchange of Crude Oil. Buyer may exchange Sale Oil for other crude oil only as provided in this Article. An exchange of Sale Oil for other crude oil shall not reduce the price Buyer has agreed to pay the State for the Sale Oil. "Exchange" includes: (1) a direct trade of Sale Oil for and equal volume of other crude oil; (2) a direct trade of Sale Oil for other crude oil that involves either cash or volume adjustment, or both, based solely on the differences in quality or location of the crude oils exchanged; (3) sequential transactions in which the Buyer trades Sale Oil to one party and, in exchange receives crude oil for a party other than the party to whom the Buyer traded the Sale Oil; and (4) matching purchases and sales of Sale Oil for other crude oil.

ARTICLE V
SPECIAL COMMITMENTS

5.1 Extension of Term. Subject to Buyer making a binding commitment for a large capital project(s) at its refinery at North Pole, Alaska, or binding support of a solution to bring natural gas from the North Slope to interior Alaska, Buyer may request to amend and extend this Agreement for an addition five year term that expires March 31, 2024. The Commissioner may approve or deny a request for an extension of term.

5.2 Wholesale Rack Price Parity. Buyer agrees, at all times while Buyer is purchasing Sale Oil under this Agreement, to maintain the Buyer's wholesale truck rack posted price for gasoline in Fairbanks at a price that does not exceed Buyer's wholesale truck rack

posted price for gasoline in Anchorage on an annual simple average basis within a variation of not more than one-cent per gallon. Buyer makes no guarantee of the price parity for Buyer's wholesale truck rack posted prices for gasoline in Fairbanks and Anchorage on a daily basis. If the annual average variation of the aforementioned posted prices exceeds one cent per gallon, Buyer shall have 90 Days to reduce the variation to below one-cent per gallon, averaged over an all-inclusive timeframe, including the 90-Day period and the previous annual period. This provision shall only apply to gasoline produced by Buyer at its North Pole refinery. This provision shall not apply to gasoline exchanges. An example of the calculations appears in Appendix 4.

ARTICLE VI
BUYER'S AND GUARANTOR'S REPRESENTATIONS AND OBLIGATIONS

6.1 Good Standing and Due Authorization of Buyer. Buyer warrants that it is, and shall remain at all times during the term of this Agreement: (1) qualified to do business in Alaska; and (2) in good standing with the State. Buyer warrants that it has all company power and authority necessary, and has performed all company action required, to enter into and fulfill its obligations under this Agreement.

6.2 Good Standing and Due Authorization of Guarantor. Guarantor warrants that it is, and shall remain at all times during the term of this Agreement: (1) qualified to do business in Alaska; and (2) in good standing with the State. Guarantor warrants that it has all company power and authority necessary, and has performed all company action required, to enter into and fulfill its obligations under this Agreement.

6.3 Financial Information. Annually as soon as practicable after March 31 but no later than June 30, Guarantor shall cause a financial analyst (the "Financial Analyst") to submit an opinion to the Commissioner in the form of a letter (the "Opinion Letter") about Guarantor's

current and expected future credit rating by Standard and Poor's and Moody's. The Financial Analyst shall be qualified to render an opinion as to the creditworthiness of the Guarantor and shall be in the business of understanding complex financial matters and financial statements to the extent required to render such opinion. Buyer shall have the right to designate the Financial Analyst, subject to approval by the State. The Financial Analyst shall be a contractor to Guarantor, and Guarantor shall be responsible for entering into any necessary contractual arrangements with the Financial Analyst and paying the fees and expenses of the Financial Analyst.

The contract between Guarantor and the Financial Analyst and each Opinion Letter must recite that the Financial Analyst (1) has been provided a copy of this Agreement, (2) understands the significance of the Opinion Letter in the administration of this Agreement, (3) understands that the State will rely on the Opinion Letter, and (4) understands that the Opinion Letter is for the benefit of the State. The contract between Guarantor and the Financial Analyst shall be subject to approval by the State, and the State shall be given a copy of the contract and all amendments to it.

The Opinion Letter shall (i) identify all documents reviewed in forming the opinion, (ii) identify people interviewed in forming the opinion and discuss the nature of the interview, (iii) state the current long term (and short term, if available) credit ratings of Guarantor by Standard and Poor's and Moody's and (iv) express an opinion whether those ratings are reasonably likely to fall to or below BBB+ (Standard and Poor's) and Baa1 (Moody's) at any time during the following twelve Months. Guarantor shall cause the Financial Analyst to review evidence of the most current ratings by Standard and Poor's and Moody's of Guarantor's long and short term debt, all bank presentations provided to Guarantor's lenders, all reports on Guarantor prepared

by Standard and Poor's or Moody's, any assessment (if available to the Guarantor) of Guarantor's financial condition conducted on behalf of the Port Commission of the Port of Corpus Christi Authority, concerning the Port of Corpus Christi Authority of Nueces County, Texas Solid Waste Disposal Revenue Bonds, all documents filed by Guarantor with the Securities and Exchange Commission, if any, any other documents reasonably necessary to deliver the Opinion Letter, and a complete set of year-to-year comparative, independently audited financial statements, including footnotes, prepared in accordance with generally accepted accounting principles.

Guarantor's contract with the Financial Analyst may require the Financial Analyst to protect the confidentiality of the information supplied to it under Section 6.3. The State may review the information supplied to the Financial Analyst under Section 6.3 by executing a confidentiality agreement with Guarantor but will not take any action that will make the information part of the State's public records.

6.4 Financial Condition. Guarantor warrants (1) that all financial information submitted to the Financial Analyst or reviewed by the State under Section 6.3 is complete and accurate at the time of preparation, and fairly represents Guarantor's financial condition at the time of submission; and (2) that there has been no material change in Guarantor's financial condition, business operations, or properties since the financial information was prepared. Guarantor warrants that the financial statements were prepared in accordance with generally accepted accounting principles. Guarantor and Buyer shall immediately inform the State of any material change in Guarantor's ownership or ownership of Buyer, ownership of parent companies, or financial condition, business operations, agreements, or property that is likely to affect their ability to perform their obligations under this Agreement.

6.5 Absolute Obligations. Buyer's and Guarantor's obligations to pay amounts due, provide assurances of performance in accordance with Article VII, accept, and dispose of and pay for Sale Oil, are absolute. These obligations shall not be excused or discharged by the operation of any disability of Buyer or Guarantor, event of Force Majeure, impracticability of performance, change in conditions, termination of this Agreement, or other reason or cause.

6.6 Guaranty. Buyer is an indirect, wholly-owned subsidiary of Guarantor. Buyer does not have public financial statements and does not have debt rated by Moody's or Standard and Poor's. The State is not willing to make this Agreement based solely on the credit worthiness of Buyer. Guarantor therefore agrees that it guarantees performance of all of Buyer's obligations under this Agreement as if Guarantor were the Buyer and legally indistinguishable from Buyer. The State may require Guarantor at any time to satisfy any unsatisfied obligation of Buyer.

ARTICLE VII
ASSURANCE OF PERFORMANCE

7.1 Credit Review. If Guarantor fails to timely submit its financial statements and other documents and information required under Article VI such that the Financial Analyst is unable to timely submit the Opinion Letter; or if, in the opinion of the Financial Analyst, Guarantor's credit ratings have fallen to or below, or are reasonably likely in the twelve Months following the Opinion Letter, to fall to or below (a) "BBB+" (Standard and Poor's "Long term issuer"), or (b) "Baal" (Moody's Investor Services "Issuer Ratings/Long Term Obligation Ratings"); or Guarantor is not rated by Standard and Poor's and Moody's, Guarantor shall immediately deliver to the State a one year irrevocable stand-by Letter of Credit meeting the requirements of Sections 7.2 through 7.5.

Guarantor shall annually renew and continuously maintain the Letter of Credit in effect until such time as, in the opinion of the Financial Analyst, Guarantor's credit rating is no longer reasonably likely to fall to or remain below (a) "BBB+" (Standard and Poor's "Long term issuer"); or (b) "Baal" (Moody's Investor Services "Issuer Ratings/Long Term Obligation Ratings") at any time during the twelve Months following the Opinion Letter.

7.2 Letter of Credit. In the event that Guarantor is required to deliver a letter of credit to the State in accordance with Section 7.1, the Letter of Credit shall be in a form satisfactory to the Commissioner and shall be in effect on delivery. The Letter of Credit shall be issued for the benefit of the State by a state or national banking institution of the United States that is insured by the Federal Deposit Insurance Corporation and has an aggregate capital and surplus amount of not less than One Hundred Million Dollars ($100,000,000) ("Issuer"), or other banking institution approved by the Commissioner, such approval not to be unreasonably withheld. The principal face amount of the Letter of Credit shall be an amount reasonably estimated by the Commissioner to be equal to the Price of all Sale Oil to be delivered by the State to Buyer during the 90 Days immediately following delivery of the Letter of Credit to the Commissioner. The Letter of Credit shall not require the State to submit any documentation in support of drafts drawn against it other than a certified statement by the Commissioner and the State's Attorney General that Guarantor is liable to the State for an amount of money equal to the amount of the draft, that the amount of money is due and payable in full, and it has not been timely paid.

7.3 Performance Assurance After Termination. If a Letter of Credit is in effect immediately prior to Termination of the Agreement, the Commissioner may require that, after Termination, the Letter of Credit be maintained in an amount estimated by the Commissioner to be equal to the value of all adjustments which may be made under Article III. As an alternative

to maintaining a Letter of Credit after Termination, and on commercial terms acceptable to the Commissioner, the Guarantor may require that Buyer establish and maintain an interest-bearing escrow account equal to the value of all adjustments that may be made under Article III and with the same payment terms as the Letter of Credit.

7.4 Other Performance Assurance. The Commissioner may allow Guarantor to provide security other than the Letter of Credit if the Commissioner determines other security is adequate to protect the State's interest.

7.5 Correction of Defects in Letter. Guarantor shall have five Business Days to correct any defect in the Letter of Credit beginning on the Business Day Guarantor first learns of the defect whether through Notice from the State or otherwise. A defect is any failure to comply with the terms and conditions of Article VII.

ARTICLE VIII
MEASUREMENTS

8.1 Measurements. The quantity and quality of Sale Oil the State delivers under this Agreement shall be determined by measurement at the Point of Delivery. Procedures used for metering and measuring the Sale Oil shall be in accordance with the procedures in effect at the Point of Delivery.

ARTICLE IX
EFFECTIVE DATE AND TERM

9.1 Condition Precedent to Effective Date. This Agreement is subject to approval under Alaska Statute 38.06.055 as a condition precedent to becoming effective.

9.2 Effective Date. This Agreement shall become effective and enforceable on the date upon which it is signed by all parties after it is approved under Alaska Statute 38.06.055 ("Effective Date").

9.3 Term. The Term of this Agreement shall begin on April 1, 2014 and terminate on March 31, 2019 except that the Term of this Agreement may be changed only as provided in Section 2.1.4, Section 5.1, and Article X.

9.4 Continuation of Obligations. The provisions of Article III, Section 6.5, Section 7.3, and Section 9.3, Article X and Article XI shall survive termination of this Agreement for any reason or cause. Termination of this Agreement shall not relieve either Party from any expense, liability, or other obligation or any remedy that has accrued or attached prior to the date of termination. For Sale Oil delivered under this Agreement, termination of this Agreement shall not relieve Buyer of its obligation to pay all production Month invoices, initial adjustments, subsequent adjustments, and interest, and, where applicable, penalties, costs, attorney fees, and any other charges related to the Sale Oil actually delivered.

ARTICLE X
DEFAULT OR TERMINATION

10.1 Default.

10.1.1 Events of Default. The Commissioner may suspend or terminate the State's obligations to tender, deliver and sell Sale Oil to Buyer, and may exercise any one or more of the rights and remedies provided in this Agreement, or at law, if any one or more of the following events of default occur:

(a) Buyer or Guarantor fails to pay in full any sum of money owed under this Agreement within five Business Days after the State gives Buyer Notice that payment is past due;

(b) Within five Business Days after Notice from the State, Buyer or Guarantor fails to provide written assurances satisfactory to the State of Buyer's or Guarantor's intention to perform its obligations under this Agreement and evidence or assurances of

transportation arrangements under Section 2.7;

(c) There is a material change in Buyer's or Guarantor's financial condition, business operations, agreements, or property or ownership that is likely to affect Buyer's or Guarantor's ability to perform its obligations under this Agreement, and within five Business Days after Notice from the State, Buyer or Guarantor is unable or unwilling to provide a Letter meeting the requirements of Sections 7.1 and 7.2;

(d) Buyer or Guarantor fails to perform any of its obligations under this Agreement, and cannot cure the non-performance or the non-performance continues for more than 30 Days after the State has given Notice to Buyer or Guarantor of its non-performance;

(e) Any representation or warranty made by Buyer or Guarantor in this Agreement is found to have been materially false or incorrect when made; or

(f) Guarantor fails, or is unable for any reason (including reasons beyond Guarantor's control), to maintain the Letter required under Article VII, regardless of Guarantor's willingness or ability to perform any other obligations under this Agreement.

10.1.2 Default by Failure or Inability to Pay. Buyer or Guarantor shall immediately provide the State with Notice if Buyer or Guarantor is unable to pay any of its debts when due, makes an arrangement for the benefit of creditors, files a bankruptcy petition, or is otherwise insolvent. Upon Notice from Buyer or Guarantor, or if the State independently determines that Buyer or Guarantor is unable to pay any of its debts when due or is otherwise insolvent, the State's obligations to deliver and sell Sale Oil to Buyer shall automatically and immediately terminate without any requirement of Notice to Buyer or Guarantor or other action by the State. Upon termination of the State's obligations under this Section 10.1.2, Buyer and

Guarantor shall be liable for payment and performance of all their obligations for Sale Oil the State delivered to Buyer before termination and for a minimum of one hundred Days after termination, plus an additional 90 Days if a Lessee invokes the force majeure term of its Royalty Settlement Agreement. Within 30 Days after termination under this Article 10.1.2, the State shall have the right, upon consent of Buyer or Guarantor, to reinstate all of the State's, Buyer's and Guarantor's obligations under this Agreement retroactive to the date of termination.

10.2 State's Remedies. If Buyer or Guarantor defaults under this Agreement, in addition to all other remedies available to the State under this Agreement or at law, the following remedies shall be available to the State:

10.2.1 Buyer's and Guarantor's Obligations Become Due. All monetary obligations Buyer or Guarantor has accrued under this Agreement, even if not yet due and payable, shall immediately be due and payable in full.

10.2.2 State May Dispose of Sale Oil. The State may dispose of some or all of the Sale Oil to third parties. If the State exercises this remedy, regardless whether this Agreement is terminated, Buyer and Guarantor shall be and shall remain liable to the State for the amount of the difference between the Price for the Sale Oil under Article II and the actual price the State receives from disposition of the Sale Oil to third parties.

10.2.3 Indemnification for Loss. Buyer and Guarantor shall hold the State harmless and indemnify it against all its liability, damages, expenses, attorney's fees and costs, and losses directly arising out of Buyer's or Guarantor's default, termination of the State's obligations, and disposal of the Sale Oil to third parties. Additionally, if Buyer or Guarantor defaults in the payment of any monetary amounts due to the State for Sale Oil tendered or delivered under this Agreement, Buyer or Guarantor shall pay the State 100 percent of

reasonable actual costs and attorney fees incurred by the State in pursuing payment of the monetary amounts due, regardless of whether litigation is commenced and regardless of whether legal services are provided by the Attorney General's office or private counsel.

10.2.4 Other Rights and Remedies. The State shall have the right cumulatively to exercise all rights and remedies provided in this Agreement and by law, and obtain all other relief available under law or at equity, including mandatory injunction and specific performance.

10.3 Limitation of Buyer's and Guarantor's Remedies. If Buyer or Guarantor breaches or defaults in any of its obligations under this Agreement, Buyer or Guarantor shall not obtain a temporary restraining order or preliminary injunction preventing the State from disposing of the Sale Oil in accordance with Section 10.2.2.

10.4 Article Survives Termination. This Article survives termination of the Agreement.

ARTICLE XI
DISPOSITION OF OIL UPON DEFAULT OR TERMINATION

11.1 Disposition of Oil Upon Default or Termination. Buyer and Guarantor acknowledge that the State may be required to provide six Months' notice to the Lessees before the State may decrease its in-kind nomination of Royalty Oil in any Month. If this Agreement terminates for default or any other reason after Buyer has nominated or is deemed to have nominated Sale Oil, Buyer shall continue to accept and pay for Sale Oil through the first Day of the Month following expiration of a minimum of 100 Days after the date of termination, if the Commissioner so requires. If, however, the additional notice provisions of Article 2.1.6 are invoked, Buyer shall continue to accept and pay for Sale Oil until the expiration of six Months and ten Days after the Date of default or notice of termination.

11.2 Security for Disposal of Sale Oil. To secure the Buyer's obligations to purchase and dispose of Sale Oil, upon the Commissioner's request, if Buyer refuse to accept or receive Sale Oil under this Agreement, Buyer shall assign or otherwise transfer to the State, or its designee, all or part of Buyer's right to transport the Sale Oil through and away from the TAPS, and all pipelines upstream from Pump Station No. 1, whether such rights are under nominations, leases, contracts, tariffs, charter parties, or other agreements. The State will incur liability or obligations under such assignment or transfer only to the extent the State actually exercises its rights to succeed to Buyer's interests under and obtain the benefits of the assignments.

ARTICLE XII
NONWAIVER

12.1 Nonwaiver. The failure of a Party to insist upon strict or a certain performance, or acceptance by a Party of a certain performance or course of performance under this Agreement shall not: (1) constitute a waiver or estoppel of the right to require certain performance or claim breach by similar performance in the future; (2) affect the right of another Party to enforce any provision; or (3) affect the validity of any part of this Agreement.

ARTICLE XIII
DISPUTE RESOLUTION

13.1 Dispute Resolution. Any disagreement or dispute about the meaning or application of a word, term, condition, right or obligation in this Agreement shall be decided according to the dispute resolution procedure set forth in this Article. The procedure set for in this Article shall be initiated by a Party by providing written Notice of the disagreement or dispute to the other Parties. No later than sixty Days after a Party provides written Notice, the Parties shall each present any arguments and evidence supporting its view of the disputed term, condition, right or obligation in writing to the Commissioner for consideration. The State,

Buyer, and Guarantor shall not have the right to civil litigation-type discovery or a civil litigation-type trial with the right to call or cross-examine witnesses unless granted by the Commissioner, after request. Within 30 Days after the Parties submit their final arguments and evidence, the Commissioner shall issue a finding interpreting the meaning or application of the disputed word, term, condition, right or obligation and shall set for the basis for the conclusion. The Parties agree to accept the findings of the Commissioner under this Article that are supported by substantial evidence in light of the whole record.

ARTICLE XIV
SEVERABILITY

14.1 Severability. If a court decrees any provision of this Agreement to be invalid, all other provisions of this Agreement shall remain valid. If, however, invalidation of a provision impairs a material right or remedy under this Agreement, the Parties will negotiate in good faith to maintain the original intent and benefits of this Agreement. If the Parties cannot restore the original intent and benefits of this Agreement, then either Party may terminate this Agreement by giving Notice.

ARTICLE XV
FORCE MAJEURE

15.1 Effect of Force Majeure. Except for Buyer's and Guarantor's obligations to pay amounts due, provide assurance of performance in accordance with Article VII, accept, dispose of, and pay for Sale Oil, no Party shall be liable for failure to perform if performance is substantially prevented by Force Majeure after commercially reasonable efforts to perform. Except, however, if Buyer or Guarantor is prevented by Force Majeure from performing any material obligation for 180 successive days or more, the State shall have the right to terminate this Agreement on 60 Days' Notice. If the State is prevented by Force Majeure from performing

any material obligation for 180 successive days or more, Buyer may terminate this Agreement on 60 Days' Notice. Before a Party exercises the right to terminate this Agreement, the Party may request the other Parties to negotiate in good faith to restore performance.

15.2 Force Majeure. In this Agreement the term "Force Majeure" means an event or condition not within the reasonable control of the Party claiming "Force Majeure."

15.2.1 Force Majeure Events include, but are not limited to, the following events:

i. act of God, fire, lightning, landslide, earthquake, storm, hurricane, hurricane warning, flood, high water, washout, explosion, well blowout, failure of plant, pipe or equipment, or;

ii. strike, lockout, or other industrial disturbance, act of the public enemy, war, military operation, blockade, insurrection, riot, epidemic, arrest or restraint by government of people, terrorist act, civil disturbance, or national emergency;

iii. act, order, or requisition of any governmental agency or acting governmental authority or any governmental proration, regulation, or priority.

15.2.2 Force Majeure events do not include changes in commercial or financial markets affecting the price of crude oil or processed petroleum products.

15.3 Notice and Remedy of Force Majeure. If a Party believes that Force Majeure has occurred, the Party shall immediately provide Notice to the other Parties of its claim of Force Majeure. The Party claiming Force Majeure shall use commercially reasonable diligence to remedy the Force Majeure. Except for Buyer's and Guarantor's absolute obligations to pay amounts due, provide assurances of performance in accordance with Article VII, and accept, dispose of and pay for Sale Oil, the disabled Party's obligations to perform that are affected by

the Force Majeure shall be suspended from the time of Notice to the other Parties until the disability caused by the Force Majeure should have been remedied with reasonable diligence.

ARTICLE XVI
NOTICE

16.1 Method of Notice. All notices, consents, requests, demands instructions, approvals, and other communications permitted or required shall be made in writing and delivered by any two of the following methods: (a) personally delivered, (b) delivered and confirmed by facsimile transmission, (c) delivered by overnight courier delivery service, (d) delivered and confirmed by electronic mail, or (e) deposited in the United States mail, first class, postage prepaid, certified or registered, return receipt requested, addressed as follows:

Commissioner of Natural Resources
550 West 7th Avenue, Suite 1400
Anchorage, Alaska 99501-3650
Facsimile Number: (907) 269-8918

and

Director, Division of Oil and Gas
550 West 7th Street, Suite 800
Anchorage, Alaska 99501-3510
Facsimile Number: (907) 269-8938

the Buyer:

Flint Hills Resources Alaska, LLC
4111 E. 37th St. N.
Wichita, KS 67220
Facsimile Number: (316) 828-8245
Attention: President
e-mail: brad.razook@fhr.com

the Guarantor:

Flint Hills Resources, LLC
4111 E. 37th St. N.
Wichita, KS 67220
Facsimile Number: (316) 828-8245
Attention: President
e-mail: brad.razook@fhr.com

or to any other place within the United States of America designated in writing by the State, Buyer or Guarantor.

16.2 Notice Effective Date. Notice given by personal delivery, or other reputable overnight courier delivery service, or United States mail, first class, postage prepaid, certified or registered, return receipt requested, shall be effective on the date of actual receipt at the appropriate address. Notice given delivered and confirmed by facsimile or electronic mail shall be effective on the date of actual receipt if received during recipient's normal business hours, or at the beginning of the next business Day after receipt if received after recipient's normal business hours. The Notice Effective Date is the effective date of the first of the two Notices received.

16.3 Change of Address. A Party may notify the other Parties of changes in its address by giving Notice.

ARTICLE XVII
RULES AND REGULATIONS

17.1 Rules and Regulations. This Agreement is subject to the laws of the State of Alaska, and orders, rules and regulations of the United States, the State of Alaska, and any duly constituted agency of the State of Alaska.

ARTICLE XVIII
SOVEREIGN POWER OF THE STATE

18.1 Sovereign Power of the State. This Agreement shall not be interpreted to limit in any way the State's ability to exercise any sovereign or regulatory powers, whether conferred by constitution, statute or regulation. The State's exercise of any sovereign or regulatory power shall not be deemed to enlarge any of Buyer's or Guarantor's rights, or limit any of Buyer's or Guarantor's obligations or liabilities under this Agreement.

ARTICLE XIX
APPLICABLE LAW

19.1 Governing Law. This Agreement, and all matters arising from or related to this Agreement, shall be governed, construed and determined by the laws of the State of Alaska.

19.2 Jurisdiction. Any legal action or proceeding arising out of or related to this Agreement shall be brought in a state court of general jurisdiction sitting in the State of Alaska, and Buyer and Guarantor irrevocably submit to the jurisdiction of that court in any action or proceeding.

19.3 Venue. The Parties agree that the venue for any legal action or proceeding arising out of or related to this Agreement shall be in the Alaska Superior Court sitting in Anchorage, Alaska.

ARTICLE XX
WARRANTIES

20.1 Warranties. The purchase and sale of Royalty Oil under this Agreement are subject only to the warranties the State has expressly set forth in this Agreement. The State disclaims and Buyer and Guarantor waive all other warranties, express or implied in law.

ARTICLE XXI
AMENDMENT

21.1 Amendment. This Agreement may be supplemented, amended, or modified only by written instrument duly executed by the Parties, and, where required, only on approval under Alaska Statute 38.06.055.

21.2 Legislative Approval. Any material amendment to this Agreement that appreciably reduces the consideration received by the State requires prior approval of the legislature.

ARTICLE XXII
SUCCESSORS AND ASSIGNS

22.1 Assignments and Other Transfers. Buyer may freely assign its rights and obligations to an Affiliate formed under the laws of a state in the United States of America. An "Affiliate" shall mean an entity that is directly or indirectly controlled by Guarantor or Guarantor's permitted assigns, or is directly or indirectly controlled by an entity that directly or indirectly controls Guarantor or Guarantor's permitted assigns, where control means the right to vote more than fifty percent of the voting interest in the entity.

Buyer and Guarantor may, without consent of the State, collectively assign their rights and obligations under this Agreement to a Person that acquires all or substantially all of the Alaska refining assets of Buyer and Guarantor (the "Assignee"), provided that at least 45 Days before the effective date of the assignment the Assignee provides to the State (a) all of the financial information and warranties Guarantor is required to provide under Article VI and (b) a copy of the form of the assignment, including Assignee's obligation to assume and discharge all of Buyer's and Guarantor's obligations under this Agreement. If, based on the financial information supplied under Article VI, Assignee is required to supply a Letter of Credit under Article VII, the Letter of Credit in the form and amount required by Article VII must be provided to the State at least 30 Days before the effective date of the assignment. No assignment can be made to an Assignee with long term credit ratings of less than BBB (Standard and Poor's) or Baa3 (Moody's). From and after the effective date of the Assignment, Buyer and Guarantor shall be relieved of their rights and obligations under this Agreement. No assignment shall be effective until after 45 Days' Notice to the State.

Buyer and Guarantor may not otherwise assign their rights or obligations under this Agreement without first obtaining the written consent of the Commissioner, which may not be unreasonably withheld.

22.2 Binding on Successors. This Agreement shall be binding upon and inure to the benefit of the legal representative, Parties and their successors, and assigns of the Parties.

ARTICLE XXIII
RECORDS

23.1 Inspection of Records. The Parties shall each accord to the other and the other's authorized agents, attorneys, and auditors access during reasonable business hours to any and all property, records, books, documents, or indices related to Buyer's, Guarantor's or the State's performance under this Agreement, and which are under possession or control of the Party from which access is sought, so the other Party may inspect, photograph, and make copies of the property, records, books, documents, or indices except: (1) the State shall not be required to disclose any information, data, or records that it is required by state or federal law or regulation, or by agreement with the Person supplying the record, to be held confidential; (2) the State's access to and treatment of Guarantor's financial records shall be limited by Section 6.3; and (3) no party shall be required to produce documents that are protected by the attorney-client privilege. If information the State obtains from Buyer or Guarantor may be held confidential under state or federal law or regulation, Buyer may request in writing that the State hold the information confidential, and the State shall keep the information confidential to the extent and for the term provided by law.

ARTICLE XXIV
EMPLOYMENT OF ALASKA RESIDENTS

24.1 Employment of Alaska Residents. Buyer shall comply with all valid federal, state, and local laws in hiring Alaska residents and companies, and shall not discriminate against Alaska residents and companies. Within the constraints of law, Buyer voluntarily agrees to employ Alaska residents and Alaska companies to the extent they are available, willing, and at least as qualified as other candidates for work performed in Alaska in connection with this Agreement. "Alaska resident" means an individual who is physically present in Alaska with the intent to remain in the state indefinitely. An individual may demonstrate an intent to remain in the state by maintaining a residence in the state, possessing a resident fishing, trapping or hunting license, or receiving a permanent fund dividend. "Alaska companies" means companies incorporated in Alaska or whose principal place of business is in Alaska. If a court invalidates any portion of this provision, Buyer agrees to employ Alaska residents and Alaska companies to the extent permitted by law.

ARTICLE XXV
COUNTERPARTS

25.1 Counterparts. This Agreement may be executed in multiple counterparts. It is not necessary for the Parties to sign the same counterpart. Each duly executed counterpart shall be deemed to be an original and all executed counterparts taken together shall be considered to be one and the same instrument.

ARTICLE XXVI
MISCELLANEOUS

26.1 Agreement Not to Be Construed Against Any Party as Drafter. The Parties recognize that this Agreement is the product of the joint efforts of the Parties and agree that it shall not be construed against any Party as drafter.

26.2 Entire Agreement. This Agreement constitutes the entire agreement and understanding between the Parties about the subject matter of this transaction and all prior agreements, understandings, and representations, whether oral or written, about this subject matter are merged into and superseded by this written Agreement.

26.3 Headings. The headings throughout this Agreement are for reference purposes only and shall not be construed or considered in interpreting the terms and provisions of this Agreement.

26.4 Authority to Sign. Each Person signing this Agreement warrants that he or she has authority to sign the Agreement.

26.5 Further Assurances. The Parties agree to do such further acts or execute such further documents as may reasonably be required to implement this Agreement.

26.6 Currency. All dollar amounts are U.S. dollars.

SIGNATURES:

the State: THE STATE OF ALASKA

_____
Commissioner
Department of Natural Resources

Date:

FLINT HILLS RESOURCES ALASKA, LLC

_____
Printed Name:

Title:

Date:

FLINT HILLS RESOURCES, LLC

_____

Printed Name:

Title:

Date:

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APPENDIX 1:
SALE OIL NOMINATION PROCEDURE

Example Nomination Procedure for July 2014 Deliveries

	Prudhoe Bay & Satellites	Greater Pt Mcintyre Area	MPU Total	DIU Total	KRU Total	Northstar Total	CRU Total	Badami Total	Oooguruk Total	Nikaitchuq Total	Total
March 15, 2014											
State receives preliminary barrel per day (bpd) production forecasts from th operator 105 days prior to the start of the production month	149,600	14,000	14,000	5,800	73,700	9,200	47,500	1,000	6,700	8,000	329,500
Not later than											
March 21, 2014											
RIK purchaser notifies state of monthly bpd nomination (a)											30,000
Not later than											
March 30, 2014											
State computes RIK %											
Estimated royalty rates	12.50%	13.34%	13.77%	14.42%	12.50%	27.50%	14.74%	14.80%	5.00%	12.50%	
State Ownership	100.00%	100.00%	100.00%	100.00%	100.00%	82.16%	67.82%	100.00%	100.00%	100.00%	
Total state estimated royalty bpd (bpd * royalty rate)	18,700	1,868	1,928	836	9,213	2,079	4,748	148	335	1,000	40,854
State's Total RIK nomination percentage (Purchaser RIK bpd/estimated royalty bpd)											73.43%
March 30, 2014											
State notifies unit operator of state's RIK nomination percentage	94.64%	94.64%	95.00%	95.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
May 26, 2014											
Unit operator notifies state and working interest owners of updated production forecast											
Production forecast (bpd) for July production month	188,938	30,009	10,900	8,560	72,080	7,300	45,084	1,291	6,900	7,800	378,842
State calculates RIK bpd											
Royalty rates based on updated estimates (b)	12.50%	13.381158%	12.50%	12.50%	12.50%	27.50%	14.74%	14.80%	5.00%	12.50%	
State's RIK nomination percentage	94.64%	94.64%	95.00%	95.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
RIK bpd (bpd production forecast * Royalty rate * nomination %)	22,351	3,803	1,294	1,017	7,659	0	0	0	0	0	36,124
State's Tendering percentage (RIK bpd/Production Forcast volumes)	11.83000000%	12.67339193%	11.87500000%	11.87500000%	10.62500000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	
May 31, 2014											
State notifies RIK purchaser of bpd volume available for July production mon	22,351	3,803	1,294	1,017	7,659	0	0	0	0	0	36,124
August 2, 2014											
State invoices RIK purchaser for May production											
Metered volume for July 1-31, 2014	7,279,221	561,360	375,992	260,120	2,712,974	258,569	1,406,638	42,261	207,194	248,903	13,351,230
State's RIK Tendering percentage	11.83000000%	12.67339193%	11.87500000%	11.87500000%	10.62500000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	
Total RIK bbls	861,131.84	71,143.35	44,649.05	30,889.25	288,253.49	-	-	-	-	-	1,296,067
bpd volume (Total RIK/31) (varies from forecast)	27,778	2,295	1,440	996	9,298	0	0	0	0	0	41,809
bpd volume varies from forecast	9,078	427	(488)	160	86						9,264

Table notes:

(a) The state determines from which units to nominate RIK volumes (section 2.1.5 of the Agreement)

(b) The estimated royalty percentage for Greater Pt Mcintyre is a composite royalty rate from several fields and will vary with production

Proration Procedure

The State may prorate the amount of the Buyer's Sale Oil nomination for the Month of Sale Oil delivery in excess of 24,000 barrels per day when the amount of available Royalty Oil is insufficient to supply the Buyer's Sale Oil nomination and the nomination of other purchasers of the State's Royalty Oil. The State will prorate the Buyer's Sale Oil nomination for the Month of Sale Oil delivery according to the following calculation:

1. The State will first determine if the sum of the total nominations of all of the State's royalty in-kind purchasers exceeds the 85 percent of total Royalty Oil.

For example, assume that the State receives a preliminary barrel per day production (bpd) forecast from the North Slope operators that the total Royalty Oil for the Month of Sale Oil delivery will be 40,000 bpd. Eighty-five percent of this amount is equal to 40,000 x 0.85 = 34,000 bpd.

Also assume also that the Buyer's Sale Oil nomination for the Month of Sale Oil delivery is equal to 29,000 bpd; the sum of the nominations submitted to the State by other royalty in-kind purchasers for the Month of Sale Oil delivery is equal to 11,000 bpd. The sum of the nominations of all of the State's royalty in-kind purchasers exceeds 85 percent of total Royalty Oil, i.e., 29,000 bpd + 11,000 bpd > 34,000 bpd. Therefore, the Buyer's nomination will be prorated.

2. Subtract 24,000 barrels per day from the Buyer's Sale Oil nomination for the Month of Sale Oil delivery and divide the result by the sum of the nominations of all the State's royalty in-kind purchasers, including the Buyer's Sale Oil nomination, for the Month of Sale Oil delivery minus 24,000 barrels per day.

(29,000 bpd – 24,000 bpd)/(29,000 bpd + 11,000 bpd – 24,000 bpd) = 0.31250

3. This factor is multiplied by 24,000 bpd subtracted from 85 percent of total Royalty Oil;

0.31250 × (34,000 bpd – 24,000 bpd) = 3,125 bpd

4. This amount is added to 24,000 to equal the Buyer's prorated Sale Oil nomination for the Month of Sale Oil delivery.

3,125 bpd + 24,000 bpd = 27,125 bpd

APPENDIX 2:
EXAMPLE OF CALCULATION OF PRICE OF SALE OIL

The Price of the Sale Oil delivered by the State to the Buyer each Month for each Unit from which the Sale Oil is nominated is:

Price = ANS Spot Price –2.15 – Tariff Allowance + Quality Bank Adjustment – Line Loss

ANS Spot Price

Table 2-1 illustrates the calculation of the ANS Spot Price for July 2014.

Table 2-1: Calculation of ANS Spot Price

	Platt's Oilgram Price Report			Telerate On-line Data Reporting			Reuters On-line Data Reporting		
Effective Date	ANS Daily Low	ANS Daily High	ANS Daily Midpoint Average	ANS Daily Low	ANS Daily High	ANS Daily Midpoint Average	ANS Daily Low	ANS Daily High	ANS Daily Midpoint Average
07/01/14	$111.28	$111.32	$111.30000	$110.49	$110.59	$110.54000	$110.49	$110.59	$110.54000
07/02/14	$113.01	$113.05	$113.03000	$112.56	$112.66	$112.61000	$112.44	$112.54	$112.49000
07/03/14	$112.64	$112.68	$112.66000	$112.73	$112.83	$112.78000	$112.20	$112.30	$112.25000
07/07/14	$114.66	$114.70	$114.68000	$114.39	$114.49	$114.44000	$114.22	$114.32	$114.27000
07/08/14	$112.28	$112.32	$112.30000	$111.75	$111.85	$111.80000	$111.74	$111.85	$111.79500
07/09/14	$111.20	$111.24	$111.22000	$110.69	$110.79	$110.74000	$110.70	$110.79	$110.74500
07/10/14	$113.36	$113.40	$113.38000	$113.82	$113.92	$113.87000	$114.60	$114.70	$114.65000
07/11/14	$113.84	$113.88	$113.86000	$114.91	$114.99	$114.95000	$114.84	$114.94	$114.89000
07/14/14	$113.47	$113.51	$113.49100	$113.00	$113.10	$113.05000	$113.60	$113.70	$113.65050
07/15/14	$114.90	$114.94	$114.92000	$114.95	$115.02	$114.98500	$115.19	$115.29	$115.24000
07/16/14	$113.55	$113.59	$113.57000	$113.96	$114.05	$114.00500	$114.08	$114.18	$114.13000
07/17/14	$115.16	$115.20	$115.18000	$115.25	$115.35	$115.30000	$115.45	$115.55	$115.50000
07/18/14	$115.60	$115.64	$115.62000	$116.40	$116.50	$116.45000	$115.39	$115.49	$115.44000
07/21/14	$116.26	$116.30	$116.28000	$116.31	$116.41	$116.36000	$116.18	$116.28	$116.23000
07/22/14	$116.20	$116.23	$116.21500	$116.82	$116.92	$116.87000	$116.82	$116.92	$116.87000
07/23/14	$116.50	$116.55	$116.52500	$116.15	$116.25	$116.20000	$116.15	$116.25	$116.20000
07/24/14	$116.65	$116.70	$116.67500	$116.72	$116.81	$116.76500	$116.54	$116.64	$116.59000
07/25/14	$115.71	$115.75	$115.73000	$115.41	$115.51	$115.46000	$115.35	$115.45	$115.40000
07/28/14	$114.75	$114.78	$114.76500	$114.02	$114.12	$114.07000	$114.39	$114.50	$114.44500
07/29/14	$113.93	$113.99	$113.96000	$114.80	$114.86	$114.83000	$114.65	$114.75	$114.70000
07/30/14	$113.55	$113.59	$113.57000	$114.01	$114.06	$114.03500	$113.18	$113.28	$113.23000
07/31/14	$114.16	$114.20	$114.18000	$114.15	$114.25	$114.20000	$114.46	$114.54	$114.50000
	Platt's Montly Avg. =		$114.23232	Telerate Monthly Avg. =		$114.28682	Reuters Monthly Avg. =		$114.26161

$\text{ANS Spot Price}_{\text{July 2014}}$ = $114.260250

Tariff Allowance

The Tariff Allowance (TA) is the sum of (1) the average, weighted by ownership, of the Minimum Interstate TAPS Tariff for each owner in effect on the Day the Sale Oil is tendered by the State to the Buyer; and (2) any tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No. 1. Table 2-2, 2-3, and 2-4 illustrates how the state will calculate the TA for each of the Units from which Sale Oil may be offered.

Table 2-2: Calculation of TAPS Portion of Tariff Allowance

Ownership-Weighted Average Minimum Interstate TAPS Tariff – July 2014				
Pipeline Company	FERC No.	Percent Pipeline Company Ownership	Minimum Interstate TAPS Tariff (Pump Station No.1 to Valdez Marine Terminal) by Pipeline Company	TAPS Tariff times Company Ownership Percentage
ConocoPhillips Transportation Alaska, Inc.		29.61017%	$5.04	$1.49235
ExxonMobil Pipeline Company		21.28289%	$5.06	$1.07691
BP Pipelines (Alaska) Inc.		49.10694%	$5.04	$2.47499
		100.0000%		
			Ownership-Weighted Average Minimum Interstate TAPS Tariff =	$5.04426

Table 2-3: Calculation of Portion of Tariff Allowance Upstream of Pump Station No. 1

Minimum Tariff on Pipelines Upstream of Pump Station No. 1 – July 2014				
Pipeline Company	FERC No.	RCA Tariff Advice Letter No.	Pipeline	Tariff
Kuparuk Transportation Company			Kuparuk River Unit to TAPS Pump Station No. 1	$0.26400
Endicott Pipeline Company			Endicott Main Production Island to TAPS Pump Station No. 1	$2.01000
Kuparuk Transportation Company			Milne Point Pipeline Connection to TAPS Pump Station No. 1	$0.19300
Milne Point Pipeline Company			Milne Point Central Facilities to Kuparuk Transportation Company Tie-in	$0.96000
			Total MPU Upstream Tariff Allowance:	$1.15300
Kuparuk Transportation Company			Kuparuk River Unit to TAPS Pump Station No. 1	$0.26400
Alpine Transportation Company			Colville, Alaska Alpine Field to Kuparuk River Unit	$0.69000
			Total CRU Upstream Tariff Allowance:	$0.95400
BP Transportation (Alaska) Inc.			Northstar Unit Seal Island to TAPS Pump Station No. 1	$2.14000

Table 2-4: Calculation of Tariff Allowance for Each Unit

Calculation of TA for Prudhoe Bay Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
Upstream Tariff	$0.00000
TA_{PBU}	$5.04426
Calculation of TA for Kuparuk River Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04497
Kuparuk Transportation Co. Tariff	$0.26400
TA_{KRU}	$5.30826
Calculation of TA for Duck Island Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
Endicott Pipeline Co. Tariff:	$2.01000
TA_{DIU}	$7.05426
Calculation of TA for Milne Point Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
Kuparuk Transportation Co. Tariff	$0.19300*
Milne Point Pipeline Co. Tariff	$0.96000
TA_{MPU}	$6.19726
Calculation of TA for Colville River Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
Kuparuk Transportation Co. Tariff:	$0.26400
Alpine Transportation Company Tariff:	$0.69000
TA_{MPU}	$5.99826
Calculation of TA for Northstar Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
BP Transportation (Alaska) Inc. Tariff:	$2.14000
TA_{DIU}	$7.18426

*From Kuparuk Pipeline/Milne Point Pipeline connection to TAPS Pump Station No. 1.

Quality Bank Adjustment (QBA)

The TAPS Quality Bank compensates shippers of a high-value crude oil stream when a lower-value crude oil stream is blended in the common stream.[1] To calculate the Price of the Sale Oil at the Point of Delivery an adjustment must be made for the impact that the sale oil will have on the value of the commingled crude oil stream when it enters the TAPS Valdez terminal.

[1] Mitchell & Mitchell, 8300 Douglas Avenue, #800, Dallas, TX 75225, administers the TAPS Quality Bank. Anyone who ships oil on TAPS must make prior arrangements with Mitchell & Mitchell to participate in the TAPS Quality Bank.

The QBA is a per-barrel value, either positive or negative, and will be calculated each Month by the State for Sale Oil from each Unit. The State will estimate a QBA for each applicable Unit for the initial billing. Typically, the State receives the data to calculate the actual QBA for the Month about two Months after the Month the Sale Oil is delivered. For this reason the QBA will be subject to a routine true-up in a subsequent adjustment.

Table 2-5: Hypothetical TAPS Quality Bank Data
(as provided by the Quality Bank Administrator)

TAPS Quality Bank
Stream Values and Total Stream Volume Shipped
July 2014

Sample Location	Stream	Volume (BBL)	Stream Value ($/BBL)	Total Stream Value ($)
PBU IPA	PBU IPA	6,339,237	$110.4164400000	$699,955,981.86
LISBURNE	LISBURNE	271,173	$112.2028800000	$30,426,391.58
ENDICOTT	ENDICOTT	202,497	$109.5248100000	$22,178,445.45
KUPARUK	KUPARUK	7,008,864	$109.1719600000	$765,171,420.25
NORTHSTAR	NORTHSTAR	396,155	$115.0336100000	$45,571,139.77
PS #1	PS #1 REFERENCE	14,217,926	**$109.9529832205**	$1,563,303,378.91
GVEA OFFTAKE	GVEA PASSING	10,748,066	$109.9891900000	$1,182,171,073.41
GVEA RETURN	GVEA RETURN	2,601,950	$107.3460500000	$279,309,054.80
GVEA	GVEA REFERENCE	13,350,016	**$109.4740357018**	$1,461,480,128.20
PSVR OFFTAKE	PSVR PASSING	11,912,350	$109.4969400000	$1,304,379,691.54
PSVR RETURN	PSVR RETURN	1,051,990	$105.4520200000	$110,934,470.52
PSVR	PSVR REFERENCE	12,978,304	**$109.1697812657**	$1,415,314,162.05

KTC Quality Bank
Stream Values and Total Stream Volume Shipped
July 2014

Sample Location	Stream	Volume (BBL)	Stream Value ($/BBL)	Total Stream Value ($)
ALPINE	ALPINE	2,241,772	$110.7967700000	$248,381,096.68
MILNE POINT	MILNE POINT	638,565	$108.6292500000	$69,366,837.03
KUPARUK REFERENCE	KUPARUK REFERENCE	7,010,971	$109.1719600000	$765,401,445.57
NIKAITCHUQ	NIKAITCHUQ	210,697	$107.4115200000	$22,631,285.03
KUPARUK RIVER UNIT	KUPARUK RIVER UNIT	3,919,937	**$108.4257800166**	$425,022,226.84

Table 2-5 shows the kind of information supplied by the TAPS quality bank administrator that will be used to calculate the quality bank differential for Sale Oil produced from each Unit. The TAPS quality bank administrator provides this information to the State, pipeline owners, and shippers. As a shipper on TAPS, the Buyer will also receive this information. In the column titled "Stream Value ($/BBL)" are the different per-barrel values of each stream produced from the Units from which Sale Oil may be delivered. The PSVR Reference Stream value is labeled "PSVR Reference" and is the stream value of the blended TAPS stream immediately downstream of the Petro Star Valdez Refinery return stream. The Quality Bank Adjustment is calculated as the difference between the stream value of each Unit and the PSVR Reference Stream.

For example, assume that the Month is July 2014 and the Sale Oil is produced from Lisburne. The QBA for Sale Oil from Lisburne (QBA_{LIS}) is calculated as the per-barrel difference between the Stream value for Lisburne, indicated as "Lisburne" in Table 2.5, and the PSVR Reference Stream Value. In this example Sale Oil from Lisburne increases the value of the stream of oil measured at Valdez. Therefore, $3.0330987343 per barrel is the QBA incorporated in the calculation of Price for Sale Oil from Lisburne.

Quality Bank Adjustment for Lisburne = the stream value for Lisburne minus the stream value of PSVR Reference (from Table 2-5)

QBA_{LIS}= 112.2028800000 - 109.1697812657

QBA_{LIS}= $3.03310

Note: The Price of Sale Oil from the PBU IPA and Lisburne are invoiced separately.

Using the results of the example calculations above, Line Loss for Sale Oil delivered from Lisburne in July 2014 equals

$$\text{Line Loss}_{LIS} = (.0009)\ X\ (\$114.26025 - \$2.15 - \$5.04426 + \$3.03310) = \$0.09909$$

Calculating the Price of Sale Oil

The Price of Sale Oil delivered from Lisburne in July 2014 is

$$\text{Price}_{LIS} = \$114.26025 - \$2.15 - \$5.04426 + \$3.03310 - \$0.09909 = \$110.00000$$

Note that each number in the equation is rounded to five decimal places. If a number's sixth decimal is 0, 1, 2, 3, or 4, the number shall be truncated to the fifth decimal. If a number's sixth decimal is 5, 6, 7, 8, or 9, the number shall be truncated to the fifth decimal and the fifth decimal shall be increased by 1.

RIK Differential Readjustment Mechanism

The RIK Differential used in the calculation of the Price of Sale Oil will be adjusted one time for deliveries of Sale Oil on and after April 1, 2016. The adjustment of the new RIK Differential will be based on data provided by BP, ExxonMobil, and CPAI and documented in their royalty filings, including all revisions to that data that are available to the State at the time the State prepares the statement of account for the April 2016 Month of delivery.

Table 2-6 below illustrates the type of data provided by BP, ExxonMobil, and CPAI as well as the calculation of "Valdez Value_{RIV}." In the columns labeled "D.V." and "M.C" are hypothetical Monthly data for the destination values and the deductions for marine transportation costs as

reported by BP, ExxonMobil, and CPAI and based on the provisions of their Royalty Settlement Agreements. BP, ExxonMobil, and CPAI also report their total royalty production for the Month of delivery subject to the formula in each lessee's Royalty Settlement Agreement; these data appear in the columns labeled "Bbls." The royalty volume-weighted average destination values and marine transportation cost allowances for each Month appear in the next two columns under the heading "Volume-Weighted Avg" and are used to calculate the Valdez $Value_{RIV}$. In the last column, the Valdez $Value_{RIV}$ for each Month is the volume-weighted average D.V. minus the volume-weighted average M.C for the three lessees.

Table 2.6: BP, ExxonMobil, CPAI Royalty Data and the Monthly Valdez $Value_{RIV}$

MONTH	BP			ExxonMobil			CPAI			Volume-Weighted Avg		Valdez
	D.V.	M.C.	Bbls	D.V.	M.C.	Bbls	D.V.	M.C.	Bbls	D.V.	M.C.	$Value_{RIV}$
January 2013	101.53	1.98	76,111	100.77	2.06	104,640	101.64	2.01	91,494	101.27605	2.02083	99.25522
February 2013	102.14	1.92	69,894	103.06	2.04	96,969	103.81	2.02	68,253	103.00500	1.99852	101.00648
March 2013	101.02	1.89	177,753	100.81	2.10	244,451	101.40	2.06	223,746	101.07142	2.02836	99.04306
April 2013	102.57	1.90	177,975	101.58	2.08	244,681	101.59	2.05	219,228	101.86023	2.01985	99.84038
May 2013	104.79	1.97	192,612	104.99	2.07	264,556	104.50	2.07	226,690	104.76971	2.04183	102.72788
June 2013	103.42	1.99	168,878	103.53	2.09	232,341	104.13	2.04	192,484	103.69268	2.04534	101.64734
July 2013	105.38	2.05	160,907	104.77	2.12	224,361	104.01	2.05	183,118	104.69852	2.07763	102.62089
August 2013	104.61	2.02	138,865	105.48	2.15	194,061	104.83	2.03	158,678	105.02434	2.07455	102.94979
September 2013	104.03	2.04	155,503	105.02	2.09	215,284	104.95	2.01	178,072	104.71953	2.04988	102.66965
October 2013	103.89	2.03	132,344	103.62	2.06	182,834	104.19	2.06	146,405	103.87713	2.05140	101.82573
November 2013	102.88	2.01	129,313	102.03	2.05	177,737	101.39	2.04	152,921	102.05748	2.03543	100.02205
December 2013	102.64	2.02	138,107	102.79	2.07	189,725	103.10	2.02	152,566	102.84566	2.03975	100.80592
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
December 2015	115.26	2.08	197,608	114.73	2.11	201,469	114.08	2.09	167,673	114.72386	2.09362	112.63024

Table 2-7 shows how the data provided by BP, ExxonMobil, and CPAI will be combined with the ANS Spot Price and the initial RIK Differential to arrive at the monthly difference between the value of RIK at Valdez and the value of RIV at Valdez.

Table 2.7: Monthly Difference between ANS Spot Price Minus $2.15 and Valdez $Value_{RIV}$

MONTH	PTR	RIK Differential	Valdez $Value_{RIV}$	Discrepancy
January 2013	100.56657	2.15	99.25522	-0.83865
February 2013	101.83060	2.15	101.00648	-1.32588
March 2013	100.63789	2.15	99.04306	-0.55517
April 2013	102.17962	2.15	99.84038	0.18923
May 2013	105.69509	2.15	102.72788	0.81721
June 2013	103.49037	2.15	101.64734	-0.30696
July 2013	105.32769	2.15	102.62089	0.55680
August 2013	103.93398	2.15	102.94979	-1.16581
September 2013	105.02457	2.15	102.66965	0.20492
October 2013	103.77881	2.15	101.82573	-0.19692
November 2013	102.56780	2.15	100.02205	0.39575
December 2013	103.28099	2.15	100.80592	0.32507
⋮	⋮	⋮	⋮	⋮
December 2015	115.34177	2.15	112.63024	0.56153

The second column in Table 2-7 is the monthly ANS Spot Price as calculated in Table 2.1.[2] The third column is the RIK Differential value initially set in Section 2.3 at $2.15. The fourth column is Valdez $\text{Value}_{\text{RIV}}$ as computed in Table 2-6. The final column in Table 2-7 labeled "Discrepancy" is calculated as the ANS Spot Price minus $2.15 minus Valdez $\text{Value}_{\text{RIV}}$. Notionally, this final column represents how the RIK value at Valdez diverged from the volume-weighted average RIV value at Valdez each Month. A positive amount means that the RIK value at Valdez exceeded the RIV value.

The hypothetical data contained in Table 2-6 and 2-7 do not include the months January 2014 through November 2015 for the sake of presentation. When the State adjusts the RIK Differential for April 2016 and thereafter, the State will first take the average of the actual calculated Discrepancy for each of the thirty-six Months between January 2013 and December 2015. RIK Differential for Sale Oil deliveries on and after April 1, 2016 is

$$\text{RIK Differential} = \begin{cases} \$2.30 & \text{if} \quad \text{Average Discrepancy} > \$0.15 \\ \$2.15 + \text{Average Discrepancy} & \text{if} \quad -\$0.15 \leq \text{Average Discrepancy} \leq \$0.15 \\ \$2.00 & \text{if} \quad \text{Average Discrepancy} < -\$0.15 \end{cases}$$

Suppose that the simple average of the thirty-six values in the Discrepancy column was $0.42. This indicates that, on average, the RIK value for Sale Oil at Valdez was $0.42 per barrel higher than the volume-weighted average unaudited value of the State's RIV at Valdez. Based on this hypothetical Discrepancy of $0.42, the RIK Differential in the final three years of the contract would be $2.30. On the other hand, if the average Discrepancy was determined to be -$0.16, the RIK Differential in the final three years of the contract would be $2.00. Finally, if the average Discrepancy was $0.02, the RIK Differential in the final three years of the contract would be $2.17.

[2] The calculation of ANS Spot Price is defined in Section 2.3. For the purposes of the calculating the adjustment of the RIK Differential the same procedures will apply to calculate an ANS Spot Price for the January 2013 through December 2015 period.

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APPENDIX 3
EXAMPLE OF CALCULATION OF INTEREST AND LATE PAYMENT PENALTIES

Sample Calculation of an Invoice for July 2014 Deliveries

Assumptions:

1. Month is August 2014.
2. Sale Oil delivered to the Buyer from Lisburne in July 2014 = 31,000 barrels (1,000 bpd).
3. July 2014 Price of the Sale Oil for Lisburne as initially estimated by the State = $110.00000 per barrel.
4. Statement of account, with July 2014 invoice, sent to the Buyer on August 2, 2014.
5. July 2014 invoice payment due to the State = August 22, 2014.
6. Buyer pays State only $1,000,000 on the due date, August 22, and pays the outstanding balance on August 25, 2014.
7. Annual interest rate provided by Alaska Statute 38.05.135(d) for August 2014 is 11 percent.

Method for calculating Buyer's invoice payment for July 2014 deliveries:

Invoice Amount = Quantity of Sale Oil x Buyer's Price of Sale Oil
= 31,000 x $110.00000 = $3,410,000.00

Because payment in full was not received by the State on or before August 22, 2014, interest will accrue on the unpaid balance from August 22, 2014 through the date the payment is received, and a late payment penalty will be assessed.

Below is a sample calculation of late payment penalty fee (assuming that it is not waived under Section 3.7) and interest. This sample calculation shows what will happen if the Buyer makes a partial payment on August 22 and the balance on August 25.

Late Payment Penalty Fee:		
Statement of Account amount	=	$3,410,000.00
Amount paid on August 22	=	$1.000.000.00
Outstanding balance (8/22/11)	=	$2,410,000.00
Late Payment Penalty Fee ($2,410,000 x 5%) =	=	$120,500.00
Interest:		
$2,410,000 x (11%/365) x 3 Days	=	$2.178.90
Amount Buyer owes on August 25, 2014	=	$2,532,678.90

Note: As more accurate data is received by the State, the State may adjust the Price and/or the actual quantity of Sale Oil and invoice the Buyer in the initial adjustment invoice submitted with the following Month's (August 2014) statement of account.

Sample Calculation of an Adjustment Invoice in September 2014

Assumptions:

1. Month is September 2014.
2. Sale Oil delivered in July 2014 has been revised to 30,000 barrels.
3. July 2014's price for Sale Oil is unchanged at $110.00000 per barrel.
4. Date of the statement of account that contains the adjustment invoice is September 1, 2014.
5. Date the adjustment invoice payment is due to the State = September 20, 2014.

Method for calculating the Buyer's adjustment invoice amount for July 2014:

Invoice Amount = Quantity of Sale Oil x Buyer's Price of Sale Oil
= 30,000 x $110.00000
= $3,300,000.00

Adjusted Invoice Amount for July 2014	=	$3,300,000.00
Amount previously paid by the Buyer for July 2014	=	$3,410,000.00
Overpayment for July 2014	=	($110,000.00)

Credit due the Buyer against statement of account amount dated September 1 due September 20, 2014.

Note: As more accurate data is received by the State, the State may adjust the Price and/or the actual quantity of Sale Oil and invoice the Buyer in the adjustment invoice submitted with the following Month's (October 2014) statement of account.

Sample Calculation of an Adjustment Invoice in October 2014

Assumptions:

1. Month is October 2014.
2. July 2014's price for Sale Oil is changed to $110.05000 per barrel due to a change in the quality bank.
3. The statement of account that contains the adjustment invoice is October 4, 2014.
4. The adjusted invoice payment is due to the State = October 20, 2014.

Method for calculating the Buyer's adjustment invoice amount for July 2014:

Production Month Invoice Amount = Quantity of Sale Oil x Buyer's Price of Sale Oil
= 30,000 x $110.05000
= $3,301,500.00

Adjusted Invoice Amount for July 2014	=	$3,301,500.00
Amount previously paid by the Buyer for July 2014	=	$3.300.000.00
Underpayment for July 2014	=	$1,500.00

The underpayment is due the State on October 20, 2014.

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APPENDIX 4
SPECIAL COMMITMENT

Wholesale Rack Price Parity

Buyer agrees, for any period of time in which Buyer is purchasing Sale Oil under this Agreement, to maintain the Buyer wholesale truck rack posted price for gasoline in Fairbanks at a price not to exceed the Buyer wholesale truck rack posted price for gasoline in Anchorage on an annual simple average basis (within a tolerance/variation of 1 cent per gallon (cpg)). Buyer makes no guarantee of the price parity for Buyer's wholesale truck rack posted prices for gasoline in Fairbanks and Anchorage on a daily basis. If the annual average variation of the aforementioned posted prices exceeds 1 cpg, Buyer shall have ninety (90) days to reduce the variation below 1 cpg, averaged over an all-inclusive timeframe, including the ninety (90) day period and the previous annual period. This provision shall only apply to gasoline produced by Buyer at its Alaska refinery. This provision shall not apply to any gasoline exchanges. An example of the calculations appears in Table 4-1.

Table 4-1 Wholesale Truck Rack Posted Price True-Up

Wholesale Rack Price Parity	Scenario 1			Scenario 2		
	Buyer Fairbanks Posting (cpg)	Buyer Anchorage Posting (cpg)	Fairbanks minus Anchorage (cpg)	Buyer Fairbanks Posting (cpg)	Buyer Anchorage Posting (cpg)	Fairbanks minus Anchorage (cpg)
January	104.00	102.44	1.56	106.00	102.44	3.56
February	103.00	100.76	2.24	103.00	100.76	2.24
March	100.00	103.01	(3.01)	106.00	103.01	2.99
April	108.00	110.02	(2.02)	114.00	110.02	3.98
May	112.00	110.07	1.93	112.00	110.07	1.93
June	111.00	109.40	1.60	114.00	109.40	4.60
July	106.00	108.38	(2.38)	108.00	108.38	(0.38)
August	107.00	109.77	(2.77)	109.00	109.77	(0.77)
September	112.00	114.02	(2.02)	115.00	114.02	0.98
October	115.00	114.02	0.98	119.00	114.02	4.98
November	115.00	113.38	1.62	113.00	113.38	(0.38)
December	112.00	113.70	(1.70)	116.00	113.70	2.30
Annual Average	**108.75**	**109.08**	**(0.33)**	**111.25**	**109.08**	**2.17**
January	Not Applicable			119	119.95	(0.95)
February				125	126.19	(1.19)
March				133	134.13	(1.13)
15 Month Average				**114.13**	**112.62**	**1.52**

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Report to the Alaska Legislature from the Alaska Royalty Oil and Gas Development Advisory Board February 28, 2013

According to AS 38.06.070(c), the Alaska Royalty Oil and Gas Development Advisory Board ("Royalty Board") "...shall make a full report to the legislature on each criterion specified in (a) or (b) of this section for any disposition of royalty oil or gas that requires legislative approval. The board's report shall be submitted for legislative review at the time a bill for legislative approval of a proposed disposition of royalty oil or gas is introduced in the legislature." This document is the Royalty Board's report regarding the sale by the Department of Natural Resources to sell up to 30,000 barrels per day of royalty oil to the Flint Hills Resources North Pole refinery under a proposed titled, Agreement for the Sale of Royalty Oil Between and Among the State of Alaska, Flint Hill Resources, LLC, a Delaware Limited Liability Company and Flint Hills Resources Alaska, LLC, An Alaska Limited Liability Company ("Proposed Contract").

The Royalty Board reviewed the Preliminary Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Flint Hills Resources Alaska, LLC" ("Preliminary Finding and Determination") prepared by the Department of Natural Resources ("DNR") and, at a public hearing held in Fairbanks, Alaska, on February 26, 2013, heard testimony from DNR staff, representatives from Flint Hills Resources Alaska, LLC., and heard testimony from the public.

AS 38.06.070(a) and (b) lists several criteria that the Royalty Board must consider when making a recommendation to the legislature for the sale of royalty oil. Below each criterion is listed in boldface type followed by the Royalty Board's findings. The data and information below draws extensively from DNR's Preliminary Finding and Determination.

AS 38.06.070(a)(1) the revenue needs and projected fiscal condition of the state

The revenue needs and fiscal condition of the state are illustrated by the fact that 1 in every 5 dollars generated in the Alaska economy is generate by the oil and gas industry. In FY 2012, 93 percent of the state's unrestricted general fund revenue was paid by oil and gas activities and the state earned $2.95 billion from oil and gas royalty payments. Given that the approximately $3.5 to $5.9 billion revenues generated by the sale represents a small improvement over the state's next best alternative, i.e., payments from the North Slope lessees for royalty in-value, the sale will contribute additional funds to the state general fund revenue.

AS 38.06.070(a)(2) the existence and extent of present and projected local and regional needs for oil and gas products and by-products, the effect of state or federal commodity allocation requirements which might be applicable to those products and by-products, and the priorities among competing needs

The North Pole refinery meets a substantial proportion of the local and regional need for petroleum-based energy. Flint Hills Resources produces approximately 18 percent of the gasoline consumed in Alaska and 26 percent of the jet fuel sold in Alaska. The North Pole

refinery produces 330 million gallons of refined petroleum products per year. On a daily basis, FHR supplies 672,000 gallons of jet fuel, 143,000 gallons of gasoline, 41,000 gallons of heating fuel, and between 68,000 and 194,000 gallons of various products used in electrical generation and other uses: HAGO, LAGO, naphtha, asphalt, refining fuel, and small amounts of high-sulfur diesel. All products are sold in Alaska in both the Interior and in Anchorage—primarily jet fuel sales at the Ted Steven International Airport.

In the absence of the sale of the state's royalty oil under the Proposed Contract, Flint Hills Resources could face the prospects of discontinued operation of the refinery. The loss of a domestic supply of refined product would have to be substituted by imports at possibly higher prices to residential and commercial customers. This would also mean a dramatic shift in the product supplies manufactured by other refineries in the state.

AS 38.06.070(a)(13) the desirability of localized capital investment, increased payroll, secondary development and other possible effects of the sale, exchange, or other disposition of oil and gas or both

As in most of the discussion of the benefits of the Proposed Contract, the effects of the sale should be understood in that they are generated in keeping the status quo. In the absence of the sale, there is a higher likelihood that the refinery might close and the benefits enjoyed today would disappear. In that the sale will contribute to the maintenance of the status quo, there is unlikely to be any incremental capital investment, increased payroll, jobs, or secondary investment that may be attributed to the sale. On the other hand, there is a specific provision in the Proposed Contract that the contract may be extended if FHR invests in a large capital project at the North Pole refinery or commits to binding support of a North Slope natural gas transportation system. If the latter were to occur in part because of FHR's commitment to the project, there would be a substantial local capital investment and hiring. The project could also contribute to potentially lower energy costs for Interior residents and generate positive environmental spillover effects.

AS 38.06.070(a)(4) the projected social impacts of the transaction

The sale is unlikely to generate incremental social impacts. In the absence of the sale 1,300 jobs in the Fairbanks North Star Borough would be at risk with attendant impacts on social infrastructure and higher demand for social services. Property taxes currently paid by FHR to the local government would also be substantially affected. With a loss of jobs, population losses due to out-migration would have negative social consequences for the local communities in the region.

AS 38.06.070(a)(5) the projected additional costs and responsibilities which could be imposed upon the state and affected political subdivisions by development related to the transaction

The sale is likely to impose negligible additional costs or responsibilities for the state or the Fairbanks North Star Borough or the city of North Pole. The absence of the sale could impose

substantial impacts on the social safety net provided by these governments as consequence of job losses and the decline of local tax revenues.

AS 38.06.070(a)(6) the existence of specific local or regional labor or consumption markets or both which should be met by the transaction

FHR's North Pole refinery is a substantial part of the local and regional labor market. The sale is expected to generate only negligible additional labor market demand but the absence of the sale could have a substantial opposite effect. FHR employs 129 full time equivalent positions, most of who are employed at the North Pole refinery. These jobs generate a total of 1,300 direct and indirect jobs in the wider economy of the Fairbanks North Star Borough. These are high paying positions as well: the average direct income associated with employment at the refinery is $166,000 per year per position and contributes to another $66,000 per year in indirect income effects.

AS 38.06.070(a)(7) the projected positive and negative environmental effects related to the transaction

The projected environmental effects of the sale, insofar as the sale will maintain the status quo, will be negligible. However, in the absence of the current locally produced refined products, there could be increased environmental impacts associated with the transportation of imported petroleum products and the substitution of wood generated heat for relatively clean-burning petroleum home heating fuel.

AS 38.06.070(a)(8) the projected effects of the proposed transaction upon existing private commercial enterprise and patterns of investments

The sale by itself will maintain the status quo operation of the North Pole refinery and will generate negligible effects on the activities in the various economic sectors of the region. If the refinery were to close as consequence of not selling royalty oil under the Proposed Contract, the loss of 26 percent of the jet fuel supply would affect flight and airport operations at both the Fairbanks International and Ted Stevens International Airport in Anchorage. The Alaska Railroad would lose one of its largest customers and its unit costs would increase. Other domestic refineries would be forced to substitute for the lost supply from the shuttered North Pole refinery but imports would likely be a new and significant source of supply. Generally, higher energy costs to residential and commercial consumers would generate a host of investment adjustments: possible lower property values and higher prices for goods and services throughout the economy.

In addition to the above criteria, the Royalty Board also verified that conditions of AS 38.06.070(b) had been achieved through the Proposed Contract. AS 38.06.070(b) says, "When it is economically feasible and in the public interest, the board may recommend to the commissioner of natural resources, as a condition of the sale of oil or gas obtained by the state as royalty, that

(1) the oil or gas be refined or processed in the state;

Article IV in the Proposed Contract has an explicit provision that "Buyer agrees to use commercially reasonable efforts to process the Sale Oil at its refinery in North Pole, Alaska."

(2) the purchaser be a refiner who supplies products to the Alaska market with price or supply benefits to state citizens; or (3) the purchaser construct a processing or refining facility in the state.

The Flint Hills Resources North Pole refinery has been in continuous operation since 1979 and has provided a slate of refined products for Alaska residential and commercial customers. Indeed, the initial 25-year royalty oil sale by DNR is responsible for the very existence of the North Pole refinery in that a secure long-term supply of crude oil made initial financing of the refinery's construction possible. In testimony heard in the public hearing on February 28, 2013, the Royalty Board learned of an anecdotal fact that the start-up of North Pole refinery led to the immediate halving of the retail price of gasoline as locally produced gasoline replaced imports.

THE ALASKA ROYALTY OIL AND GAS DEVELOPMENT ADVISORY BOARD
Resolution 13-1

Whereas, on Tuesday, February 26, 2013 at 1:00 p.m., the Alaska Royalty Oil and Gas Development Advisory ("Royalty Board") conducted a public hearing at the Noel Wien Library Auditorium in Fairbanks, Alaska at 1:00 p.m. to consider the proposed royalty in-kind oil supply contract titled, "Agreement for the Sale of Royalty Oil Between and Among the State of Alaska, Flint Hill Resources, LLC, a Delaware Limited Liability Company and Flint Hills Resources Alaska, LLC, An Alaska Limited Liability Company" ("Proposed Contract").

Whereas, under the Proposed Contract, DNR will sell to Flint Hills Resources Alaska, LLC, between 18,000 to 30,000 barrels per day of North Slope royalty oil. Upon enactment of legislation approving the Proposed Contract, delivery of the royalty oil will begin on April 1, 2014.

Whereas, at this public hearing the Royalty Board reviewed the Preliminary Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Flint Hills Resources Alaska, LLC" ("Preliminary Finding and Determination") submitted to the Royalty Board by the Department of Natural Resources ("DNR") via email on February 19, 2013 and provided in hard copy to the Royalty Board members at the public hearing.

Whereas, at this public hearing the Royalty Board heard testimony from the staff of DNR, representatives of Flint Hills Resources, and members of the public.

Whereas, on the following Thursday, February 28, 2013, the Royalty Board conducted a public meeting in Conference Room 1860 at the Robert Atwood State Office Building in Anchorage at 9:00 a.m. to review the testimony heard at the February 26, 2013 public hearing and to consider the approval and recommendation to the Alaska Legislature in light of the criteria of AS 38.06.070. After a thorough discussion, the Royalty Board voted to approve the proposed sale and recommend the proposed agreement be approved by the Alaska Legislature. The Royalty Board also adopted the attached report to be submitted to the Alaska Legislature along with its recommendation as required under AS 38.06.070.

Be it resolved, that based on the Royalty Board's review of the Proposed Contract, the Preliminary Finding and Determination, and the information presented at its public hearing, the Royalty Board is of the opinion that the proposed disposition of North Slope royalty oil to Flint Hills Resources Alaska, LLC meets the requirements of AS 38.06.070. In accordance with AS 38.06.070(c) the Royalty Board submits the attached report and, in accordance with AS 38.06.050, recommends that the Alaska State Legislature approve the Proposed Contract.

Bob Roses	2/28/13 Date	Charles Wiegers	2/28/13 Date
Steve Menard	2/28/13 Date	Steve Selvaggio	Date
Dana Pruhs	2/28/13 Date	Daniel Patrick O'Tierney	Date
Joe Balash	Date	Bruce Tangeman	2/28/13 Date

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RESOURCE DEVELOPMENT COUNCIL

Growing Alaska Through Responsible Resource Development

February 25, 2013

Mr. Kevin Banks
Alaska Division of Oil and Gas
550 West Seventh Avenue, Suite 1100
Anchorage, AK 99501-3560

Dear Mr. Banks:

The Resource Development Council (RDC) is writing to support the proposed new royalty oil contract between the State of Alaska and Flint Hills Resources Alaska (FHR).

RDC is an Alaskan business association comprised of individuals and companies from Alaska's oil and gas, mining, forest products, tourism, and fisheries industries. Our membership includes all of the Alaska Native Regional Corporations, local communities, organized labor, and industry support firms. RDC's purpose is to expand the state's economic base through the responsible development of our natural resources.

The proposed contract fully meets the criteria set out for the sale of royalty oil under Alaska Statute 38.05 and 38.06. RDC requests that approval of the negotiated contract occur in an expeditious manner before the State Royalty Advisory Board and the Alaska Legislature.

The proposed sale of royalty oil to FHR is needed to meet in-state need for crude and facilitate continued operations of the North Pole refinery with significant benefits to Alaskans and the Interior Alaska economy. RDC agrees with the Commissioner of Natural Resources that the proposed contract for the sale of the State's royalty oil to FHR is in the public's best interest.

The proposed contract commits the State to deliver a maximum of 30,000 barrels per day to FHR between April 1, 2014 and March 31, 2019.

For decades, the refinery at North Pole has been a major component of the Interior Alaska economy, providing good-paying jobs and tax revenues to the Fairbanks North Star Borough. The refinery has provided reasonably-priced fuels, and shipments from the refinery have benefited Alaskan entities, including the Alaska Railroad Corporation. Moreover, FHR has been an excellent corporate citizen, supporting many organizations statewide.

RDC encourages the State Royalty Advisory Board and the Alaska Legislature to expeditiously approve the negotiated contract. It will serve Alaskans well.

Sincerely,

Carl Portman
Deputy Director

121 West Fireweed Lane, Suite 250, Anchorage, Alaska 99503
Phone: 907-276-0700 • Fax: 907-276-3887 • Email: resources@akrdc.org • Website: akrdc.org

Sponsored by: Mayor Bryce Ward
Introduced & Adopted: March 4th, 2013

CITY OF NORTH POLE
RESOLUTION 13-04

A RESOLUTION SUPPORTING LEGISLATIVE ACTION TO APPROVE THE FIVE YEAR ROYALTY OIL CONTRACT BETWEEN FLINT HILLS RESOURCES LLC AND THE ALASKA DEPARTMENT OF NATURAL RESOURCES DURING THE 28TH LEGISLATIVE SESSION

WHEREAS, the royalty contract proposed between Flint Hills Resources and the Alaska Department of Natural Resources satisfies all state requirements; and

WHEREAS, a five year contract allows for enough stability for outside investment in the Flint Hills Refinery; and

WHEREAS, Flint Hills Resources LLC has no other supplier of crude oil; and

WHEREAS, lack of a royalty oil contract with the State of Alaska would put the refinery at sever risk of closure; and

WHEREAS, Flint Hills Resources is an instate producer of oil, creating jobs in the City of North Pole and the State of Alaska; and

WHEREAS, based on a FEDC study the Flint Hills Refinery is responsible for up to 1,600 indirect jobs that average over $60,000 a year; and

WHEREAS, if the Flint Hills Refinery was to shut down it would have over a $100,000,000 negative impact on the community; and

WHEREAS, Flint Hills Resources is a Major contributor to property tax revenue for the City of North Pole; and

WHEREAS, the City of North Pole desires to promote and maintain local business in the City.

NOW, THEREFORE, BE IT RESOLVED that the North Pole City Council supports legislative action to approve the royalty oil contract between Flint Hills Resources LLC and the Alaska Department of Natural Resources during the 28th legislative session.

PASSED AND APPROVED by a duly constituted quorum of the North Pole City Council this 4th day of March, 2013

Bryce J Ward, Mayor

ATTEST:

Kathryn M Weber, MMC, City Clerk
North Pole City Clerk

THE CITY OF NORTH POLE INCORPORATED ON JANUARY 16, 1953 SEAL ALASKA

PASSED
YES: 7 - Hunter, Sikma, Holm, Smith, Nelson, McGhee, Ward
NO: 0
ABSENT: 0

Fairbanks North Star Borough Office of the Mayor
809 Pioneer Road • PO Box 71267 • Fairbanks, AK 99707 (907) 459-1300 FAX 459-1102

Department of Natural Resources
Division of Oil & Gas
Attn.: Kevin Banks
550 West 7th Avenue, Suite 200
Anchorage, Alaska 99701-3560

March 12, 2013

Dear Mr. Banks:

The Fairbanks North Star Borough (FNSB) wholly supports the Department of Natural Resources proposal to sell North Slope royalty oil to Flint Hills Resources Alaska, LLC.

If Flint Hills is allowed to purchase royalty oil and refine it, this can and will create a more competitive market to see the product throughout the state. We have already seen the decline in refining at Flint Hills due to the high operating costs we face here in the Interior. This, in turn, has caused a reduction in force which harms our local economy.

The FNSB is putting the pieces in place so we can deliver low cost gas to our community. We have created the Interior Alaska Natural Gas Utility. Not only will the utility benefit borough residents, it also reduces the costs at our refineries. This long term proposal for Flint Hills to purchase the royalty oil is very important to everyone here.

As Mayor of the FNSB, I believe entering a long term contract with Flint Hills is in the best interest of the State, the refinery and the residents of the borough. I look forward to a positive finding in this endeavor and seeing legislation move forward as we all do our part of bolster the economy.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Luke Hopkins,
Borough Mayor

GREATER FAIRBANKS CHAMBER OF COMMERCE

Interior Alaska – The "Place" To Do Business
100 Cushman St., Suite 102 | Fairbanks, Alaska 99701-4665
ph (907) 452-1105 | fax (907) 456-6968 | www.FairbanksChamber.org

March 15, 2013

Alaska State Legislature
State Capitol Building
Juneau, AK 99501

Dear Alaska State Legislature,

The Greater Fairbanks Chamber of Commerce represents over 700 businesses and organizations in the greater Fairbanks area and our mission is to ensure a healthy economic environment. The Flint Hills Refinery is an important contributor to the success of our Interior economies. For several decades, the refinery has provided market priced fuels. Their impact on jobs in our community was recently made clear as changes at the refinery led to significant layoffs at the Alaska Railroad Corporation. Flint Hills Resources also has a major impact through their support of the many organizations and programs throughout the State.

The negotiations that generated the proposed contract and the draft Best Interest Finding resulted in an agreement designed to meet both the letter and the spirit of the laws and regulations governing royalty oil sales. The proposed contract also provides incentives of extended length for purchase of North Slope natural gas – and action that could also benefit efforts to bring North Slope gas to the Interior.

For Flint Hills Resources to efficiently operate in the State, they need a predictable supply of crude oil. With the current contract expiring on April 1, 2014, Flint Hills Resources and the Alaska State Department of Natural Resources have negotiated a new contract. This new contract has been approved by the Alaska Royalty Oil & Gas Development Advisory Board and needs to be approved by the State Legislature.

In order for Flint Hills Resources to continue operations, plan and make future investments, and for the refinery to negotiate new sales contracts with their customers in a timely manner, legislative approval must be made before the Legislature adjourns in April of 2013. We ask that this action be done expeditiously.

Sincerely,

Lisa Herbert
Executive Director

Terri Froese
Board of Directors, Chair

Bob Shefchik
Energy Committee, Chair

Cc: Governor Sean Parnell
Lieutenant Governor Mead Treadwell
Bryan Butcher, Commissioner of Revenue
Dan Sullivan, Commissioner of Natural Resources
Joe Balash, Deputy Commissioner of Natural Resources
Alaska State Legislature
Alaska State Chamber of Commerce
Membership of the Greater Fairbanks Chamber of Commerce

Alaska Royalty Oil and Gas Development Advisory Board

Transcript of Oral Public Comments
Noel Wien Library
Fairbanks, Alaska
February 26, 2013

Comment from Bob Shefchik. Chamber Energy Committee

MR. SHEFCHIK: Bob Shefchik. 557 Grandview. I'm representing the Chamber Energy Committee and I have a Chamber Energy Committee at 2:30, so I will be necessarily brief. Welcome home, Mr. Pruhs (Board Member).

You know, I am representing the Chamber Energy Committee. I'm here to support the Preliminary Best Interest Finding and ask the board to take actions necessary to get the proposed Royalty Oil contract acted on by the legislature this session. You know, authorization of a successor oil contract with Flint Hills and the state has been a Chamber of Commerce legislative priority since we started working on our priorities last summer. We understand the value to our community and the value to Flint Hills. We also understand the value to the state and believe that putting this off to 2014 would cause problems for all of us.

Flint Hills, you know, is a valuable asset in our community. They're a corporate citizen. They're a large employer. They're a local taxpayer and they are one of two anchors of our energy economy here in the Interior. The chamber understands the high cost of energy is a critical problem in the community; it's another of our priorities. But we also recognize that the royalty oil is a world commodity. And so we -- you know, we appreciate the give and take between the two. When parties negotiate, from the outside all you can do is assume and trust that both sides worked hard and the end balance in pricing and terms reflects, you know, a good balance to both, and we appreciate that. You know, we know that there is a, you know, slight change from the last contract, but, you know, 50 cents on a 42-gallon barrel of oil is not a big change if you, you know, do the math.

You know, we appreciate the time that you put into studying the details of these complex transactions. You know, each of us can only spend so much time drilling it on to so many things and so particularly for the citizen members, you know, we thank you for spending the time to do that for us. You know, and we urge the support for this Preliminary Best Interest Finding and movement of that contract this year. And with that, I'll thank you and close.

MR. ROSES (Board Chairman): Any questions? Dana [PRUHS]?

MR. PRUHS (Board Member): Yeah, I just have one question and it may not be directly related to the refinery, but it has to do with the fuel. Could you -- do you have a sense of the number of homes that burn home heating fuel versus wood in the community?

MR. SHEFCHIK: I could tell you the number of homes that are heated, and there's 26,000 structures in the community off the borough database. I would put it in the 10 to 20 percent range on the residential that you're looking at, at a wood supply now and it's predominant in the North Pole area.

MR. PRUHS: Okay.

MR. SHEFCHIK: But it's really -- since 2008 with the spike of oil, it's throughout the community.

MR. PRUHS: And then what percentage of the typical home, average home if there is such a thing, are they spending on fossil fuels versus something else?

MR. SHEFCHIK: Versus something else? I have seen statistics and I believe they were out of AEA that talked about the Anchorage homes spending 3 to 5 percent of their disposable income on live electricity and oil. And in Fairbanks, you'd see 10 to 15 percent, a combination of higher kinds of oil products and degree days and -- is how they come up with that.

Comment from Bryce Ward, Mayor, City of North Pole

MR. ROSES: And the next up would be Bryce Ward. Thank you, Mr. Mayor. Please state your name and why you're here.

MAYOR WARD: Definitely. Bryce Ward, City of North Pole mayor. 606 East 5th Avenue, North Pole, Alaska.

I come here today to represent at least the mayor's office, the City of North Pole. We do have a resolution in for our next council meeting this next week in support of this action that you're looking at before you [CONTAINED IN THIS EXHIBIT]; however, it has not gone before our council at this time. I'd like to speak in favor of the royalty contract before you right now. As you have read, it fulfills the state requirements and it is in the best interest of the state's citizens of Alaska and also of the local Interior residents.

To give you a little bit of history and -- of the effects that the refinery has in the City of North Pole, they are a large portion of our property tax. Within I would say probably about a third of the property tax that we derive comes from the Flint Hills Refinery. Our utility department, water and sewer utility department in the last five years has seen approximately $6 to $7 million in donations to the City of North Pole on behalf of Flint Hills Refinery from a force sewer main which was put in this last year, a value of about 3 million, to our new city wells that we have of approximately 3 to 4 million that were put in approximately five years ago. They are a huge contributor to the City of North Pole and the residents. The high-paying jobs that they -- that were referred to earlier in this meeting are a huge benefit to the City of North Pole. We want to see these local jobs stay here and if the -- if Flint Hills Refinery cannot remain competitive by securing a long-term contract, the effects of them not being in this community are huge, not only to the City of North Pole, but also to the surrounding community of North Pole and the greater area.

Again, just to let you know, these are a few of the things that we look at when we talk about the City of North Pole and Flint Hills Refinery. I believe it's a productive and a good relationship that we have. If you were to look at our overall budget and the portion of property tax, we also – our income is property tax and also sales tax. The property tax is probably -- the amount that Flint Hills Resources contributes to the City of North Pole in property tax is equivalent to approximately 15 to 20 percent of our overall budget. And so if we were to take a hit of that size, it would mean substantial loss of employment to the City of North Pole and also services to the residents of our area. So, again, we speak in favor. I, from the mayor's office, speak in favor of this and I'm hoping that within the next week we can have a resolution from our council to this board in support of action by this legislature this year on this contract. Thank you.

MR. ROSES: May I make a suggestion? You may want to address your resolution -- if it's going to be more than a week, you may want to address it to the legislature because I would anticipate that this board will make a decision either today or Thursday when we have our next meeting.

MAYOR WARD: Definitely.

MR. ROSES: So if you wait a week, it will be too late for us. So if you address it to the legislature.....

MAYOR WARD: And that is our intent, to go basically to the body making the decision.

MR. ROSES: Any questions of the mayor? Seeing none. Thank you very much for your testimony.

MAYOR WARD: Thank you.