Chapter 3

Oil Valuation

This chapter describes Indian oil valuation in greater detail than covered in Chapter 2, “Valuation Basics” and provides example scenarios. The guidance in this chapter applies to all Indian leases that either: (1) contain a major portion provision or (2) provide that the Secretary of the Interior may establish value; (with the exception of leases in Osage County, Oklahoma).

Osage leases are governed by 25 CFR Part 226. ALWAYS refer to your lease document for information on valuing production.

In those cases where the valuation regulations are inconsistent with the valuation provisions in the lease, the lease terms, including those that have been modified by subsequent agreements, govern the valuation to the extent of the inconsistency under 30 CFR §§1202.100(b)(3) and 1202.555(c).

Many Indian leases include a provision whereby the Indian lessor has the option of taking production in kind. If you need help reporting production taken in kind, please contact royaltyvaluation@onrr.gov, for assistance.

Throughout this handbook, the term “you” will be used to refer to a lessee, operator, or other person legally responsible for paying royalties under 30 CFR Chapter XII, Subchapter A.

The timing of your production determines how to value oil produced from Indian lands. You must value all oil produced after July 1, 2015, using the rule published May 1, 2015 in 80 FR 24794. ONRR refers to this current oil valuation rule as the “Index-Based Major Portion (IBMP) Price.”

You must value Indian oil produced prior to July 1, 2015, using the 1988 regulations, as amended on December 17, 2007 in 72 FR 71231. ONRR refers to this older oil valuation method as “Oil Major Portion (MP).” This chapter will address both the 2015 rule and the regulations in effect prior to 2015.

3.1 Valuation of Oil Produced After July 1, 2015

As stated above, you must value all oil produced after July 1, 2015, using 30 CFR 1206 Subpart B. For a given month, the value of oil for royalty purposes is **<u>the higher of</u>**:

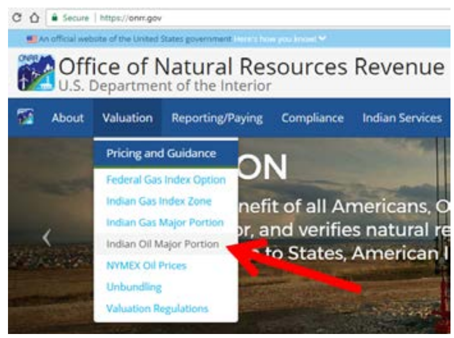
1) Gross Proceeds (less allowable transportation)

Or

2) Index-Based Major Portion (IBMP) Price (no transportation allowance)

> **!** Under audit, you will be required to show that you: 1) compared your gross proceeds, less allowable transportation, to the IBMP price, and 2) that you reported and paid on the higher of the two.

Each month, ONRR publishes an IBMP price for the previous month's production. The prices are posted at www.onrr.gov. Click on the "Valuation" drop-down menu, then select "Indian Oil Major Portion" for [Indian Oil Major Portion Prices](#).



3.1.1 Comparing Gross Proceeds and IBMP Prices

In order to calculate your gross proceeds, you first need to determine whether or not you are selling your oil under an arm's-length or non-arm's-length contract. If you sell your oil under an arm's-length contract, under 30 CFR §1206.52, the value of your Indian oil is the gross proceeds accruing to you under that arm's--length contract, less allowable transportation costs. If you sell your oil under a non-arm's-length contract, under 30 CFR §1206.53, the value of your oil is the volume-weighted average of the gross proceeds paid or received by you or your affiliate, including your refining affiliate, for purchases or sales under arm's-length contracts, less applicable allowances.

> The general order of determining royalties will be:
> 1) Determine the designated area
> 2) Determine the crude type
> 3) Calculate your gross proceeds
> 4) Find the IBMP price on [onrr.gov](#)
> 5) Report and pay on the higher of steps 3 and 4

Once you calculate your gross proceeds under the regulations above, you will compare those values with the IBMP price for the same crude type and designated area that ONRR published on its website for the same production month.

If your per barrel gross proceeds price, net of allowable transportation, is higher than the IBMP price, report and pay royalties on your gross proceeds. If the IBMP price is

higher than your per barrel gross proceeds price, report and pay royalties on the IBMP price, even if you did not (or could not) sell oil for that price.

For example, assume that your gross proceeds calculations, net of allowable transportation, resulted in a value of $85 per barrel for July, 2015. For the July, 2015 production month, the ONRR-published IBMP price for your crude type and designated area was $83 per barrel. Because the IBMP price was lower than your calculated gross proceeds, you would report and pay royalties on $85 per barrel. In this case, you should report allowable transportation costs that you incur separately as a transportation allowance. The table below summarizes the information.

> ! You may deduct your actual transportation costs when you pay on gross proceeds. The IBMP price is adjusted for transportation.

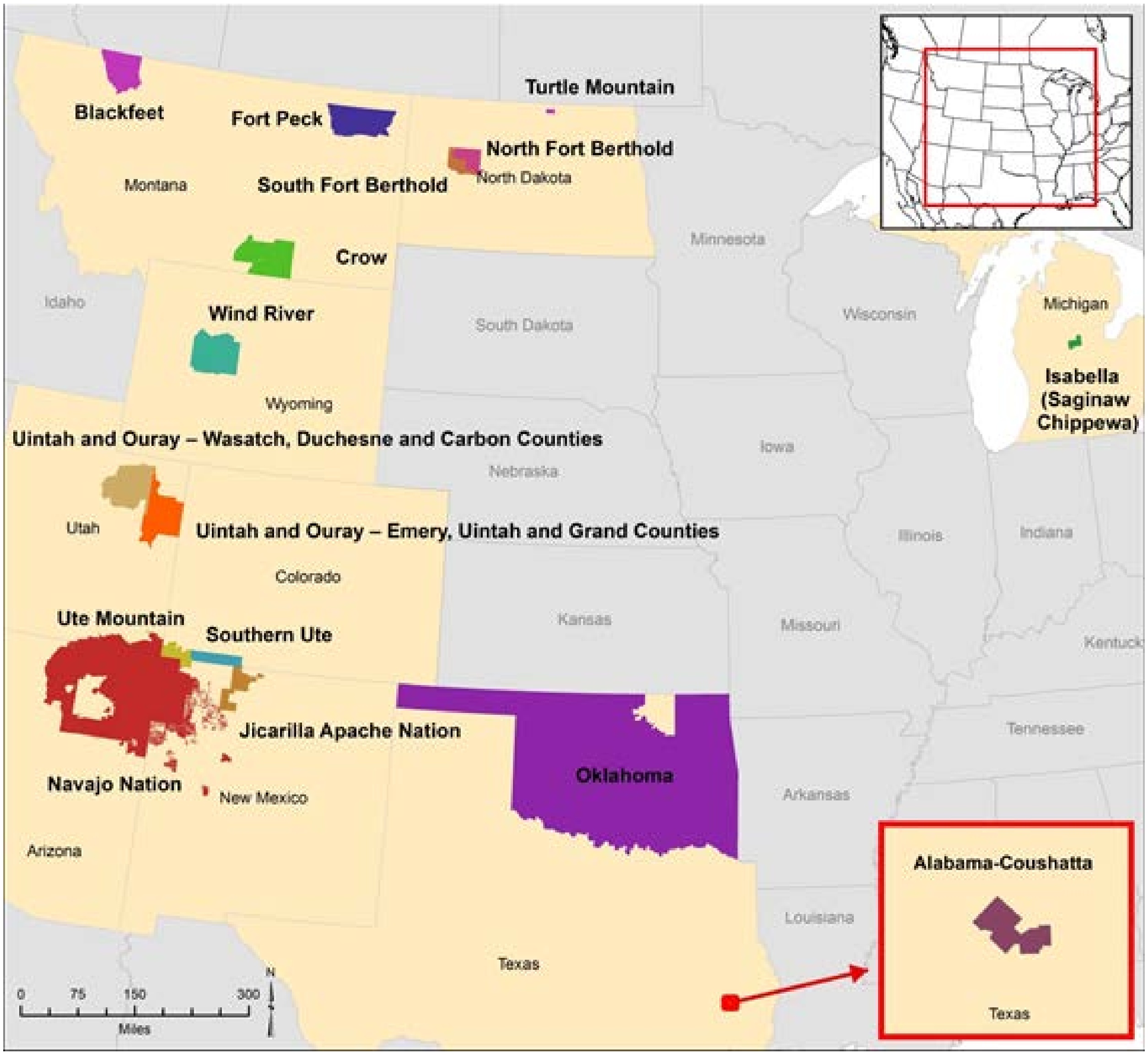
Month/Year	Gross proceeds	IBMP	Higher of gross proceeds and IBMP	Report separate transportation allowance?
July 2015	$85	$83	$85	yes

Alternatively, assume that your gross proceeds, net of allowable transportation, resulted in a value of $81 per barrel for July 2015. For the July 2015 production month, the ONRR-published IBMP price for your crude type and designated area was $83 per barrel. Because the IBMP price, net of transportation, was higher than your calculated gross proceeds, you would report and pay royalties on $83 per barrel. The table below summarizes the information.

Month/Year	Gross proceeds	IBMP	Higher of gross proceeds and IBMP	Report separate transportation allowance?
July 2015	$81	$83	$83	no

3.1.1.1 Designated Areas

The price you use to value your oil produced from Indian lands depends on the top hole location of your well, i.e. where your production surfaced. Generally, designated areas are identified by reservation boundaries, including any off-reservation allotments or dependent Indian communities, where location and crude types are similar to each other.



There are 16 designated areas ONRR identifies as unique in the table below. If you have questions concerning which designated area your lease is in, please contact royaltyvaluation@onrr.gov.

Designated Area	Description
Alabama/Coushatta	The reservation boundary, including any off-reservation allotments or dependent Indian communities.

Designated Area	Description
Blackfeet	The reservation boundary, including any off-reservation allotments or dependent Indian communities.
Crow	The reservation boundary, including any off-reservation allotments or dependent Indian communities.
Fort Peck	The reservation boundary, including any off-reservation allotments or dependent Indian communities, including all lands within the Fort Peck Reservation boundary and the Turtle Mountain public domain lease lands administered by the Fort Peck Agency of the BIA.
Jicarilla Apache	The reservation boundary, including any off-reservation allotments or dependent Indian communities.
North Fort Berthold	All lands within the Fort Berthold Reservation boundary north of the Missouri River, including the Turtle Mountain public domain lease lands north of the Missouri River that the Fort Berthold Agency of the Bureau of Indian Affairs (BIA) administers, with the dividing line of the Missouri River being the county lines that follow the Missouri River.
Oklahoma*	One statewide area encompassing all oil production on trust lands, excluding Osage County. ***For Oklahoma IBMP price only, account for a plus/minus roll.** The roll is defined under 30 CFR §1206.51.
Isabella (Saginaw Chippewa)	The reservation boundary, including any off-reservation allotments or dependent Indian communities.
South Fort Berthold	All lands within the Fort Berthold Reservation boundary south of the Missouri River, including the Turtle Mountain public domain lease lands south of the Missouri River that the Fort Berthold Agency of the BIA administers, with the dividing line of the Missouri River being the county lines that follow the Missouri River.
Southern Ute	The reservation boundary, including any off-reservation allotments or dependent Indian communities.

Designated Area	Description
The Navajo Nation	The reservation boundary, including any off-reservation allotments or dependent Indian communities.
Turtle Mountain	The reservation boundary, including any off-reservation allotments or dependent Indian communities, including all lands within the Turtle Mountain Reservation and the Turtle Mountain public domain lease lands administered by the Turtle Mountain Agency of the BIA.
Uintah & Ouray (Uintah & Grand)	The reservation boundary, including any off-reservation allotments or dependent Indian communities located within Emery, Uintah and Grand Counties, Utah.
Uintah & Ouray (Duschesne)	The reservation boundary, including any off-reservation allotments or dependent Indian communities located within Duchesne, Wasatch and Carbon Counties, Utah.
Ute Mountain Ute	The reservation boundary, including any off-reservation allotments or dependent Indian communities.
Wind River	The reservation boundary, including any off-reservation allotments or dependent Indian communities.

3.1.1.2 Crude Type

To accurately calculate the IBMP price, ONRR must use like quality oil. ONRR relies on lessees to report the type of oil produced from their Indian leases. The crude type is based on, among other things, API gravity and sulfur content. There are six crude types, each with a unique product code, captured in the table below.

Product Code	Crude Type
02	Condensate
61	Sweet Crude
62	Sour Crude
63	Asphaltic
64	Black Wax
65	Yellow Wax

3.1.2 Sales Type Codes

If your gross proceeds, less allowable transportation, are higher than the IBMP price, select either the ARMS or NARM sales type code based on your transaction.

If the IBMP price is higher than your gross proceeds, less allowable transportation, use OINX as your sales type code.

Sales Type Code	Description
ARMS	Arm's-length transactions
NARM	Non-arm's-length transactions
RIKD	Royalty-in-kind deliveries
OINX	Oil valued using an index price

3.2 Examples

Intro – basic example for an arm's-length sale of Indian oil. Assume that the lessee sells 1,000 barrels of oil in the sample month, which is also the volume measured for royalty-purposes. Also consider the following set of facts:

Designated Area	Product Codes					
	02	61	62	63	64	65
South Fort Berthold	$36.82	$43.56	$37.88	$	$	$
Uintah & Ouray - Duchesne County	$35.82	$41.36	$	$40.93	$40.27	$41.04

We will walk through the royalty calculation and reporting, completing the sample form ONRR-2014 Royalty Report fields shown below. While there are other required fields on the form ONRR-2014, these are the ones related to valuation.

Form ONRR-2014 Royalty Report						
Product Code	Sales Volume	Sales Value	Sales Type Code	Royalty Value prior to Allowances	Transportation Allowance	Royalty Value less Allowances

Example 3.2.1

<u>Product Code</u>
The product code is based on the type of oil being sold. In this example, we know that the crude is a light, sweet crude. Based on our list of product codes, we should use PC 61.

<u>Sales Volume</u>
In this example, we noted that the lessee is selling 1,000 bbls, which was what was measured for royalty. So, our sales volume is 1,000 bbls.

<u>Sales Value</u>
The sales value is the higher of 1) the lessee's gross proceeds less transportation, or 2) the value using the IBMP price.
Gross Proceeds = Sales Volume x Arm's-Length Sales Price – Transportation Costs
Gross Proceeds = (1,000 Bbls x $42.50) – (1,000 x $5)
Gross Proceeds = $37,500
IBMP Value = Sales Volume x IBMP Price
IBMP Value = 1,000 Bbls x $43.56
IBMP Value = $43,560
In this case, the IBMP value is higher, so the lessee must pay royalty on the IBMP value.

This price is pulled from the ONRR.gov website, based on the location and type of crude.

<u>Sales Type Code</u>
Because the sales value reported and paid by the lessee is based on the IBMP price, the lessee should use sales type code OINX.

<u>Royalty Value Prior to Allowances (RVPA)</u>
RVPA = Sales Value x Royalty Rate
RVPA = $43,560 x 16 2/3 %
RVPA = $7,257

<u>Transportation Allowance</u>
In this example, the lessee is paying using the IBMP price. The IBMP price is already adjusted for transportation costs, so the lessee should not take a transportation allowance.

Form ONRR-2014 Royalty Report						
Product Code	Sales Volume	Sales Value	Sales Type Code	Royalty Value prior to Allowances	Transportation Allowance	Royalty Value less Allowances
61	1,000	$43,560	OINX	$7,257	-	$7,257

Example 3.2.2

Assuming the same set of pricing facts in Example 1:

<u>Product Code</u>

The product code is based on the type of oil being sold. In this example, we know that the crude is a black wax. Based on our list of product codes, we should use PC 64.

<u>Sales Volume</u>

In this example, we noted that the lessee is selling 1,000 bbls, which was what was measured for royalty. So, our sales volume is 1,000 bbls.

<u>Sales Value</u>

The sales value is the higher of 1) the lessee's gross proceeds less transportation, or 2) the value using the IBMP price.

Gross Proceeds = Sales Volume x Arm's-Length Sales Price – Transportation Costs

Gross Proceeds = (1,000 Bbls x $46.00) – (1,000 x $5)

Gross Proceeds = $41,000

IBMP Value = Sales Volume x IBMP Price

IBMP Value = 1,000 Bbls x $40.27

IBMP Value = $40,270

This price is pulled from the ONRR.gov website, based on the location and type of crude.

In this case, the gross proceeds value is higher, so the lessee must pay royalty on the gross proceeds value.

<u>Sales Type Code</u>

Because the sales value reported and paid by the lessee is based on the IBMP price, the lessee should use sales type code ARMS.

<u>Royalty Value with Allowances (RVA)</u>

RVA = Sales Value x Royalty Rate – (Transportation Allowance x Royalty Rate)

RVA = $46,000 x 16 2/3% - ($5,000 x 16 2/3%)

RVA = $7,664 - $833

RVA = $6,831

<u>Transportation Allowance (TA)</u>

In this example, the lessee is paying using the gross proceeds, so transportation is allowed.

TA = 1000 bbl x $5/bbl x 16 2/3%

TA = $5000 x 16 2/3%

TA = $833

Form ONRR-2014 Royalty Report						
Product Code	Sales Volume	Sales Value	Sales Type Code	Royalty Value prior to Allowances	Transportation Allowance	Royalty Value less Allowances
64	1,000	$46,000	ARMS	$7,664	$833	$6,831

Example 3.2.3

Assume that a lessee produces 50,000 bbls of oil, which it then refines at refinery it owns. The lessee also purchases like-quality oil from other producers in the same field at arm's length for use as feedstock in its refinery. The oil produced from the lease that is being valued under this section is Wyoming general sour with an API gravity of 23.5°.

In this example, assume that the refinery purchases at arm's-length oil (all of which must be Wyoming general sour) in the following volumes of the API gravities stated at the prices and locations indicated:

10,000 bbl	24.5°	$34.70/bbl	Purchased in the field.
8,000 bbl	24.0°	$34.00/bbl	Purchased at the refinery after the third-party producer transported it to the refinery, and the lessee does not know the transportation costs.
9,000 bbl	23.0°	$33.25/bbl	Purchased in the field.
4,000 bbl	22.0°	$33.00/bbl	Purchased in the field.

<u>Product Code</u>

The product code is based on the type of oil being sold. The Product Code for Sour Crude is 62.

<u>Sales Volume</u>

The refiner will pay on all 50,000 barrels purchased or produced and refined.

<u>Sales Value</u>

Because the lessee does not know the costs that the seller of the 8,000 bbl incurred to transport that volume to the refinery, that volume will not be included in the volume-weighted average price calculation. Further assume that the gravity adjustment scale provides for a deduction of $0.02 per $\frac{1}{10}$ degree API gravity below 34°. Normalized to 23.5° (the gravity of the oil being valued in this example), the prices of each of the volumes that the refiner purchased that are included in the volume-weighted average calculation are as follows:

10,000 bbl	24.5°	$34.50/bbl	(1.0° difference over 23.5° = $0.20 deducted).
9,000 bbl	23.0°	$33.35/bbl	(0.5° difference under 23.5° = $0.10 added).
4,000 bbl	22.0°	$33.30/bbl	(1.5° difference under 23.5° = $0.30 added).

The volume-weighted average price is:

(10,000 bbl × $34.50/bbl) + (9,000 bbl × $33.35/bbl) + (4,000 bbl × $33.30/bbl)) / 23,000 bbl = $33.84/bbl.

That price will be the value of the 50,000 bbls of oil produced from the lease and refined prior to an arm's-length sale under this section.

Sales Type Code
Because this is a non-arm's-length transaction, the sales type code will be NARM.

Royalty Value (RV)
RV = Sales Value x Royalty Rate RV = 50,000 x $33.84 x 16 2/3% RV = $1,692,000 x 16 2/3% RV = $281,887.20

Transportation Allowance
30 CFR 1206.53(c): If you value oil under this section, ONRR will allow a deduction, under §§1206.56 and 1206.57 or §1206.58, for the reasonable, actual costs: (1) That you incur to transport oil that you or your affiliate sell(s), which is included in the volume-weighted average price calculation, from the lease to the point where the oil is sold. (2) That the seller incurs to transport oil that you or your affiliate purchase(s), which is included in the volume-weighted average cost calculation, from the property where it is produced to the point where you or your affiliate purchase(s) it. You may not deduct any costs of gathering as part of a transportation deduction or allowance.

Form ONRR-2014 Royalty Report						
Product Code	Sales Volume	Sales Value	Sales Type Code	Royalty Value prior to Allowances	Transportation Allowance	Royalty Value less Allowances
62	50,000	$1,692,000	NARM	$281,887.20	-	$281,887.20

3.3 Valuation of Oil Produced Before July 1, 2015

If you or your affiliate sell your oil under an arm's-length contract prior to refining, under 30 CFR §1206.52, the value of your oil is the gross proceeds accruing to you (or your affiliate) under that arm's-length contract, less applicable allowances. Report your actual gross proceeds and allowable transportation costs separately. For all arm's-length sales, including your affiliate's arm's-length sales, use sales type code ARMS. If you or your affiliate do not sell your oil prior to refining, use the volume-weighted average of the gross proceeds paid or received for arm's-length purchases and sales of other like-quality oil produced from the same field or area to determine the value for royalty purposes as described under 30 CFR §1206.53. If you or your affiliate do not sell the oil at arm's length prior to refining and you determine value under 30 CFR §1206.53, use sales type code NARM.

3.4 Special Oil Valuation Situations

For case-specific guidance on unique Indian oil valuation situations, including reporting and valuation of slop oil, reclaimed oil, oil blending, or injecting load oil downhole for well maintenance, please contact royaltyvaluation@onrr.gov.

3.5 Terms

Term	Definition
Designated Area	An area that ONRR identifies as unique based on both its location and crude type differential. Note that a location with two crude types would have two designated areas.
IBMP Price	**Index-Based Major Portion (IBMP) Price** The IBMP Price is the NYMEX Calendar Month Average (CMA), adjusted by the LCTD for each designated area. This represents approximately the 75% major portion price for a designated area.
LCTD	**Location and Crude Type Differential** LCTDs adjust NYMEX prices to account for transportation costs and crude types for each designated area.
MP	**Major portion**
NYMEX CMA	**New York Mercantile Exchange (NYMEX) Calendar Month Average (CMA)** This reflects the average price of West Texas Intermediate (WTI) crude for all trade days within a calendar month.
Roll	**For Oklahoma IBMP price only, account for a plus/minus roll** (NYMEX CMA Price +/- Roll) x (1 - LCTD) The roll is defined under 30 CFR §1206.51.

Appendix

A brief history leading up to the current Indian oil rule

The Minerals Management Service (MMS), published proposed rules for Indian oil valuation in February 1998 and in January 2000. MMS subsequently withdrew each of these proposed rules because of market changes and the passage of time. In addition, MMS held eight public meetings in 2005 to consult with Indian Tribes and Indian mineral owners and to obtain information from interested parties. MMS published a third rule in February 2006. Tribal and industry commenters on the 2006 proposed rule did not agree on most issues regarding oil valuation, and none of the commenters supported the major portion provisions. In 2006, the Royalty Policy Committee's Indian Oil Valuation Subcommittee evaluated the proposed rule, but was unable to reach consensus about how the Department of the Interior should proceed. Thus, MMS decided to make only technical amendments to the existing Indian oil valuation regulations. MMS published a final rule addressing the technical amendments on December 17, 2007.

The preamble to that final rule stated MMS's intent to convene a committee to address the major portion provisions for the valuation of oil produced from Indian leases. Major portion means the highest price paid or offered at the time of production for the major portion of oil production from the same field or area. The major portion provision applies for any Indian leases that (1) provide that the Secretary has the authority to establish value or (2) that the Secretary may consider the highest price paid or offered for a major portion of production in determining value for royalty purposes.

MMS became the Office of Natural Resources Revenue (ONRR) on October 1, 2010. On December 8, 2011, ONRR published a Notice of Establishment in the *Federal Register* that created the committee, authorized and established under the Federal Advisory Committee Act, to make recommendations to replace existing regulations governing the valuation of oil on American Indian lands. The Secretary of the Interior (Secretary) signed the charter on December 23, 2011.

The Secretary's federal trust responsibility mandates that ONRR establish regulations concerning Indian oil valuation, including the duty to maximize revenue for Indian Tribes and Indian mineral owners. ONRR kept in mind that any action by the United States in relation to Indian-owned trust property, including Indian minerals, must be that of a trustee who must act in a manner that is in the best interest of the Indian owner. The Secretary must choose the alternative that most benefits the Indian mineral owner, based on the responsibility to maximize revenue, when faced with more than one reasonable alternative.

Within the context of the Secretary's federal trust responsibility, the purpose of the rulemaking process was to ensure that Indian lessors receive maximum revenues from their mineral resources, as required by statute and the trust responsibility of the United States, while also developing regulations that offer greater simplicity, certainty, clarity and consistency in production valuation for mineral revenue recipients and mineral lessees. The committee finished their work in September 2013 by reaching consensus on recommendations for a new rule. ONRR published the final rule in the *Federal Register* on May 1, 2015, effective July 1, 2015.

The final rule established formula prices based on the calendar month average price for West Texas Intermediate crude oil at Cushing, Oklahoma, less a location and crude type differential. This establishes a price for Indian oil at the designated areas (in most cases, the reservation). These prices are the Index Based Major Portion (IBMP) prices. The committee defined designated areas as the reservation boundary with a few exceptions. The reason for the exceptions were either geographic obstacles and/or lack of infrastructure to get the Indian oil to market. However, the rule allows for ONRR to re-visit these exceptions in the future. ONRR calculates a monthly Indian oil price for each different crude type in each designated area. For example, ONRR calculated 34 different oil prices for October 2018. The value of Indian oil for royalty purposes is the higher of the gross proceeds price for the sale of Indian crude oil under a company's contract less transportation, if applicable, or the IBMP price, already adjusted for allowable transportation.