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## **Hazardous Substance/Petroleum Products Tax, Vessels Operating Both in Washington Waters and Outside of Washington**

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### **Scope**

Washington imposes a hazardous substance tax and a petroleum products tax on the first possession of the taxable product/substance in this state. The taxes are imposed on the wholesale value of the taxable product/substance. The Department has approved the use of the formulas below for computing these taxes on fuel used by vessels operating both in Washington waters and outside of Washington.

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### **Background**

Chapter 82.21 RCW imposes an excise tax upon the privilege of possessing hazardous substances, including petroleum products, in this state. The tax applies to the wholesale value of the hazardous substance. A credit is allowed for hazardous substance tax paid on fuel carried from this state in the fuel tank of a ship. RCW 82.21.050 (1).

Chapter 82.23A RCW imposes an additional excise tax upon the privilege of possessing petroleum products in this state. The tax applies to the wholesale value of the petroleum product. A credit is allowed for petroleum products tax paid on fuel carried from this state in the fuel tank of a ship. RCW 82.23A.040 (1).

Consequently, taxpayers operating vessels in interstate or foreign commerce are liable for both hazardous substance tax and petroleum products tax on the wholesale value of fuel the vessels consume in Washington waters (except during periods when the petroleum products tax has been temporarily suspended, in which case only the hazardous substance tax is due).

See WAC 458-20-252 for further information on the hazardous substance tax and the petroleum products tax.

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**Formulas for  
Calculating  
Hazardous  
Substance Tax  
and Petroleum  
Products Tax**

Because wholesale values of fuel vary widely and measuring actual consumption is difficult, the Department has approved the use of the formulas below for determining the tax amounts due. These formulas calculate the hazardous substance tax and petroleum products tax on the fuel consumed only in Washington waters by applying fuel consumption rates, which vary depending on the type of vessel and type of fuel, to the number of miles the vessel travels in the state, to estimate the amount of fuel consumed in Washington.

Hazardous Substance Tax (H)

$$H = (\text{Miles} \times ((\text{IFO Consumption Rate} \times \text{IFO Wholesale Price} \times \text{Tax Rate}) + (\text{MDO Consumption Rate} \times \text{MDO Wholesale Price} \times \text{Tax Rate}))) + \$ .50$$

Petroleum Products Tax (P)

$$P = (\text{Miles} \times ((\text{IFO Consumption Rate} \times \text{IFO Wholesale Price} \times \text{Tax Rate}) + (\text{MDO Consumption Rate} \times \text{MDO Wholesale Price} \times \text{Tax Rate}))) + \$ .50$$

"Miles" means the number of nautical miles traveled in Washington waters using point-to-point distances shown on the accompanying chart (see page 4 of this advisory). All distances shown on the chart are one way. Vessels entering Puget Sound from the ocean are considered as having first entered Washington waters at buoy "J." Vessels leaving Puget Sound to return to the ocean are considered as having left Washington waters at Port Angeles. The distances between points on the Columbia River are one half of actual distances based on the assumption that half of the travel occurs in Oregon Waters.

"IFO" means intermediate fuel oil, which is used in the engines that supply power to the vessel's propulsion system.

"MDO" means marine diesel oil, which is used in the generators that supply electricity for the vessel's electrical system.

"Consumption Rate" means the IFO or MDO consumption rate, expressed in terms of metric tons per nautical mile, shown on the accompanying chart. Vessels burn both IFO and MDO while underway. In addition, vessels burn MDO (but not IFO) while at anchor or in port. The consumption rate of MDO on the chart has been increased slightly from typical MDO consumption rates to take this fact into account.

"Wholesale Price" means the average Seattle wholesale price per metric ton for IFO or MDO published by Platts, OPIS (Oils Pricing Information Service), or another widely available independent source, for the second preceding quarter. For example, the average Seattle prices reported for the first quarter of 2014 would be used for computing taxes due for the third quarter 2014, second quarter 2014 prices would be used for computing fourth quarter 2014 taxes, third quarter 2014 prices would be used for computing first quarter 2015 taxes, and so on. If price information is not published in a widely available independent source like Platts, the taxpayer may

calculate Wholesale Price to equal the actual, reasonable retail price it paid for the fuel, multiplied by a factor of 0.8. The price paid by a taxpayer does not reflect a reasonable retail price, however, if, for example, it purchased the fuel in such large quantity that the fuel's price approached wholesale.

"Tax Rate" is the rate of the applicable tax.

".50" is added to both calculations to account for the relatively small amount of lubricant consumed while in Washington waters.

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**Example**

Vessel, a bulk carrier, enters Washington from the Pacific Ocean on June 1, 2014, and travels to Longview, Washington via the Columbia River. On June 7, 2014, Vessel enters the Pacific Ocean after returning on the Columbia River using the same route.

Vessel uses IFO 380 fuel to power its engines and MDO to power its generators. Assume that the average Seattle wholesale price per metric ton for the fourth quarter 2013 reported by Platts was \$628.00 for IFO 380 and \$959.00 for MDO.

The chart on page 4 shows that Vessel traveled 66 nautical miles on Washington waters between the Pacific Ocean and Longview (33 miles each way). The chart also indicates that Vessel's IFO consumption rate is .092 metric tons of IFO per nautical mile, and its MDO consumption rate is .032 metric tons of MDO per nautical mile.

Presume the tax rates of the Hazardous Substance Tax and Petroleum Products Tax during this period were 0.7% and 0.3%, respectively. Applying the above formulas, the hazardous substance tax and petroleum products tax arising from Vessel's trip are as follows:

Hazardous substance tax:

$$(66 \text{ miles} \times ((.092 \times \$628.00 \times .007) + (.032 \times \$959.00 \times .007))) + \$0.50 = \$41.37$$

Petroleum products tax

$$(66 \text{ miles} \times ((.092 \times \$628.00 \times .005) + (.032 \times \$959.00 \times .005))) + \$0.50 = \$29.69$$

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## POINT-TO-POINT DISTANCES<sup>1</sup> (Nautical miles)

PUGET SOUND										GRAYS HARBOR		COLUMBIA RIVER <sup>2</sup>					
Buoy "J"	Anacortes	British Columbia	Bellingham	Cherry Point	Edmonds	Everett	Ferndale	Manchester	March Point	Olympia	Port Angeles	Port Townsend	Point Wells	Seattle	Tacoma	Vancouver	Vendovi Island
115	xx	45															
128	xx	45															
132	xx	62	26														
129	xx	55	xx	74													
133	61	60	74	78	14												
131	xx	61	24	3	xx	78											
146	xx	75	84	89	xx	28	xx										
117	xx	45	18	29	56	64	25	73									
187	114	113	xx	xx	xx	76	xx	47	xx								
71	44	xx	57	61	58	62	60	75	46	116							
107	xx	31	43	52	xx	32	49	xx	33	xx	36						
130	xx	56	70	74	1	15	74	xx	56	xx	59	31					
144	71	67	84	89	15	30	88	7	73	52	73	45	14				
164	92	91	105	109	36	50	109	24	92	37	93	65	34	28			
107	xx	xx	xx	19	xx	68	xx	xx	xx	xx	36	xx	xx	74	95		

xx indicates no traffic between these points

1. All distances are one way.
2. Columbia River distances are one-half of actual distance based on the assumption that half of the travel occurs in Oregon waters.

## CONSUMPTION RATES (Marine Tons/Nautical Miles)

Auto Carriers	IFO:	0.082	MDO:	0.022
Bulk Carriers	IFO:	0.092	MDO:	0.032
Container Ship	IFO:	0.165	MDO:	0.018
Grain Carrier	IFO:	0.116	MDO:	0.05
Log Carrier	IFO:	0.11	MDO:	0.063
Tankers:				
<60000DWT	IFO:	0.17	MDO:	0.076
60000 - 120000	IFO:	0.667	MDO:	0.003
120000 + DWT	IFO:	0.955	MDO:	0.052