OIL SHALE AND THE DEPLETION ALLOWANCE

JOHN B. TWEEDY

The purpose of this paper is to summarize the current state of Federal Income Tax Law with respect to oil shale. In 1958 this subject was ably treated by Messrs. Shepherd, Lawrence and Pagter of the Union Oil Company of California, in an article entitled *Income Tax Aspects of Oil Shale Operations*, published in Prentice Hall's *Oil & Gas Taxes*. Although many of you are familiar with that article, I would like to review briefly its conclusions as a point of departure before embarking on a discussion of the significant changes in the law which have taken place since its publication.

First, a word or two about historical background. From the passage of the first income tax act in 1913 until the 1930's, Congress vacillated between percentage and cost depletion, with the percentage depletion finally emerging as the more practical of the two methods.

Here it is interesting to recall the reasons which prompted Congress to adopt percentage depletion in the case of metal mines. In offering an amendment to the 1928 Revenue Act which would substitute percentage depletion for the so-called discovery value method then in effect, Mr. Arentz argued as follows:

> The outstanding advantages of the amendment are that without materially affecting the public revenue it provides a simple, equitable, and definite method of computing the depletion allowance that permits of the prompt and final determination of the tax liability. It eliminates for the future the analytical appraisal of metal mines with attendant technical complexities. It means a great saving of expense to the Government as well as the taxpayer. * * *

The same reasoning had caused Congress to adopt the 27½ percent depletion rate for oil and gas in the Revenue Act of 1926.

By 1954, the statutory framework governing the application of depletion had matured into a well-developed system of intricate rules. Earlier legislation which failed to define the "income from property" had been found wanting.

Commencing with the Revenue Act of 1934, Congress began to elaborate on the basis against which percentage depletion was to be applied. In that act "Gross Income from Property" was first defined to mean gross income from mining. Mining in turn was defined to include not

---

Partner, Tweedy, Mosley, Sullivan & Young.

merely the extraction of the ores or minerals from the ground but also *the ordinary treatment processes* normally applied by mine owners or operators to obtain *the* commercially marketable mineral product or products. Under the 1954 Code, as originally enacted, the term "ordinary treatment processes" expressly included the following:

> (A) In the case of coal — cleaning, breaking, sizing, dust allaying, treating to prevent freezing, and loading for shipment;
>
> (B) in the case of sulfur recovered by the Frasch process — pumping to vats, cooling, breaking, and loading for shipment;
>
> (C) in the case of iron ore, bauxite, ball and sagger clay, rock asphalt, and minerals which are customarily sold in the form of a crude mineral product — sorting, concentrating, and sintering to bring to shipping grade and form, and loading for shipment;
>
> (D) in the case of lead, zinc, copper, gold, silver, or fluorspar ores, potash, and ores which are not customarily sold in the form of the crude mineral product — crushing, grinding, and beneficiation by concentration (gravity, flotation, amalgamation, electrostatic, or magnetic), cyanidation, leaching, crystallization, precipitation (but not including as an ordinary treatment process electrolytic deposition, roasting, thermal or electric smelting, or refining), or by substantially equivalent processes or combination of processes used in the separation or extraction of the product or products from the ore, including the furnacing of quick-silver ores ;and
>
> (E) the pulverization of talc, the burning of magnesite, and the sintering and nodulizing of phosphate rock.

The listed processes were not deemed to be exclusive.

The statutory definitions were soon supplemented by judicial interpretation. *Black Mountain Corporation*[1] construed "commercially marketable mineral product" as "*first* commercially marketable mineral product." In *United States v. Cherokee Brick & Tile Co.*,[2] the Fifth Circuit held that if the first commercially marketable product is also the final product, then this is the point at which depletion is calculated.

This test was adopted by the First Circuit in *Dragon Cement v. United States*[3] and by the Tenth Circuit in *United States v. Sapulpa Brick and Tile Corp.*[4] In other cases, it was held that commercially marketable meant commercially marketable at a profit.[5]

This, in general, was the state of the law when Messrs. Shepherd, et al., reached the conclusion that "ordinary treatment processes" included at least the retorting of crushed shale. They reasoned that although retorting of oil shale did not fall within any of the listed categories, it would be an ordinary treatment process applied by a mine owner to obtain the first commercially marketable mineral product.

By 1959, the Treasury had all but given up hope of winning before the courts. It believed that the clay and cement industries had extended the meaning of the existing statutes beyond reason and accordingly sought relief in Congress. It proposed legislation which would delete the

[1](1954) 21 T.C. 746,757.
[2](5th Cir. 1955) 218 F. 2d 424
[3](1st Cir. 1957) 244 F. 2d 513, Cert. Denied (1937)
[4](10th Cir. 1956) 239 F. 2d 694
[5]*United States v. Cannelton Sewer Pipe Co.* (7th Cir. 1959) 268 F. 2d 334; *Commissioner v. Iowa Limestone* (8th Cir. 1959), 269 F. 2d 398

"ordinary treatment process" language and give it sole jurisdiction to determine what processes were to be treated as mining by making the statutory list exclusive, except in cases prescribed by the Secretary. In 1958 it attempted without success to get passed a bill aimed specifically at the clay and cement industries. In 1959 it submitted a new bill covering all minerals. The House Ways and Means Committee held hearings in 1959 but took no action because of the action of the Supreme Court in granting *certiorari* in the *Cannelton* case. Much to the surprise of the mining industry on June 20, 1960, one week before the Supreme Court's decision in the *Cannelton* case, the Senate passed as an amendment to the Public Debt and Tax Rate Extension Act the Treasury Department's 1959 proposal. Although a new amendment was substituted in the Conference Committee, the final bill was a striking victory for the Treasury Department. It eliminated from Section 613(d)(2) the words "ordinary" and "normally applied by mine owners or operators in order to obtain the commercially marketable mineral product or products." These and other changes had the effect of making the listed processes exclusive except where allowed under Section 613(c)(4)(H). The categories remained much the same as in the 1954 Act except that (1) Section 613(c)(4)(D) has been broadened to cover "minerals" as well as "ores", (2) the two new sections have been added to cover cement and clay, (3) the Secretary has been authorized to designate other treatment processes, and (4) Section 613(c)(5) which excludes certain processes, including "treatment effecting a chemical change" had been added. For convenience, Section 613(c) is set forth in full as Exhibit A to this paper.

What treatment may oil shale expect under the Gore Amendment?

1. It is no longer possible to argue that retorting is an ordinary treatment process applied by a mine operator or owner to obtain a commercially marketable process.

2. Retorting is not expressly covered in the present statute.

3. It is possible to argue with merit that retorting falls within that portion of Section 613(c)(4)(D) which reads as follows:

> (D) . . . in the case of . . . minerals which are not customarily sold in the form of the crude mineral product — crushing, grinding, and beneficiation by concentrating . . . or by substantially equivalent processes or combination of processes used in the separation or extraction of the product or products from the mineral or minerals from other material from the mine or other natural deposit.

Notwithstanding the logic of the foregoing argument, the Treasury Department has issued a private ruling that "retorting of oil shale" is not considered as mining under the provisions of Section 613(c)(5) (sic), Internal Revenue Code of 1954. While the ruling itself does not impress the reader as a well considered one, it nevertheless reflects the current view of the Treasury Department.

This would mean that unless the Treasury Department takes another look at oil shale and Section 613(c)(4) or unless Congress sees fit to adopt another provision specifically designed to cover oil shale, the oil shale operator must reconcile himself, not to a depletion allowance measured by 15 percent of the value of the retorted oil, but instead to a rate ranging somewhere between 8 percent and 10 percent depending upon the ratio of mining and related costs to retorting and related costs.

This sobering thought immediately prompts the question: what are the chances of persuading (1) Treasury to modify its views, or (2) Congress to adopt a special provision under Section 613(c)(4)?

The arguments in favor of such changes are persuasive:

First. Shale oil properly can be said to come within the intent of Congress in framing Section 613(c)(4)(D) as one of the "minerals which are not customarily sold in the form of the crude mineral product." It can be strongly urged that retorting is a substantially equivalent process . . . "used in the separation or extraction of the product or products from the mineral or minerals from other material from the mine or other natural deposit."

Second. Retorting does not properly come within the specifically excluded processes set out in Section 613(c)(5). As was so ably pointed out by Mr. Shepherd and his associates in 1958, and notwithstanding the position of the Treasury Department to the contrary, retorting and smelting are not equivalent processes. Nor should retorting be regarded as a "treatment effecting a chemical change" within the meaning of Section 613(c)(5). The "chemical change" involved in retorting shale to extract kerogen is not the same as the chemical change involved in turning an ore into a refined metal, or in kilning the mineral itself to get a manufactured product, as for example in the production of tile or refractory products. The retorting process does not turn an ore into a finished product, but instead separates the desired mineral from waste material.

Therefore from a careful reading of Section 613(c) it can be said that the Treasury Department can consider the retorting of oil shale as a treatment process considered as mining without stretching the existing statutory language.

If Treasury cannot be persuaded that retorting comes within existing language, the Secretary is empowered to provide by regulation that retorting is a treatment process considered as mining under Section 613(c)(4)(H). Policy reasons for such regulation are compelling. In the first place to do otherwise would be to disregard the basic objective of percentage depletion which is administrative convenience. Obviously, the artificial computation of retorting costs must vary in every case and indeed from year to year. These computations are complex and must involve a series of judgment decisions. In the second place, different retorting techniques must result in different depletion allowances. The most extreme example would be the differences between the depletion

allowance accorded the operator using an in situ method and the operator using a gas combustion type of retort. Lesser but nevertheless real differences in depletion allowance would exist between the user of the Tosco process and the gas combustion type retort.

To do otherwise would be to flaunt the intent of Congress so ably expressed by Senator Byrd when he explained the purpose of Section 613(c)(4) with the following language (Cong. Rec. p. 14514):

> The conference agreement also adds a new subparagraph (H) to provide administrative flexibility in the application of this provision by providing that the Secretary or his delegate may by regulation provide for the allowance of any other treatment process which is not specifically denied in the other subparagraphs of paragraph (4). Your Committee hopes that the Secretary will use this subparagraph to *equalize treatment* insofar as possible under the different processing techniques and *with respect to competitive minerals.*

Finally, if Treasury cannot be persuaded to view the retorting of oil shale as falling within the provisions of Section 613(c)(4) or to adopt regulations to so provide under Section 613(c)(5), Congress should be asked to amend the provisions of Section 613(c) to provide expressly for retorting of oil shale. In making this request, the industry need not worry about asking Congress to extend special treatment to a totally new process. In granting similar treatment to the furnacing of quicksilver Congress has already recognized as mining an almost identical treatment process.

In closing it can be said the Treasury Department has the power to treat retorting as mining within the framework of existing legislation and that there are compelling reasons for such treatment.

EXHIBIT A

[Sec. 613(c)]

(c) DEFINITION OF GROSS INCOME FROM PROPERTY. — For purposes of this section —

(1) GROSS INCOME FROM THE PROPERTY. — The term "gross income from the property" means, in the case of a property other than an oil or gas well, the gross income from mining.

(2) MINING. — The term "mining" includes not merely the extraction of the ores or minerals from the ground but also the treatment processes considered as mining described in paragraph (4) (and the treatment processes necessary or incidental thereto), and so much of the transportation of ores or minerals (whether or not by common carrier) from the point of extraction from the ground to the plants or mills in which such treatment processes are applied thereto as is not in excess of 50 miles unless the Secretary or his delegate finds that the physical and other requirements are such that the ore or mineral must be transported a greater distance to such plants or mills.

(3) EXTRACTION OF THE ORES OR MINERALS FROM THE GROUND. — The term "extraction of the ores or minerals from the ground" includes the extraction by mine owners or operators of ores or minerals from the waste or residue of prior mining. The preceding sentence shall not apply to any such extraction of the mineral or ore by a purchaser of such waste or residue or of the rights to extract ores or minerals therefrom.

(4) TREATMENT PROCESSES CONSIDERED AS MINING. — The following treatment processes where applied by the mine owner or operator shall be considered as mining to the extent they are applied to the ore or mineral in respect of which he is entitled to a deduction for depletion under section 611:

(A) In the case of coal — cleaning, breaking, sizing, dust allaying, treating to prevent freezing, and loading for shipment;

(B) in the case of sulfur recovered by the Frasch process — cleaning, pumping to vats, cooling, breaking, and loading for shipment;

(C) in the case of iron ore, bauxite, ball and sagger clay, rock asphalt, and ores or minerals which are customarily sold in the form of a crude mineral product — sorting, concentrating, sintering, and substantially equivalent processes to bring to shipping grade and form, and loading for shipment;

(D) in the case of lead, zinc, copper, gold, silver, uranium, or fluorspar ores, potash, and ores or minerals which are not customarily sold in the form of the crude mineral product — crushing, grinding, and beneficiation by concentration (gravity, flotation, amalgamation, electrostatic, or magnetic), cyanidation, leaching, crystallization, precipitation (but not including electrolytic deposition, roasting, thermal or electric smelting, or refining), or by substantially equivalent processes or combination of processes used in the separation or extraction of the product or products from the ore or the mineral or minerals from other material from the mine or other natural deposit;

(E) the pulverization of talc, the burning of magnesite, the sintering and nodulizing of phosphate rock, and the furnacing of quicksilver ores;

(F) in the case of calcium carbonates and other minerals when used in making cement — all processes (other than preheating of the kiln feed) applied prior to the introduction of the kiln feed into the kiln, but not including any subsequent process;

(G) in the case of clay to which paragraph (5) (B) of subsection (b) applies — crushing, grinding, and separating the mineral from waste, but not including any subsequent process; and

(H) any other treatment process provided for by regulations prescribed by the Secretary or his delegate which, with respect to the particular ore or mineral, is not inconsistent with the preceding provisions of this paragraph.

(5) TREATMENT PROCESSES NOT CONSIDERED AS MINING. — Unless such processes are otherwise provided for in paragraph (4) (or are necessary or incidental to processes so provided for), the following treatment processes shall not be considered as "mining": electrolytic, deposition, roasting, calcining, thermal or electric smelting, refining, polishing, fine pulverization, blending with other materials, treatment effecting a chemical change, thermal action, and molding or shaping.