

Cite as Det. No. 92-185, 12 WTD 217 (1993).

BEFORE THE INTERPRETATION AND APPEALS DIVISION  
DEPARTMENT OF REVENUE  
STATE OF WASHINGTON

In the Matter of the Petition	)	<u>D</u> <u>E</u> <u>T</u> <u>E</u> <u>R</u> <u>M</u> <u>I</u> <u>N</u> <u>A</u> <u>T</u> <u>I</u> <u>O</u> <u>N</u>
For Correction of Assessment of	)	
	)	
	)	No. 92-185
	)	
. . .	)	Registration No. . . .
	)	. . ./Audit No. . . .
	)	

[1] RULE 113: CHEMICALS USED IN PROCESSING -- CATALYSTS.  
Catalysts used by an oil refiner to break down crude oil molecules into ingredients of final products are exempt from use and/or deferred sales tax as chemicals used in processing.

Headnotes are provided as a convenience for the reader and are not in any way a part of the decision or in any way to be used in construing or interpreting this Determination.

TAXPAYER REPRESENTED BY: . . .

DATE OF HEARING: . . .

NATURE OF ACTION:

An oil refiner petitions for correction of assessment of use tax and/or deferred sales tax on cracking catalysts used in refining petroleum.

FACTS AND ISSUES:

Pree, A.L.J. -- The taxpayer is engaged in the business of refining petroleum products. It has a refinery in Washington where it refines crude oil into useful products such as gasoline. To do so, it purchased cracking catalysts which are the subject of this dispute.

The taxpayer's records were examined for the period October 1, 1985 through December 31, 1989 and an assessment was issued, which consisted of use and/or deferred sales tax on unreported

purchases most of which, but not all, were for an item labelled "COARSE CATALYST".

In its petition, the taxpayer protested the assessment of tax on the catalysts. It paid the unprotected portion of the assessment. The sole issue is whether or not the catalysts are subject to use and/or deferred sales tax.

The taxpayer contends that the catalysts are exempt as chemicals used in processing. The Auditor's Detail of Differences and Instructions to Taxpayer states that "Chemicals used in processing":

. . . includes only chemical substances which are used by the purchaser to unite with other chemical substances, present as ingredients or components of the article or substances being processed, to produce a chemicals reaction therewith as contrasted with merely a physical reaction therein. . . .

The taxpayer has stated that the catalysts when mixed with the crude oil, cause the crude oil molecules to break apart into smaller molecules which are the ingredients of final products such as gasoline. A typical crude oil molecule may contain 60 carbon atoms while the "cracked" petroleum molecules in gasoline will contain less than 20 carbon atoms. The taxpayer explained that the catalyst molecules temporarily attach or unite with the crude oil molecules causing them to break apart. As soon as they separate, the catalyst molecules break off. As this reaction is repeated the catalyst becomes "spent" acquiring a certain amount of carbon residue. The catalyst can be regenerated by burning off the carbon. The regenerated catalyst can then be reused.

#### DISCUSSION:

[1] RCW 82.12.020 imposes use tax on tangible personal property purchased at retail. Chemicals used in processing are excluded from the definition of retail sale under RCW 82.04.050(1)(c) which defines them as:

. . . a chemical used in processing, when the primary purpose of such chemical is to create a chemical reaction directly through contact with an ingredient of a new article being produced for sale, . . .

The catalyst is introduced to create a chemical reaction, breaking down the long chain of hydrocarbon molecules composed of 20-60 carbon atoms to shorter molecules which make up such products as liquid petroleum gas, gasoline, and light cycle oil.

The reaction where the number of carbon atoms in the petroleum molecules is reduced constitutes a chemical reaction. We are aware of no other reason why the catalysts are introduced other than to create the chemical reaction.

WAC 458-20-113 (Rule 113) provides in part (6):

"Chemicals used in processing" carries its common restricted meaning in commercial usage. It includes only chemical substances which are used by the purchaser to unite with other chemical substances, present as ingredients or components of the articles or substances being processed, to produce a chemical reaction therewith, as contrasted with merely a physical change therein. A chemical reaction is one in which there takes place a permanent change of certain properties, with the formation of new substances which differ in chemical composition and properties from the substances originally present, and usually differ from them in appearance as well. It is not necessary that all of the new substances which are formed be present in the final completed article or substance which is sold; one or more of such new substances resulting from the chemical reaction may be removed or drawn off in the processing.

According to the taxpayer, the catalyst temporarily (or instantaneously) unites with the crude oil molecule. The crude oil molecule splits into smaller molecules as the catalyst separates from them in the chemical reaction. The catalyst is thus removed to be regenerated and reused.

The Audit Division has provided no evidence to contradict the taxpayer's explanation. The taxpayer has provided additional technical explanations regarding the makeup of the catalysts and their role in refining petroleum. Absent evidence to the contrary, we will rely on the tax attorney's simplified explanation in the paragraph above as the factual basis for this determination.

We find, as explained by the taxpayer, that the catalysts meet the statutory definition of chemicals used in processing. As such, the purchase of these catalysts are not retail sales and are thus exempt from use and/or deferred sales tax.

#### DECISION AND DISPOSITION:

The taxpayer's petition is granted.

DATED this 29th day of July, 1992.