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In this article, the author examines the Internal Revenue Service's ruling that storage and loading for shipment at the mine site are non-mining processes for ores and minerals described in section 613(c)(4)(D) of the Internal Revenue Code. He explains the tax consequences of the ruling and discusses the correctness of the position taken by the Internal Revenue Service in light of the relevant case law and the language and legislative history of the statute.

REVENUE RULING 73-538: THE SERVICE'S ASSAULT ON PERCENTAGE DEPLETION FOR "D" MINERS

*Donald A. Barnes**

I. INTRODUCTION

In Revenue Ruling 73-538,¹ the Internal Revenue Service ruled that, for purposes of calculating percentage depletion, storage and loading for shipment at the mine site are nonmining processes for ores and minerals described in section 613(c)(4)(D) of the Internal Revenue Code. The ruling involved a miner who extracted potash ore from the ground, and concentrated potassium chloride (commonly called potash or muriate) from the ore through the application of flotation, leaching and crystallization processes.² After the application of these processes, the potash concentrate was stored by the miner at the mine site, and there-

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1. Rev. Rul. 73-538, 1973-2 C.B. 198.

2. *Id.*

after loaded for shipment in bulk and sold to manufacturers of compound fertilizers.³ The effect of the ruling is to reduce the percentage depletion deduction available to many miners of ores and minerals described in section 613(c)(4)(D), including miners of lead, zinc, copper, gold, silver, uranium, fluorspar, potash, soda ash, garnet and tungsten.

A miner's percentage depletion deduction is a specified percentage of his "gross income from mining," subject to a limitation of 50 percent of his net income from mining.⁴ The Treasury regulations prescribe three alternate methods for determining gross income from mining: (i) the actual sales method, (ii) the representative market or field price method, and (iii) the proportionate profits method.⁵

If an ore or mineral is sold after the application of only mining processes, regulation 1.613-4(b)(1) states that gross income from mining is "the actual amount for which the ore or mineral is sold."⁶ Thus, under this method, the miner's actual sales price of his mineral product establishes gross income from mining.

If the miner does not sell his mineral product until after it has been subjected to nonmining processes, regulation 1.613-4(c)(1) provides that gross income from mining shall be measured by the sales price of other mineral products which are of "like kind and grade" as the miner's mineral product prior to the application of any nonmining processes. The sales price of the like kind and grade mineral product is said to establish a "representative market or field price" for the miner's mineral product after the application of mining processes, but before the application of nonmining pro-

3. *Id.* A portion of the potash concentrate bypassed storage and was loaded for shipment directly after application of the concentration processes. Furthermore, a small portion of the potash was bagged rather than loaded for shipment in bulk. *Id.* There is no question that the bagging was a nonmining process. See *infra* notes 33-34 and accompanying text.

4. I.R.C. § 613(a) and (c)(1) (1976).

5. Treas. Reg. § 1.613-4(b), (c) and (d) (1972).

6. Treas. Reg. § 1.613-4(b)(1) (1974). This regulation is similar to regulations which have been in existence for many years. See, e.g., Treas. Reg. § 1.613-3(b)(2)(i) (1968); Prop. Reg. § 1.613-3(b)(2)(i) (1966); Prop. Reg. § 1.613-3(b)(2) and (3)(i) (1956); Treas. Reg. 118, § 39.23(m)-1(e) (3) (1953); Treas. Reg. 77, art. 221(g) (1933).

cesses. That point in the processing of a mineral product is commonly referred to as the "depletion cut-off point."

Finally, if it is impossible for the miner to establish a representative market or field price, the miner is required to compute his gross income from mining by the proportionate profits method.⁸ Under the proportionate profits method, gross income from mining is calculated by multiplying the miner's sales of his first marketable product or group of products by a fraction, the numerator of which is the miner's costs allocable to mining processes, and the denominator of which is the sum of all costs "incurred to produce, sell, and transport the first marketable product or group of products."⁹

Normally, all mineral products are loaded for shipment by the miner at the mine site.¹⁰ In addition, most mineral products are stored at the mine site for some period of time before being loaded for shipment. If storage and loading for shipment of "D" minerals were categorically nonmining processes, as Revenue Ruling 73-538 holds, producers of "D" minerals would be precluded from establishing an actual sales price or a representative market or field price for their mineral products, since their mineral products are never sold prior to the allegedly nonmining processes of storage and loading for shipment. Consequently, all producers of "D" minerals would be required to compute gross income from mining by the proportionate profits method. As discussed below, such a result would substantially reduce the percentage depletion deduction presently available to those "D" miners who, with the exception of storage and loading, apply exclusively mining processes to their mineral products at the mine site.

7. Treas. Reg. § 1.613-4(c) (1) (1972).

8. Treas. Reg. § 1.613-4(d) (1) (i) (1972).

9. Treas. Reg. § 1.613-4(d) (4) (ii) (1972).

10. Substantially all metals and minerals produced in the United States are sold f.o.b. mine or mill, or on a delivered price basis. In either case, the miner loads the mineral product on board common carriers at the mine or mill. Typically, the purchaser is located in a city some distance from the mine (or in a foreign country), and it would be wholly impractical for the purchaser to come to the mine or mill and load the mineral product he wishes to purchase.

The proportionate profits method operates on the assumption that each dollar of cost incurred by the miner in producing his mineral product contributes proportionately to the revenues received by the miner upon sale of the product.¹¹ Under Revenue Ruling 73-538, miners of "D" minerals who produce a mineral product exclusively through the application of mining processes would be unable to use the f.o.b. mine sales price of their mineral product to establish gross income from mining. Instead, those miners' gross income from mining would be the f.o.b. mine sales price of their mineral product, reduced by their costs of storage and loading for shipment, and further reduced by a fraction of their profit which the proportionate profits method attributes to the storage and loading costs. A simple example illustrates the computation.

Assume a potash miner incurs costs of \$60 to mine and concentrate potash which he sells for \$100 f.o.b. mine. Further assume that the miner's costs consist of \$10 to extract the potash ore from the ground, \$40 to concentrate the potash by the application of flotation, leaching, crystallization and other mining processes, and \$10 to store and load the potash at the mine site. If storage and loading for shipment were mining processes, the miner's gross income from mining would be \$100, the f.o.b. mine price of the potash. Under Revenue Ruling 73-538, however, the Service would argue that storage and loading for shipment are nonmining processes and that the miner's gross income from mining is \$83.33, computed under the proportionate profits method as follows:

$$\frac{\$100 \times \$50 \text{ (mining costs)}}{\$60 \text{ (total costs including storage and loading for shipment)}} = \$83.33$$

The Service's computation reduces the miner's depletion base by \$10, the amount of storage and loading costs, and also by one-sixth of the miner's \$40 profit on sale of the pot-

11. See Treas. Reg. § 1.613-4(d) (4) (i) (1972).

ash, or \$6.67, on the assumption that the storage and loading costs contributed equally with the miner's other costs to the \$40 profit.¹²

This article will show that the Service's position in Revenue Ruling 73-538 with respect to storage and loading for shipment is not supported by the statute, the regulations or the case law. Moreover, the Service's position is directly contrary to the legislative history of the depletion statute and evidences a reversal of long-standing administrative practice.

II. THE SERVICE'S POSITION

The Service held in Revenue Ruling 73-538 that bulk loading of the potash at the mine site was a nonmining process because loading for shipment is not designated as a mining process in section 613(c)(4)(D) of the Internal Revenue Code.¹³ The ruling also held that storage of the potash at the mine site was a nonmining process because storage is not designated as a mining process in section 613(c)(4)(D), and, under the facts of the ruling, the storage "merely facilitate[d]" the subsequent loading for shipment of the potash.¹⁴ Revenue Ruling 73-538 gives the misleading impression that the Service considers storage and loading of "D" minerals to be nonmining processes for the same reason, *i.e.*, because they are not designated as mining processes in section 613(c)(4)(D). In fact, the Service's arguments with respect to storage are considerably different from its arguments with respect to loading.

The Service argues that loading for shipment of "D" minerals is a nonmining process because loading for shipment is not listed as a mining process in section 613(c)(4)(D). The Service's unstated premise is that the processes designated as mining in section 613(c)(4)(D) are a com-

12. Moreover, the more efficient the miner is in extracting and concentrating his mineral product, the *lower* his gross income from mining will be under the proportionate profits method. If the potash miner in the foregoing example incurred costs of only \$5 to extract the potash ore from the ground and \$30 to concentrate the potash, his gross income from the property under proportionate profits (assuming the same \$10 cost for storage and bulk loading) would be \$77.78.

13. Rev. Rul. 73-538, 1973-2 C.B. 198, 199.

14. *Id.*

prehensive or exclusive listing of mining processes for "D" minerals. In addition to the argument that section 613(c) (4) (D) is an exclusive listing of mining processes for "D" minerals, the Service also argues that because section 613(c) (4) (D) omits any mention of loading for shipment, whereas section 613(c) (4) (C) expressly designates loading for shipment as a mining process, an inference should be drawn that Congress intended to treat loading for shipment of "D" minerals as a nonmining process.

The Service's arguments with respect to loading are supported, at least superficially, by language in two Tenth Circuit cases, *Utco Products, Inc. v. United States*¹⁵ and *American Gilsonite Co. v. Commissioner*.¹⁶ In both of those cases, the court of appeals commented that the depletion statute included loading for shipment as a mining process for ores and minerals which are customarily sold in the form of a crude mineral product (*i.e.*, minerals listed in section 613(c) (4) (C)), but made no such provision for ores or minerals which are *not* customarily sold in the form of a crude mineral product (*i.e.*, minerals listed in section 613(c) (4) (D)).¹⁷ Finally, the Service bolsters its position with respect to loading by analogizing loading for shipment to the admittedly nonmining process of bagging or sacking.

In contrast to the foregoing arguments with respect to loading, the Service's argument with respect to storage of "D" minerals is quite different. Storage is not listed as a mining process in either section 613(c) (4) (C) or section 613(c) (4) (D). Thus, the Service cannot draw the same inference from the statute which it makes with respect to loading for shipment. Instead, the Service argues in Revenue Ruling 73-538 that storage is not necessary or incidental to the preceding mining processes which were applied to the mineral, but, rather, is related to the subsequent loading for

15. 52 AFTR 1823 [57-2 USTC ¶ 10,013] (D. Utah 1957), *rev'd*, 257 F.2d 65 (10th Cir. 1958).

16. 28 T.C. 194 (1957), *rev'd*, 259 F.2d 654 (10th Cir. 1958), *cert. denied*, 359 U.S. 925 (1959).

17. *United States v. Utco Products, Inc.*, 257 F.2d at 68 (10th Cir. 1958); *See also American Gilsonite Co. v. Comm'r*, 259 F.2d at 657 (10th Cir. 1958). *See infra* notes 212-33 and accompanying text.

shipment. Since the Service considers loading for shipment of "D" minerals to be a nonmining process, the related storage is also a nonmining process.

The Service's reasoning indicates, however, that storage would be a mining process if loading for shipment were a mining process. Thus, the underpinning for the holding in Revenue Ruling 73-538 with respect to both storage and loading for shipment is that loading for shipment at the mine site is a nonmining process for "D" minerals. As will be shown below, the statute, the regulations and the case law all refute the Service's conclusion that storage and loading for shipment of "D" minerals are categorically nonmining processes.

III. THE STATUTE

Section 613(c) (2) of the Internal Revenue Code elaborates on the meaning of "gross income from mining" by stating that "mining" includes not only the extraction of ores or minerals from the ground, but also the treatment processes designated as mining processes in section 613(c) (4). Section 613(c) (4) designates the following processes as mining processes for "C" and "D" minerals:

(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 extrac-*

tion of the product or products from the ore or the mineral or minerals from other material from the mine or other natural deposit.¹⁸

In addition, section 613(c) (2) states that mining processes also include treatment processes which are "necessary or incidental" to those processes designated as mining in section 613(c) (4).

Section 613(c) (5) lists certain processes which are not to be considered mining processes, unless they are specified as such in section 613(c) (4) or are necessary or incidental to specified mining processes. The treatment processes listed in section 613(c) (5) as generally constituting nonmining processes are "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."¹⁹ These processes are nonmining processes for all ores and minerals, including both "C" and "D" minerals.

Because storage and loading for shipment are not listed as mining processes in section 613(c) (4) (D), Revenue Ruling 73-538 concludes that storage and loading for shipment of "D" minerals must be nonmining processes. The ruling apparently draws support for its conclusion from the fact that loading for shipment is omitted from the mining processes listed in section 613(c) (4) (D), but is expressly designated as a mining process in section 613(c) (4) (C). For several reasons, the Service's interpretation of the statute is erroneous.

First, the statute does not classify storage or loading for shipment of "D" minerals as either mining or nonmining. Storage and loading for shipment are neither listed as mining processes in section 613(c) (4) (D) nor listed as nonmining processes in section 613(c) (5). If storage and loading for shipment of "D" minerals were categorically intended to be nonmining processes, as Revenue Ruling 73-538 holds,

18. I.R.C. § 613(c) (4) (1976) (emphasis added).

19. I.R.C. § 613(c) (5) (1976).

Congress would have so provided by listing them as nonmining processes in section 613(c)(5). Congress has not done so. Congress' failure to classify storage and loading for shipment of "D" minerals as either mining or nonmining suggests that Congress did not want (or was unable) to classify those processes categorically one way or the other.

Second, the processes designated as mining in section 613(c)(4)(D) are not a comprehensive or exclusive listing of mining processes for "D" minerals. It would have been impossible for Congress to list all the mining processes and methods that miners apply to "D" minerals, and the statute makes no pretense of being comprehensive. Thus, processes which are necessary or incidental, or substantially equivalent, to designated mining processes are recognized as mining processes even though they are not listed in section 613(c)(4)(D).²⁰

The treatment processes which are listed in the statute as constituting mining processes for "D" minerals—crushing, grinding, beneficiation by concentration, cyanidation, leaching, crystallization and precipitation—are the same processes that were specified as mining for "D" minerals in the Revenue Act of 1943.²¹ The legislative history of the

20. I.R.C. § 613(c)(2) (1976).

21. Revenue Act of 1943, § 124, ch. 63, 58 Stat. 21, 44. The Revenue Act of 1943 added a new subdivision (B) to section 114(b)(4) of the Internal Revenue Code of 1939, as follows:

(B) *Definition of Gross Income From Property.* As used in this paragraph the term "gross income from the property" means the gross income from mining. The term "mining," as used herein, shall be considered to include not merely the extraction of the ores or minerals from the ground but also the ordinary treatment processes normally applied by mine owners or operators in order to obtain the commercially marketable mineral product or products. The term "ordinary treatment processes," as used herein, shall include the following:

(iv) 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 quicksilver ores. . . . (emphasis added).

Revenue Act of 1943 indicates that the specification of mining processes in the statute was not intended to be exclusive, but rather only was intended "to give *reasonable specification* of what are to be considered [mining] processes. . . ."²² There have been no subsequent changes in the depletion statute that would indicate that Congress intended to make the listing of mining processes in the current statute a comprehensive one. Indeed, a 1960 amendment to the depletion statute²³ made the definition of mining more flexible, by adding the "necessary or incidental" language to sections 613(c)(2) and 613(c)(5).

Third, the basic difference between "C" and "D" minerals explains why loading for shipment is listed as a mining process in section 613(c)(4)(C), but not listed as a mining process in section 613(c)(4)(D). Ores and minerals described in section 613(c)(4)(C) are customarily sold in the form of a crude mineral product,²⁴ that is, in the form in which the ores and minerals emerge from the mine, or in the form of a processed mineral product,²⁵ that is, after extraction from the ground and the application of mining processes. Since loading for shipment of those minerals at the mine site involves loading of products which have been produced solely by mining processes, Congress quite understandably specified loading for shipment of "C" minerals as a mining process in the statute.

In contrast, section 613(c)(4)(D) deals with ores and minerals which are not customarily sold in the form of a crude mineral product. Sometimes "D" minerals are shipped from the mine site in the form of a processed mineral product, that is, after being subjected only to mining processes, and sometimes "D" minerals are shipped from the mine

22. S. REP. No. 627, 78th Cong., 1st Sess. 23 (1943) *reprinted in* 1944 C.B. 973, 991 (emphasis added).

23. Public Debt and Tax Rate Extension Act of 1960, Pub. L. No. 86-564, 74 Stat. 290 (commonly called the Gore amendment).

24. Prop. Reg. § 1.613-3(c)(1) (1956) ("'crude mineral product' means the mineral in the form in which it emerges from the mine"); Prop. Reg. § 1.613-3(f)(3)(iv) (1966).

25. Prop. Reg. § 1.613-3(c)(2) (1956) ("'processed mineral product' means the mineral product which is obtained by application to the crude mineral product of one or more of the ordinary treatment processes").

site in the form of a manufactured product,²⁶ that is, after being subjected to both mining and nonmining processes. In the former case, it would seem that loading for shipment should be treated as a mining process (just as in the case of "C" minerals), while, in the latter case, it would seem that loading for shipment should not be treated as a mining process. If the classification of loading for shipment as a mining or nonmining process depends upon whether the mineral product which is loaded is a mined or manufactured product, that would explain why Congress was unable to classify loading for shipment of "D" minerals as either mining or nonmining.

IV. THE REGULATIONS

Like the statute, the regulations do not expressly characterize storage or loading for shipment of "D" minerals as either mining or nonmining. However, various provisions in the regulations imply that storage and loading for shipment of "D" minerals are mining processes if the "D" mineral has *not* been processed into a manufactured product prior to storage and loading.

For example, the regulations state that "[t]he costs attributable to the operation of warehouses . . . for *manufactured* products shall be considered as nonmining costs,"²⁷ and that ". . . storage or warehousing of *manufactured* products shall not be considered as mining."²⁸ These regulations do not distinguish between "C" and "D" minerals, but rather between mineral products that have been produced exclusively by mining processes, and mineral products that have been processed into manufactured products by the application of nonmining processes. Comparable provisions existed in prior regulations.²⁹

26. Prop. Reg. § 1.613-3(c)(3) (1956) ("‘manufactured product’ means the product which is obtained by the application to the crude mineral product or processed mineral product of processes which are not ordinary treatment processes"); *Accord* Treas. Reg. § 1.613-4(g)(5) (1972).

27. Treas. Reg. § 1.613-4(d)(3)(iii)(c) (1972) (emphasis added).

28. Treas. Reg. § 1.613-4(g)(3) (1972) (emphasis added).

29. *See* Treas. Reg. § 1.613-3(d)(4)(iii)(b) (1968).

Similarly, the regulations provide that loading for shipment of "manufactured products" is a nonmining process: "The costs attributable to the bulk loading of *manufactured* products shall be considered as nonmining costs."³⁰ Once again, this provision does not distinguish between "C" and "D" minerals, but rather between mineral products which have been produced solely by mining processes and mineral products which have been subjected to nonmining processes. Identical or similar provisions have been in the regulations for many years.³¹

It is inconceivable that the regulations would be so explicit in characterizing storage and loading for shipment as nonmining processes where the storage and loading follow a manufacturing process, unless storage and loading for shipment without the intervention of a manufacturing process were to be treated as mining processes.³² There is nothing in the regulations which suggests that storage and loading for shipment at the mine site are nonmining processes where the mineral product has been produced exclusively by mining processes.

In contrast to the provisions in the regulations dealing with storage and loading for shipment, the regulations treat bagging as a nonmining process without regard to whether the mineral product which is bagged is a mined or a manufactured product:

The costs attributable to containers, *bags*, packages, pallets, and similar items as well as the costs of materials and labor attributable to *bagging*, pack-

30. Treas. Reg. § 1.613-4(d)(3)(iii)(b) (1972) (emphasis added).

31. See, e.g., Treas. Reg. § 1.613-3(d)(4)(iii)(b) (1968) ("The costs attributable to the bulk loading of *manufactured* products shall be considered as nonmining costs") (emphasis added); Treas. Reg. § 1.613-3(g)(2)(i) (1968) ("The loading for shipment of *products which have been molded, shaped, or fired* shall not be considered as mining") (emphasis added); Prop. Reg. § 1.613-3(d)(5) (1956) ("The loading for shipment of a *manufactured* product is not an ordinary treatment process") (emphasis added).

32. The Treasury is, of course, bound by the literal language of its own regulations. See *Tipton and Kalmbach, Inc. v. United States*, 480 F.2d 1118, 1121 (10th Cir. 1973); *Weyerhaeuser Co. v. United States*, 395 F.2d 1005, 1008 (Ct. Cl. 1968).

aging, palletizing, or similar operations *shall be considered as nonmining costs.*³³

Thus, bagging is a nonmining process even if the mineral product which is bagged has been produced solely by mining processes. This bagging regulation is consistent with numerous cases which have held bagging to be a nonmining process, even though the mineral product which was bagged had been produced exclusively by mining processes, and loading for shipment in bulk of the identical mineral product would have been treated as a mining process.³⁴

Other provisions in the regulations lend additional support to the proposition that storage and loading for shipment of "D" minerals are mining processes, if the mineral product which is stored and loaded is not a manufactured product. If an ore or mineral is sold after the application of only mining processes, regulation 1.613-4(b) (1) states that gross income from mining is "*the actual amount for which the ore or mineral is sold.*"³⁵ The regulation gives an example of a taxpayer who sells several sizes of crushed gypsum and gypsum fines, and states that gross income from mining in that case would be "*the total amount for which such crushed gypsum and fines are actually sold.*"³⁶ By its terms, regulation 1.613-4(b) (1) is not limited to "C" minerals, but applies as well to "D" minerals which are sold after the application of only mining processes. Although the regulation does not explicitly mention storage or loading for shipment, it seems clear that "*the actual amount for which the ore or mineral is sold*" refers to the sales price of the ore or mineral *after* storage and loading for shipment at the mine site. Thus, it appears that regulation 1.613-4(b) (1) treats storage and loading for shipment at the mine as mining processes for both "C" and "D" minerals, where the mineral product has not been converted into a manufactured product prior to storage and loading.

33. Treas. Reg. § 1.613-4(d) (3) (iii) (a) (1972) (emphasis added).

34. See, e.g., North Carolina Granite Corp. v. Comm'r, 43 T.C. 149 (1964); Iowa Limestone Co. v. Comm'r, 28 T.C. 881 (1957), *aff'd*, 269 F.2d 398 (8th Cir. 1959).

35. Treas. Reg. § 1.613-4(b) (1) (1972) (emphasis added).

36. Treas. Reg. § 1.613-4(b) (1) (1972).

Under regulation 1.613(e)(2)(i), a miner's gross income from mining may be computed by subtracting the costs incurred for "purchased transportation to the customer" from the delivered price of his mineral product which has been produced solely by mining processes.³⁷ No reduction is required by the regulation for the miner's costs of storage and loading for shipment at the mine. By its terms, regulation 1.613-4(e)(2)(i) is applicable to ores and minerals described in all subparagraphs of section 613(c)(4), including "D" minerals. Since a delivered price obviously includes the miner's costs of storage and loading for shipment at the mine, the regulation implicitly treats storage and loading for shipment at the mine for both "C" and "D" minerals as mining processes. If storage and loading for shipment at the mine are mining processes where the subsequent transportation of the product to the customer qualifies as "purchased transportation to the customer," there is no reason why storage and loading for shipment at the mine should not be mining processes where the mineral product is sold f.o.b. mine and there is no purchased transportation to the customer.

Finally, the Commissioner's position in Revenue Ruling 73-538 that storage and loading for shipment of all "D" minerals are nonmining processes is contrary to the general thrust of the regulations. The Treasury regulations provide that gross income from mining should be measured by the actual sales price for which the taxpayer's mineral product is sold, or by the representative market or field price of a mineral of "like kind and grade."³⁸ Only if it is impossible to determine a representative market or field price is the miner required to determine gross income from mining by the proportionate profits method.³⁹ These regulations are applicable to all ores and minerals listed in section 613(c)(4), including both "C" and "D" minerals.

If storage and loading for shipment of "D" minerals were categorically nonmining processes, all producers of "D"

37. Treas. Reg. § 1.613-4(e)(2)(i) (1972).

38. Treas. Reg. § 1.613-4(b) and (c) (1972).

39. Treas. Reg. § 1.613-4(d)(1)(i) (1972).

minerals would be compelled to compute gross income from mining by the proportionate profits method, since no mineral product is ever sold prior to some storage and loading for shipment at the mine. Such an extreme position runs counter to the priority set forth in the regulations for determining gross income from mining. The proportionate profits method is the *least* preferred method of calculating a miner's gross income from mining.⁴⁰ It seems highly improbable that Congress or the Treasury intended proportionate profits to be the only method available to the entire class of "D" minerals for computing gross income from mining.

V. THE PROCESSING OF "D" MINERALS

The category of "D" minerals includes lead, zinc, copper, gold, silver, uranium, fluorspar ores, potash and other ores and minerals, such as garnet, tungsten and soda ash, which are not customarily sold in the form of a crude mineral product. The depletion statute and regulations treat these "D" minerals as a single group and specify certain processes as mining processes for all of them.

Despite the monolithic treatment accorded "D" minerals in the depletion statute, there is substantial diversity in how "D" minerals are processed, both among miners of different "D" minerals and among miners of the same mineral. Some "D" minerals, after the application of various concentration processes, are commercially marketable "finished" products and ready for sale and use in the production of other products. Garnet, potash and fluorspar fall into this category. In contrast, other "D" minerals must be concentrated and then smelted or refined (or smelted and refined) before they become commercially marketable. Copper, lead, zinc, gold and silver fall into this category.

Moreover, miners differ with respect to the extent to which they process their mineral products at the mine site. Some miners of "D" minerals do not own a mill and there-

40. See Treas. Reg. § 1.613-4(b), (c) and (d) (1972).

fore must transport their ore from the mine to a distant mill owned by another party. Other miners of "D" minerals concentrate their ore at the mine site and then ship the concentrate to a distant smelter or refinery (either owned by them or another party). Still other miners of "D" minerals concentrate, smelt and refine their mineral product at the mine site.

A brief description of the structure of the mining industry and how various "D" minerals are processed shows the diversity.

1. *Copper*. In 1979, 25 mines accounted for 94 percent of total U.S. copper production.⁴¹ The five largest mines produced 45 percent of total U.S. production that year.⁴²

After extraction from the ground, copper ore is generally subjected to crushing, fine grinding, and concentration by flotation.⁴³ Ore which is not amenable to flotation is leached with sulfuric acid to dissolve the copper.⁴⁴ The dissolved copper is then recovered from the leach solutions by chemical precipitation on scrap iron (cementation), by electrowinning, or by solvent extraction and electrowinning.⁴⁵

Copper concentrates and precipitates are smelted into an impure blister copper.⁴⁶ Thereafter, the blister copper may be upgraded to fire-refined copper by melting in a furnace and removing the principal impurity, oxygen.⁴⁷ However, most blister copper, after partial refining in a furnace, is cast into copper anodes for electrolytic refining.⁴⁸

Because copper ores have a relatively low copper content, virtually all copper ore is concentrated at mills near

41. BUREAU OF MINES, U.S. DEPT OF INTERIOR, BULLETIN 671, MINERAL FACTS AND PROBLEMS 229 (1980) [hereinafter cited as 1980 MINERAL FACTS AND PROBLEMS].

42. *Id.*

43. *Id.* at 227, 233.

44. *Id.* at 233.

45. *Id.* at 229, 233.

46. *Id.*

47. *Id.* at 233.

48. *Id.* at 233-34.

the mine site.⁴⁹ Moreover, since copper concentrates average only 25 percent copper, most smelters are located near the mills to minimize transportation costs.⁵⁰

Several leading copper-producing companies are integrated miner-manufacturers and have mining, smelting, refining and fabricating facilities.⁵¹ Other copper companies mine and concentrate the ore, but ship their copper concentrate to custom plants for smelting and refining. For example, Cities Service Co., Duval Corp., Cyprus Bagdad Copper Co. and Cyprus Pima Mining Co. mine and concentrate substantial amounts of copper ore, but have their copper concentrate smelted and refined by others.⁵²

2. *Garnet*. In 1980, garnet was produced in the United States by five companies.⁵³ Garnet is separated and concentrated from other minerals in the ore by a combination of methods, including crushing, grinding, screening, flotation and the use of concentrating tables.⁵⁴ Garnet is sold in its concentrate form, and is not refined or smelted.⁵⁵

3. *Fluorspar Ores*. Most of the fluorspar produced in the United States comes from underground mines.⁵⁶ Because fluorspar varies widely in mineralogical content and in the degree of physical interlocking of its associated minerals, a

49. *Id.* at 229, 239.

50. *Id.* at 239.

51. In 1979, ASARCO Incorporated, Kennecott Corp., Phelps Dodge Corp., Magma Copper Corp., The Anaconda Company, Copper Range Co. and Inspiration Consolidated Copper Co. all operated copper mines, smelters and refineries in the United States. *Id.* at 229. In addition, AMAX, Inc. was a significant miner of copper through Anamax Mining Co. (a joint venture between it and Anaconda) and a substantial producer of refined copper through its subsidiary, United States Metals Refining Co. *Id.*

52. *Id.*

53. *Id.* at 329-30. Those five companies were Barton Mines Corp., NYCO Division of Processed Minerals, Inc., Idaho Garnet Abrasive Co., Emerald Creek Garnet Milling Co., and Industrial Garnet Extractives, Inc. *Id.*

54. *Id.* at 331-32.

55. Barton Mines' garnet is sold directly to consumers for use in coated abrasives, glass grinding and polishing, and metal lapping. *Id.* at 329-30. NYCO's garnet is a fine concentrate used mostly in sandblasting and bonded abrasives. *Id.* at 331. The garnet produced by Idaho Garnet and Emerald Creek is generally used for sandblasting and water filtration. *Id.* at 330. Industrial Garnet produces both a garnet concentrate and a garnet-containing utility grit. *Id.* at 330-31.

56. *Id.* at 311.

variety of concentration processes are applied to produce a salable product.⁵⁷

Two companies with mining and milling facilities in southern Illinois account for most of the U.S. production of fluorspar.⁵⁸ Those companies are Ozark-Mahoning Co., which operates four mines, a flotation mill and two heavy media plants, and Allied Chemical Corp., which operates two mines, a flotation mill and a heavy media plant.⁵⁹ Three other fluorspar miners produce small tonnages of fluorspar annually.⁶⁰

4. *Zinc*. In 1979, zinc was mined in 19 states, but mines in Tennessee, Missouri, New Jersey, Idaho, and Pennsylvania accounted for 86 percent of the total U.S. output.⁶¹ The 25 largest zinc mines in the United States accounted for 98 percent of the total domestic mine output in 1979.⁶²

Essentially all zinc ores are mined by underground methods and beneficiated into zinc concentrate at the mine site.⁶³ Zinc ores are generally concentrated by flotation methods.⁶⁴ The zinc concentrate is then shipped to smelters for processing into zinc slab, recovery of coproduct and byproduct metals, and production of sulfuric acid.⁶⁵

Smelting of zinc concentrate into zinc slab is accomplished by electrolytic deposition from a sulfate solution or

57. *Id.* Fluorspar is produced in three principal grades: (i) acid (which contains 97% CaF_2), (ii) ceramic (which is generally marketed as No. 1 ceramic, containing 95 to 97% CaF_2 , or as No. 2 ceramic, containing 85 to 93% CaF_2), and (iii) metallurgical (which contains 60 to 85% CaF_2). *Id.* at 306. Acid and ceramic grades of fluorspar are commonly produced by froth flotation. *Id.* at 311. Metallurgical grade fluorspar is often produced by hand-sorting of high grade lump crude ore, followed by crushing and screening to remove most of the fines. *Id.* Metallurgical grade fluorspar is also produced by gravity concentration processes such as jigging. *Id.*

58. *Id.* at 304.

59. *Id.*; BUREAU OF MINES, U.S. DEPT OF INTERIOR, 1 MINERALS YEARBOOK, METALS AND MINERALS 341-42 (1978-1979) [hereinafter cited as 1978-1979 MINERALS YEARBOOK].

60. 1980 MINERALS FACTS AND PROBLEMS, *supra* note 41, at 304. Those three miners are D & F Minerals Co. of Alpine, Texas, J. Irving Crowell, Jr. of Beattey, Nevada, and Hastie Mining Co. of Cave-in-Rock, Illinois. *Id.* D & F Minerals and J. Irving Crowell have no milling facilities. 1978-1979 MINERALS YEARBOOK *supra* note 59, at 342. Hastie operates a small heavy media concentrator at its mine site. *Id.*

61. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 1027.

62. 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 986.

63. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 1038.

64. *Id.* at 1031, 1038.

65. *Id.* at 1038.

by distillation in retorts or furnaces.⁶⁶ Zinc produced by distillation may be further upgraded by refining.⁶⁷

Six principal companies operate both zinc mines and smelters or refineries in the United States. Those companies are Amax Zinc Co., Inc., ASARCO Incorporated, The Bunker Hill Co., The New Jersey Zinc Co., Jersey Miniere Zinc Co. and St. Joe Zinc Co.⁶⁸ Other major zinc miners, such as Cominco American Inc., Eagle-Picher Industries, Inc., Ozark Lead Co., Cities Service Co., Hecla Mining Co. and United States Steel Corp., mine and concentrate zinc but do not operate zinc smelters.⁶⁹

5. *Silver*. In 1979, silver ores were mined from more than 225 mines in the United States.⁷⁰ Of the 25 largest mines, nine were exploited principally for silver, 11 were copper mines and the remainder were lead, lead-zinc or copper-lead-zinc-gold mines.⁷¹

Silver ores are beneficiated by grinding and gravity flotation.⁷² Silver is thereafter recovered as a coproduct or byproduct from intermediate products of lead, zinc or copper smelting.⁷³

Five major smelting and refining companies produce most of the primary silver in the United States.⁷⁴ These companies refine concentrates which they have mined and milled themselves, as well as concentrates produced by other mining companies.⁷⁵ Other silver miners, including Sunshine Mining Co. and Hecla Mining Co., rely upon custom smelting by others to recover their silver.⁷⁶

66. *Id.* at 1031.

67. *Id.* at 1032.

68. *Id.* at 1026.

69. *See Id.* *See also* 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 1001, 1003.

70. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 823.

71. *Id.*

72. *Id.* at 831.

73. *Id.* at 827.

74. *Id.* at 823. In 1979, ASARCO Incorporated was the leading producer of mined silver and the leading producer of refined silver. *Id.* Other large producers of refined silver were The Anaconda Company, The Bunker Hill Co., Kennecott Copper Corp. and U.S. Metals Refining Co. (a division of Amax Copper Co.). *Id.* at 824.

75. *Id.*

76. *Id.* at 824.

6. *Gold*. About 60 percent of the gold produced in the United States comes from gold ores, and the remainder is a byproduct of copper and other base metal production.⁷⁷ In 1979, gold-bearing ores were mined from approximately 200 mines in the United States.⁷⁸ Three mines accounted for 64 percent of the total domestic output, and 25 mines accounted for 97 percent of total domestic output.⁷⁹

The leading U.S. gold producer is Homestake Mining Co., which produces more than 25 percent of the total U.S. production from an underground mine at Lead, South Dakota.⁸⁰ The Kennecott Copper Corp. is usually the second largest gold producer. Kennecott's gold is produced as a byproduct in its copper mining operations.⁸¹ The third largest domestic gold producer, Carlin Gold Mining Co., has an open-pit mine in north-central Nevada.⁸²

Gold is recovered from gold-bearing ores by cyanidation, amalgamation, flotation, gravity concentration, or smelting, or by a combination of these processes.⁸³ The methods used depend upon the nature of the ore. Most gold is recovered by cyanidation of precious metal ores and smelting of base metal ores.⁸⁴ Where gold is associated with copper ores, it travels with the copper through concentration and smelting to the refining stage.⁸⁵ The gold is eventually recovered as gold bullion in the refinery.⁸⁶

There are two primary gold refiners in the United States, Handy & Harman at Northvale, New Jersey, and Homestake Mining Co. at Lead, South Dakota.

7. *Lead*. Lead is mined in the United States from about 25 mines in 7 states.⁸⁷ Almost all lead and lead-zinc ores are

77. *Id.* at 368.

78. *Id.*

79. *Id.*; 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 379.

80. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 368.

81. *Id.*

82. *Id.*

83. *Id.* at 371.

84. 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 379.

85. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 371.

86. *Id.*

87. *Id.* at 494.

extracted from underground mines.⁸⁸ The ore is concentrated at the mine site at all of the larger mines and usually at the medium-sized mines.⁸⁹ Ore produced at some of the smaller mines in the West is trucked to centrally located milling facilities.⁹⁰

Flotation is the major concentration method used to recover lead from the ore.⁹¹ At some mills, the ore is partially concentrated by gravity methods prior to flotation.⁹² The lead concentrate produced by flotation is thereafter subjected to further processing, including sintering or roasting, smelting, dressing and refining.⁹³

In 1979, there were four companies who mined, milled, smelted and refined lead in the United States, *viz.*, St. Joe Lead Co., which operated six mines, four mills, and a lead smelter-refinery at Herculanum, Missouri; Amax Lead Co., of Missouri, which operated a mine, mill and smelter-refinery at Boss, Missouri; The Bunker Hill Co., which operated mines and a smelter-refinery near Kellogg, Idaho; and ASARCO Incorporated, which operated mines in Colorado and Idaho, smelters in El Paso, Texas and East Helena, Montana, a smelter-refinery at Glover, Missouri, and a refinery at Omaha, Nebraska (to serve ASARCO's smelters at El Paso and East Helena).⁹⁴

Other major lead miners, including Ozark Lead Co., a subsidiary of Kennecott Copper Corp., Hecla Mining Co., Day Mines, Inc., and Cominco American Inc., produced lead concentrates but did not smelt or refine lead.⁹⁵

8. *Tungsten*. Although there are approximately 50 tungsten mines in the United States, nearly all tungsten production comes from six mines.⁹⁶ Those six mines are:

88. *Id.* at 499.

89. *Id.* at 494-95.

90. *Id.* at 495.

91. *Id.* at 499.

92. *Id.*

93. *Id.*

94. *Id.* at 495.

95. *Id.*; 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 519.

<i>Company</i>	<i>Location</i>	<i>Mine</i>
Union Carbide Corp.	Bishop, California	Pine Creek
AMAX Inc.	Leadville, Colorado	Climax
Union Carbide Corp.	Tempiute, Nevada	Emerson
Teledyne Tungsten	North Fork, California	Strawberry
National Resources Development, Inc.	Fallon, Nevada	Nevada Scheelite
Utah International, Inc.	Imlay, Nevada	Springer

Tungsten ores are concentrated at the mine site, generally by gravity and flotation methods.⁹⁷ Tungsten concentrates are thereafter processed chemically into tungsten chemicals, such as ammonium paratungstate (APT), tungstic acid, or sodium tungstate.⁹⁸ Most APT is then converted into tungsten metal powder, generally by hydrogen reduction.⁹⁹ The metal powder is processed further into tungsten carbide or ferrotungsten.¹⁰⁰

Union Carbide, the largest U.S. tungsten producer, is integrated vertically from mining to the manufacture of tungsten intermediate products.¹⁰¹ At its Pine Creek Mine and mill, Union Carbide processes tungsten ore directly into APT.¹⁰² At Union Carbide's Emerson Mine, the tungsten ore is processed into a low-grade concentrate and then shipped to Union Carbide's Pine Creek facility for conversion into APT.¹⁰³ AMAX recovers tungsten as a byproduct of its molybdenum production.¹⁰⁴ Teledyne Tungsten ships tungsten concentrate from its Strawberry Mine and mill to the Teledyne Wah Chang Huntsville processing plant at Huntsville, Alabama.¹⁰⁵ National Resources ships tungsten concentrate from its Nevada Scheelite Mine and mill to a processing

96. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 980; 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 950-51.

97. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 979, 984-85.

98. *Id.* at 979, 982.

99. *Id.*

100. *Id.*

101. *Id.* at 980.

102. *Id.* The advantage of processing tungsten ore directly into intermediate products is that a lower grade concentrate (with fewer fines and slimes) can be used. *Id.* at 985.

103. *Id.* at 980.

104. *Id.*

105. Letter from Mr. John D. Corrick, Chief, Branch of Domestic Data, United States Department of Interior, Bureau of Mines (Oct. 16, 1981).

plant owned by Kennametal, Inc. at Fallon, Nevada.¹⁰⁶ Utah International processes its tungsten concentrate into APT at the Springer Mine site, and then ships the APT to tungsten processing plants operated by General Electric Company.¹⁰⁷

9. *Potash.* In 1979, approximately 84 percent of U.S. potash production was obtained by underground mining of bedded deposits near Carlsbad, New Mexico.¹⁰⁸ The balance was obtained from brines or solution mining in Utah, and brines in California.¹⁰⁹

Seven companies are engaged in mining potash in the Carlsbad area.¹¹⁰ All the companies in Carlsbad mine a sylvinite ore (a mixture of potassium chloride and sodium chloride), and concentrate the ore at the mine site to produce potassium chloride (commonly called muriate of potash).¹¹¹ In addition, two of the companies mine a langbeinite ore in Carlsbad, which consists of a double sulfate of potassium and magnesium.¹¹² The langbeinite ore is concentrated at the mine site to produce sulfate of potash (potassium sulfate) and potassium magnesium sulfate.¹¹³

The two basic methods of recovering potassium chloride from sylvinite ore are froth flotation and crystallization.¹¹⁴ Approximately 95 percent of the potash produced in the United States is sold by the mining companies to manufacturers of compound fertilizers, who combine the potash with nitrogen and phosphorus.¹¹⁵

106. *Id.*

107. *Id.*

108. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 707; 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 714.

109. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 707.

110. 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 714. Those seven companies are (i) AMAX Chemical Corp. of AMAX Inc., (ii) Duval Corp. of Pennzoil Co., Inc., (iii) Kerr-McGee Chemical Corp., (iv) Mississippi Chemical Corp., (v) National Potash Co. of Freeport Minerals Co., (vi) International Minerals and Chemical Corp., and (vii) Potash Company of America, a division of Ideal Basic Industries, Inc. *Id.*

111. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 709, 712.

112. *Id.* at 709.

113. BUREAU OF MINES, U.S. DEP'T. OF INTERIOR, 1 MINERALS YEARBOOK, METALS AND MINERALS 652 (1980).

114. BUREAU OF MINES, U.S. DEP'T OF INTERIOR, BULLETIN 650, MINERAL FACTS AND PROBLEMS 1160 (1970) [hereinafter cited as 1970 MINERAL FACTS AND PROBLEMS]. Langbeinite ore is also processed by flotation or dissolution methods. *Id.*

115. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 707, 710.

10. *Uranium*. In 1980, uranium ore was produced from fifty-two open-pit mines and 303 underground mines.¹¹⁶ As of February 1981, there were 23 uranium mills in operation in the United States.¹¹⁷

The basic steps in processing or milling uranium ore are crushing, grinding, leaching, and the recovery of uranium from the leach solution, typically by a solvent extraction process.¹¹⁸ The uranium concentrate produced in the milling process (which contains about 85% U_3O_8) is commonly called yellowcake.¹¹⁹

After milling, yellowcake is refined in order to remove impurities and converted to uranium hexafluoride by a fluorination process.¹²⁰ The uranium hexafluoride is thereafter enriched by a gaseous diffusion process.¹²¹ Finally, the enriched substance is fabricated into a fuel suitable for nuclear reactors.¹²²

The foregoing discussion plainly shows that some "D" miners produce a mined product at the mine site, whereas other "D" miners produce a manufactured product at the mine site. This difference is attributable to several factors.

First, some "D" minerals, such as fluorspar, garnet and potash, are commercially marketable mineral products in their concentrate form. In contrast, other "D" minerals, such as copper, lead and zinc, must be smelted or refined or both smelted and refined in order to become commercially marketable.

Second, mining companies differ in their size and the extent to which they process their mineral products. Some miners have only mining and milling facilities, while others

116. J. Q. Jones, *Uranium Production 1* (Oct. 1981) (unpublished paper by the Uranium Reserves and Production Branch, Minerals Assessment Division, U.S. Department of Energy, Grand Junction, Colorado).

117. *Id.* at 6, 13.

118. 1970 MINERAL FACTS AND PROBLEMS, *supra* note 114, at 225.

119. *Id.* at 226.

120. *Id.*

121. *Id.*

122. *Id.*

are integrated miner-manufacturers. As discussed above, copper, lead, zinc, tungsten, silver and gold are produced in a concentrate form by some miners and in a smelted, refined or otherwise manufactured form by other miners.

Third, integrated miner-manufacturers may have their smelting, refining and other manufacturing facilities at the mine site, or at some location away from the mine. For example, St. Joe Lead Co. operates lead mines, mills and a lead smelter-refinery at Herculaneum, Missouri. On the other hand, ASARCO Incorporated's lead mines are in Colorado and Idaho, and its lead smelters are in Texas, Montana and Missouri.

Fourth, a mining company can be an unintegrated miner at one location and an integrated miner-manufacturer at another location. For example, Union Carbide processes tungsten ore into a manufactured product at its Pine Creek Mine, but produces and ships tungsten concentrate at its Emerson Mine. Another example is Duval Corp., which mines and concentrates copper at three mine sites (Sierrita, Esperanza and Mineral Park), but operates only a single refinery, which is situated at the Sierrita Mine.¹²³

The legislative history of the depletion statute indicates that Congress was aware that some "D" miners produce and ship a mined product from the mine site, whereas other "D" miners produce and ship a manufactured product from the mine site. The legislative history also reveals that Congress intended loading for shipment of "D" minerals at the mine site to be a mining process where the mineral product that is loaded has been produced exclusively by mining processes, and loading for shipment to be a nonmining process where the "D" mineral has been processed into a manufactured product prior to loading.

VI. THE LEGISLATIVE HISTORY OF THE DEPLETION STATUTE: 1913-1943

The legislative history of the depletion statute shows that Congress intended percentage depletion to be calculated

123. 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 282; 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 228.

on the f.o.b. mine sales price of the mineral product sold by the unintegrated miner. An f.o.b. mine sales price, by definition, means a price after storage and loading for shipment at the mine site.¹²⁴

A miner's percentage depletion deduction is a specified percentage of his "gross income from mining," subject to a limitation of 50 percent of his net income from mining.¹²⁵ The concepts of gross income from mining and net income from mining date back to the original percentage depletion statute which was enacted in 1926, and to depletion provisions which existed in prior income tax acts.

The Income Tax Act of 1913 allowed as a deduction "a reasonable allowance for the exhaustion, wear and tear of property . . . not to exceed, in the case of mines, 5 per centum of the *gross value at the mine* of the output for the year. . . ."¹²⁶ Gross value at the mine was defined in the regulations as:

*the market value of ore, coal, crude oil, and gas at the mine or well, where such value is established by actual sales at the mine or well; and in case the market value of the product of the mine or well is established at some place other than at the mine or well, or on the basis of the bullion or metallic value of the ore, then the gross value at the mine is held to be the value of the ore, coal, oil or gas sold, or of the metal produced, less transportation, reduction, and smelting charges.*¹²⁷

In 1918, Congress changed the deduction for exhaustion of mines and authorized what was commonly called "discovery depletion." Under discovery depletion, miners were allowed a reasonable allowance for depletion based on the fair market value of their mining property at the time of discovery, or

124. F.O.B. means "free on board" at a named place. When the terms of sale are f.o.b. place of shipment, "the seller must at that place ship the goods . . . and bear the expense and risk of putting them into the possession of the carrier; . . ." U.C.C. § 2-319(1)(a) (1978).

125. I.R.C. §§ 613(a) and (c)(1) (1976).

126. Income Tax Act of 1913, § II B, ch. 16, 38 Stat. 114, 167 (emphasis added).

127. Treas. Reg. 33, art. 142 (1914) (emphasis added).

within thirty days thereafter.¹²⁸ The value of the total estimated quantity of minerals in place was computed, a depletion rate per unit of production was established, and the yearly allowance was based upon the number of units recovered.

In 1921, the statute was amended to provide that the deduction for discovery depletion could not exceed "the net income, computed without allowance for depletion, from the property upon which the discovery is made. . . ."¹²⁹ The regulations defined net income from the property as follows:

*Net income is the gross income from the sale of all mineral products and any other income incidental to the operation of the property for the production of the mineral products, less operating expenses, including depreciation on equipment, and taxes, but excluding any allowance for depletion. If the mineral products are not sold as raw material but are manufactured or converted into a refined product, then the gross income shall be assumed to be equivalent to the market or field price of the raw material before conversion.*¹³⁰

In 1924, Congress changed the limitation on discovery depletion to 50 percent of the "net income . . . from the property."¹³¹

Two points can be noted with respect to these early depletion provisions. First, the depletion base during 1913-1918 was market value or the actual sales price of the mineral product at the mine site. Similarly, the net income limitation under discovery depletion was determined with reference to the sales price of the mineral product at the mine. Second, these early depletion provisions recognized the existence of integrated miner-manufacturers who mine, concentrate and refine their mineral products. Under the statute and regulations, those integrated producers were not entitled to depletion on the sales price of their manufactured products, but rather were required to subtract "transportation,

128. Revenue Act of 1918, § 214(a) (10), ch. 18, 40 Stat. 1057, 1067-68.

129. Revenue Act of 1921, § 214(a) (10), ch. 136, 42 Stat. 227, 241.

130. Treas. Reg. 62, art. 201(h) (1922) (emphasis added).

131. Revenue Act of 1924, § 204(c), ch. 234(a) (8), 43 Stat. 253, 284-285.

reduction and smelting charges" from the sales price of those products, or base depletion on the "market or field price" of their mineral product at the mine before the application of any nonmining manufacturing processes.¹³²

By the mid-1920's, both the mining industry and the Bureau of Internal Revenue had become disenchanted with discovery depletion. The valuation of property required under discovery depletion was complex, costly and subject to the varying judgments of appraisal engineers. As a result, there were numerous disputes between the Government and taxpayers over valuation.¹³³

In response to the criticism of discovery depletion, it was proposed that depletion in the case of oil and gas be calculated on a percentage-of-income basis in the interest of "simplicity and certainty of administration."¹³⁴ This recommendation was adopted in the Revenue Act of 1926, which allowed oil and gas producers a deduction of 27½ percent of their "gross income from the property" during the taxable year, subject to a limitation of 50 percent of the net income from the property.¹³⁵

In 1927, the Joint Committee on Internal Revenue Taxation issued a report on percentage depletion in which it defined gross income from the property, in the case of oil and gas, as:

the gross receipts from the sale of oil and gas as it is delivered from the property less the royalties paid in cash, if any. . . . In the case of taxpayers who are operators, refiners, transporters, etc., the gross income from the property must be computed from the production and posted price of oil, as the gross re-

132. Income Tax Act of 1913, § II B, ch. 16, 38 Stat. 114, 167; Revenue Act of 1921, § 214(a) (10), ch. 136, 42 Stat. 227.

133. PARTIAL REPORT OF THE SELECT COMMITTEE ON INVESTIGATION OF THE BUREAU OF INTERNAL REVENUE, S. REP. NO. 27, 69th Cong., 1st Sess. 3, 116 (1926) (commonly called the Couzens Report); *Hearings on the Revenue Act of 1926 Before the Senate Comm. on Finance*, 69th Cong., 1st Sess. 158, 178 (1926).

134. S. REP. NO. 52, 69th Cong., 1st Sess. 17-18 (1926) reprinted in 1939-1 C.B. (part 2) 332, 345-46.

135. Revenue Act of 1926, § 204(c) (2), ch. 27, 44 Stat. 9, 16.

*ceipts from a refined and transported product can not be used in determining the income as relating to an individual tract or lease.*¹³⁶

Subsequent Treasury regulations reiterated the fact that gross income from the property was the actual sales price of the oil and gas at the well, prior to any refining or transportation.¹³⁷ The courts upheld these regulations and refused to allow taxpayers to include refining and transportation from the well as part of their depletion base.¹³⁸ Thus, the percentage depletion base of the integrated oil and gas producer, like that of the nonintegrated producer, was measured by the gross receipts of the oil and gas at the well.

A proposal to extend percentage depletion to metal mines was made during hearings on revenue revision before the House Ways and Means Committee in 1927.¹³⁹ The American Mining Congress appeared at those hearings and argued that a depletion allowance for metal mines equal to 15 percent of gross income from the property would be simple, practical, and advantageous for both the Government and the taxpayer:

Briefly stated, 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 removes discrimination and gives to the smaller operator who can not now afford to spend the money necessary to establish proper value of his ore bodies and the corresponding depletion value of his unit of production, the reasonable allowance for depletion contemplated by the statute.¹⁴⁰

136. JOINT COMM. PRELIM. REP. ON DEPLETION, vol. 1, pt. 2 at 13 (1927) (emphasis added).

137. Treas. Reg. 74, art. 221(i) (1929).

138. See, e.g., *Consumer's Natural Gas Co. v. Commissioner*, 78 F.2d 161 (2d Cir. 1935), cert. denied, 296 U.S. 634 (1935); *Greensboro Gas Co. v. Commissioner*, 79 F.2d 701 (3d Cir. 1935), cert. denied, 296 U.S. 639 (1935).

139. *Hearings on Revenue Revision Before the House Comm. on Ways and Means*, 69th-70th Cong. 161 (1927-28).

140. *Id.* at 508, 510.

An amendment incorporating the American Mining Congress' recommendation was introduced on the floor of the House, but was withdrawn on the understanding that the matter would receive additional study.¹⁴¹

In 1930, the Joint Committee on Internal Revenue Taxation issued a report on depletion with respect to metal mines.¹⁴² The report stated that the existing situation under discovery depletion was difficult to administer and resulted in inequitable results among producers of the same mineral and between producers of different minerals.¹⁴³ The report considered three alternative methods for computing depletion—fixed rate per pound of mineral sold, percentage of gross income, and percentage of net income—and concluded that depletion should be calculated as a percentage of net income.¹⁴⁴

Although the 1930 Joint Committee report recommended that depletion for metal mines be based on a percentage of net income, the report noted that Congress had previously considered a proposal to base depletion for metal mines on gross income from the property.¹⁴⁵ A report prepared by Alex R. Shepherd, a mining engineer employed by the Joint Committee, also recommended that depletion for metal mines be based on gross income from the property.¹⁴⁶ Shepherd's report was attached to the Joint Committee's report as Appendix XXXI. Because Congress adopted gross income from the property as the depletion base when it extended percentage depletion to metal mines, coal and sulphur in 1932, Shepherd's report came to be regarded as a definitive source of legislative intent with respect to percentage depletion for hard minerals.¹⁴⁷

141. 69 CONG. REC. (pt. I) 599-600 (1927).

142. PRELIM. REP. ON DEPLETION, STAFF REPORTS TO THE JOINT COMM. ON INTERNAL REVENUE TAXATION (1930).

143. *Id.* at 2, 6-8, 9-12.

144. *Id.* at 2-3, 14-21.

145. *Id.* at 13. *Hearings on Revenue Revision*, *supra* note 139.

146. PRELIM. REP. ON DEPLETION, STAFF REPORTS TO THE JOINT COMM. ON INTERNAL REVENUE TAXATION 14 (1930).

147. See *United States v. Cannelton Sewer Pipe Co.*, 364 U.S. 76, 81-83 (1960). In this decision, Mr. Justice Clark wrote: "[t]he Congress in fashioning the 1932 Act took into account these [the Shepherd Report's] recommendations." *Id.* at 33.

Shepherd's report compiled extensive information regarding depletion allowances claimed by miners in the metal mining industry under discovery depletion, and the relationship of those depletion allowances to gross income and net income from the mining properties.¹⁴⁸ The data showed that the average depletion deduction for all metals¹⁴⁹ under discovery depletion was approximately seventeen percent of the miner's "gross sales."¹⁵⁰ Thus, the Shepherd Report concluded that 15 percent of gross income from the property, subject to a limitation of 50 percent of net income from the property, would be a reasonable depletion allowance for metal mines.¹⁵¹

Before discussing how gross income from the property should be determined, the Shepherd Report summarized the various processes through which metals must pass, from crude ore to the product which is eventually sold to consumers:

(1) Mining, or getting the metal-bearing rock out of the ground; (2) Concentrating, or separating the profitable portions of the ore from the unprofitable . . . ; (3) Smelting, or isolating the metallic constituents as impure bullion by melting the concentrate in a furnace; (4) refining, or separating the metals from each other, and (5) marketing the refined products.¹⁵²

The Shepherd Report recognized that while some miners put their ores through all the foregoing processes, other miners do not. Nevertheless, the Shepherd Report stated that gross income from the property could be the same for all miners:

In the case of the smaller operator [*i.e.*, the unintegrated miner], the product in most all cases is sold

148. PRELIM. REP. ON DEPLETION, STAFF REPORTS TO THE JOINT COMM. ON INTERNAL REVENUE TAXATION, app. XXXI, at 65 (1930) [hereinafter cited as Shepherd Report].

149. The metals discussed in the Shepherd Report were lead, zinc, iron ore, copper, silver and gold.

150. Shepherd Report, *supra* note 148, at 67-68.

151. 69 CONG. REC. (pt. I) 599-600 (1927).

152. *Id.* at 71.

in the crude or semirefined (concentrate) state to smelter under contract or otherwise.

. . . .

Therefore, in the case of 90 percent (in numbers) of the taxpayers their *gross income from the property is the smelter return settlement*, less royalty due lessors.

. . . .

In the case of the large mine operators with complete plants for concentrating, smelting, refining and marketing [*i.e.*, the integrated miner-manufacturer], the practice in accounting from a tax-reporting standpoint is more or less the same as the smaller operator who sells to a smelter or its agent.

Most of them do custom work [*i.e.*, smelting or refining for other miners] and therefore must keep accounts of the cost of refining ores from their own properties in a similar manner as is done with purchased ores. *Therefore the net smelter return basis can apply equally to their own operations.*¹⁵³

Net smelter return is the payment which the miner receives from the smelter and represents the market value of the metals in the ore or concentrate shipped to the smelter, less smelting charges and transportation from the mine to the smelter.¹⁵⁴

The Shepherd Report summarized the way in which producers of copper, lead, zinc, gold, silver and iron ore generally sold their mineral products, and proposed the following definition of gross income from the property for the various minerals:

“[T]he gross income from the property” shall be *the competitive market receipts, or its equivalent, received from the sale of the crude, partially beneficiated or refined gold, silver, or copper, the product actually disposed of by the taxpayers to govern the method of computation of receipts in all cases, and in the case of all other metals, coal and oil and*

153. *Id.* at 71-72 (emphasis added).

154. *Id.* at 71.

*gas, the competitive market receipts, or its equivalent, received from the sale of the crude products, or concentrates on an f.o.b. mine, mill, or well basis.*¹⁵⁵

Thus, the recommendation of the Shepherd Report was that in the case of certain metals (*i.e.*, gold, silver and copper), gross income from the property should be the amount received by the miner from the sale of the mineral product, regardless of the extent to which the mineral product was processed by the miner. In the case of all other metals (*e.g.*, lead, zinc and iron ore),¹⁵⁶ the Shepherd Report provided that gross income from the property should be determined on the basis of the market price, or its equivalent, of "*the crude products, or concentrates on an f.o.b. mine, mill, or well basis.*"¹⁵⁷

In 1932, Congress extended percentage depletion to coal, sulphur and metal mines.¹⁵⁸ Following the recommendation of the Shepherd Report, the statute provided that the allowance for depletion in the case of metal mines should be 15 percent of the "gross income from the property during the taxable year," subject to a limitation of 50 percent of the net income from the property.¹⁵⁹

The regulations promulgated by the Treasury in February 1933 did *not* adopt gross receipts of the mineral product actually sold by the miner (regardless of the extent to which the mineral product was processed by the miner) as the measure of gross income from the property.¹⁶⁰ Instead, the

155. *Id.* at 73 (emphasis added).

156. It is interesting to note that the Shepherd Report proposed the same depletion base for zinc, lead and iron ore, even though zinc and lead were eventually classified in the statute as "D" minerals, and iron ore was eventually classified as a "C" mineral. The depletion base proposed by the Shepherd Report for zinc, lead and iron ore—market price of the crude products or concentrates on an f.o.b. mine, mill or well basis—obviously included storage and loading for shipment of the crude products or concentrates at the mine site. Thus, the Shepherd Report considered storage and loading for shipment of crude mineral products or concentrates at the mine to be mining processes, irrespective of whether the mineral product was a "C" or "D" mineral.

157. Shepherd Report, *supra* note 148, at 73 (emphasis added).

158. Revenue Act of 1932, § 114(b)(4), ch. 209, 47 Stat. 169, 203.

159. *Id.*

160. Treas. Reg. 77, art. 221(g) (1933).

regulations followed the recommendation made by the Shepherd Report with respect to lead, zinc and iron ore that gross income from the property should be the market price, or its equivalent, of the crude products or concentrates sold by the miner on an f.o.b. mine or mill basis. The regulations provided that gross income from the property is the amount for which the miner sells his mineral product, but not in excess of the "representative market or field price" of the mineral product after the application of concentration and other mining processes but before the application of smelting and refining processes.¹⁶¹

Thus, if a miner smelted and refined his concentrate and sold the finished metals, the representative market or field price of the concentrate at the mine or mill would be the miner's gross income from the property.¹⁶² On the other hand, if a miner sold his concentrate f.o.b. mine, the miner's gross income from the property would be his sales price for the concentrate. In either case, storage and bulk loading of

161. In pertinent part, article 221(g) defined "gross income from the property" as:

the amount for which the taxpayer sells (a) the crude mineral product of the property or (b) the product derived therefrom, not to exceed in the case of (a) the representative market or field price (as of the date of sale) of crude mineral product of like kind and grade before transportation from the immediate vicinity of the mine or well, or in the case of (b) the representative market or field price (as of the date of sale) of a product of the kind and grade from which the product sold was derived, before the application of any processes (to which the crude mineral product may have been subjected after emerging from the mine or well) with the exception of those listed below, and before transportation from the place where the last of the processes listed below was applied. If there is no such representative market or field price (as of the date of sale), then there shall be used in lieu thereof the representative market or field price of the first marketable product resulting from any process or processes minus the costs (including transportation costs) of the processes not listed below. The processes excepted are as follows:

(3) In the case of *iron ore* and ores which are customarily sold in the form of the crude mineral product—*sorting or concentrating* to bring to shipping grade, and loading at the mine for shipment; and

(4) In the case of *lead, zinc, copper, gold or silver ores* and ores which are not customarily sold in the form of the crude mineral product—*crushing, concentrating (by gravity or flotation), and other processes to the extent to which they do not benefit the product in greater degree (in relation to the crude mineral product on the one hand and the refined product on the other) than crushing and concentrating (by gravity or flotation).*

(emphasis added).

162. Treas. Reg. 77, art. 221(g) (1933).

the concentrate at the mine site were treated as mining processes.

The clear intent of the Revenue Act of 1932 and the 1933 regulations was that a large, integrated miner-manufacturer should have the same depletion allowance as the small miner who does not have a smelter. This point was reaffirmed by the Treasury during Congressional hearings on percentage depletion in 1942.¹⁶³

The 1933 regulations contained a limited specification of processes which were included in the computation of gross income from the property. In the case of iron ore and other "C" minerals, the regulations specified sorting, concentrating and loading for shipment at the mine as included pro-

163. *Hearings Before a Subcomm. of the Special Senate Comm. on the Investigation of Silver*, 77th Cong., 2d Sess. 763-64 (1942). Mr. Lewis P. Andresen, Chief, Natural Resources Section, Internal Revenue, United States Treasury, testified at these hearings as follows:

Basically, we have the conception we should treat all taxpayers alike. I think you will agree that we have tried to do that. The act which speaks in terms of mines, oil and gas, and gas wells, timber, and other natural deposits, never speaks of smelters, manufacturing plants, marketing systems, or transportation systems. Early in the days of percentage depletion oil and gas companies took the product of the well, put it through a plant and produced gasoline, and then said to us, "There is the first marketable product." This is what Congress intended percentage depletion should apply to. The Court settled it in the case of Signal Gasoline Corporation v. Commissioner, 77 Fed. (2d) 728, and held that Congress intended that the percentage depletion should apply to the price at which the product would have sold at the mouth of the mine or well and not to the price for which the refined product was sold.

In the committee hearings, it was made clear that the basis of gross income for the property was to be net smelter returns to the operator of the mine; in other words, depletion relates to the price he could get for the concentrates from a smelter, assuming that the smelter would get a reasonable profit for the investment in addition to its depreciation and costs. We then found ourselves face to face with taxpayers who own mines, smelters, refineries, and marketing systems. These taxpayers contended they should have depletion based on the sale of the refined product—the metal. If we had allowed that, it would have provided them with a substantially greater depletion allowance than the miner would have, who only owns a mine and a mill.

What the mine owner would have sold the ore for in the form of a concentrate at the mine provides the gross income from the mining property for percentage depletion purposes. When he beneficiates the product in greater degree, we must deduct from the selling price the costs of other processes such as smelting, roasting, refining, selling and the proportionate profits attributable to those, to arrive at gross income from the mining property. Don't you think this is basically fair to taxpayers and puts them all on the same basis?

Id. (emphasis added).

cesses. In the case of lead, zinc, copper, gold, silver and other "D" minerals, the regulations stated that concentrating (by gravity or flotation) and "other processes to the extent to which they do not beneficiate the product in greater degree . . . than crushing and concentrating" were includable processes. Thus, under a literal reading of the 1933 regulations, storage and loading for shipment of "D" ores or concentrates at the mine were includable processes, since neither storage nor loading for shipment beneficiated the product¹⁶⁴ in greater degree than concentration.

In the early 1940's, the Bureau of Internal Revenue took the position that certain processes, such as the furnacing or retorting of quicksilver ores and the cyanidation of gold ores, must be excluded from the computation of gross income from the property. The Bureau argued that those processes were excludable from the depletion base because they were not specifically mentioned in the regulations, even though furnacing of quicksilver and cyanidation of gold were generally regarded by miners as the equivalent of concentration.¹⁶⁵ This position was a reversal of the Treasury's prior administrative practice. During the 1930's, taxpayers had *not* subtracted the costs of those processes in determining their gross income from mining, and the Treasury had not challenged that treatment.¹⁶⁶

In order to resolve the controversy between miners and the Treasury with respect to whether furnacing of quicksilver and cyanidation of gold were mining processes, Congress in 1943 inserted a definition of gross income from the property in the statute.¹⁶⁷ Gross income from the property was defined as "gross income from mining," and "mining" was defined as including the "ordinary treatment processes

164. "Beneficiation" has been defined as: "a. The dressing or processing of ores for the purpose of (1) regulating the size of a desired product, (2) removing unwanted constituents, and (3) improving the quality, purity, or assay grade of a desired product. . . ." BUREAU OF MINES, U.S. DEPT OF THE INTERIOR, A DICTIONARY OF MINING, MINERAL AND RELATED TERMS 97 (1968).

165. See *id.* at 858-59; *Hearings on H.R. 3687 Before the Senate Comm. on Finance*, 78th Cong., 1st Sess. 527-28 (1943).

166. *Hearings on H.R. 3687 Before the Senate Committee on Finance*, 78th Cong., 1st Sess. 527 (1943).

167. Revenue Act of 1943, § 124(a) (4) (C), ch. 63, 58 Stat. 21, 45.

normally applied by mine owners . . . to obtain the commercially marketable mineral product. . . ."¹⁶⁸ The statute specifically identified certain processes as ordinary treatment processes for "C" and "D" minerals, and specifically identified certain processes (i.e., electrolytic deposition, roasting, thermal or electric smelting and refining) as not constituting ordinary treatment processes for "D" minerals.¹⁶⁹ Cyanidation of gold and furnacing of quicksilver ores were both listed as ordinary treatment processes.¹⁷⁰

The designation of ordinary treatment processes in the Revenue Act of 1943 was not intended to effect a change in the law. The legislative history of the Revenue Act of 1943 clearly indicates that the amendment to the depletion statute was merely intended to make explicit what Congress had intended in the Revenue Act of 1932 when it extended percentage depletion to metal mines.¹⁷¹

168. Revenue Act of 1943, § 124(c), ch. 63, 58 Stat. 21, 45. The Revenue Act of 1943 added a new subdivision (B) to § 114(b) (4) of the Internal Revenue Code of 1939, as follows:

(B) *Definition of Gross Income From Property.* As used in this paragraph the term "gross income from the property" means the gross income from mining. *The term "mining," as used herein, shall be considered to include not merely the extraction of the ores or minerals from the ground but also the ordinary treatment processes normally applied by mine owners or operators in order to obtain the commercially marketable mineral product or products.* The term "ordinary treatment processes," as used herein, shall include the following:

(iii) . . . 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*; and

(iv) 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 quicksilver ores.*

Id. (emphasis added).

169. *Id.*

170. *Id.*

171. The Senate report explained the purpose of the 1943 amendment to the depletion statute as follows:

Section 114(b) (4) of the Code is amended to include a definition of "gross income from the property" for purposes of percentage depletion of mines The purpose of the provision is to make certain that the ordinary treatment processes which a mine operator would normally apply to obtain a marketable product

In summary, two points are clear from the legislative history of the depletion statute. First, Congress intended percentage depletion—like prior depletion allowances extending back to 1913—to be based on the f.o.b. mine price of the mineral product sold by the unintegrated miner. Second, Congress intended that large, integrated miner-manufacturers have the same depletion allowance as small, unintegrated miners. Thus, loading for shipment at the mine by an unintegrated “D” miner should be a mining process and included in the computation of gross income from the property, and loading for shipment of a manufactured product by an integrated “D” miner-manufacturer should be a non-mining process and excluded from the computation of gross income from the property.

VII. THE TREASURY’S 1959 PROPOSED LEGISLATION AND THE GORE AMENDMENT

The definition of gross income from the property, which was added to the depletion statute by the Revenue Act of 1943, was codified without significant change in the Internal Revenue Code of 1954.¹⁷² The 1954 Code did, however, reorganize the depletion statute into three subsections.¹⁷³

should be considered as a part of the mining operation, and to give reasonable specification of what are to be considered such processes for various kinds of classes of mines.

The law has never contained such a definition, and its absence has given rise to numerous disputes. *The definition here prescribed expresses the congressional intent of these provisions as first included in the law, and is in accord with the original regulations and the Bureau practices and procedures thereunder. It is therefore made retroactive to the date of such original provisions.*

S. REP. NO. 627, 78th Cong., 1st Sess. 23-24 (1943) reprinted in 1944 C.B. 973, 991 (emphasis added).

See also 88 CONG. REC. (pt. 6) 8033 (1942) [colloquy between Senator Thomas and Senator Johnson].

172. The only change in the definition of gross income from the property between 1943 and 1954 was an amendment in 1950, which provided that gross income from mining included “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 the ordinary treatment processes are applied thereto as is not in excess of 50 miles . . .” Revenue Act of 1950, § 207(a), ch. 994, 64 Stat. 906, 931.

173. The original depletion provisions in the 1954 Code read in pertinent part as follows:

§ 613. Percentage depletion

(a) *General rule.*—In the case of the mines, wells, and other natural deposits listed in subsection (b), the allowance for depletion under section 611 shall be the percentage, specified in subsection (b), of the gross income from the property Such allow-

The language in the statute that mining included "the ordinary treatment processes normally applied by mine owners or operators in order to obtain the commercially marketable mineral product" was the subject of considerable litigation during the 1950's. Taxpayers took the position that the term "ordinary treatment processes" included all processes which a miner applied to produce a marketable mineral product, and the courts sustained this argument in several cases. The two leading cases were *United States v. Cherokee Brick & Tile Co.*¹⁷⁴ and *Dragon Cement Co., Inc. v. United States*.¹⁷⁵ The effect of these decisions was to allow integrated miner-manufacturers to claim percentage depletion on the sales price of their manufactured products, such as cement and brick.

ance shall not exceed 50 percent of the taxpayer's taxable income from the property (computed without allowance for depletion). . . .

(b) *Percentage depletion rates*

(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 ordinary treatment processes normally applied by mine owners or operators in order to obtain the commercially marketable mineral product or products, 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 the ordinary treatment processes are applied thereto as is not in excess of 50 miles. . . .

(4) *Ordinary treatment processes.*—The term "ordinary treatment processes" includes the following:

(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 fluor-spar 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 quicksilver ores.* . . .

68A Stat. 1, 208-09 (1954) (emphasis added).

174. 218 F.2d 424 (5th Cir. 1955).

175. 244 F.2d 513 (1st Cir. 1957), *cert. denied*, 355 U.S. 833 (1957).

In response to these "end product" depletion cases, the Treasury submitted a bill to Congress in February 1959 which would have eliminated the phrase "commercially marketable mineral product or products" from section 613(c) (2).¹⁷⁶ In addition, the Treasury's bill combined "C" and "D" minerals into a single category and specified certain treatment processes, including loading for shipment, as mining processes for those minerals. The Treasury's bill also contained a "sudden death" provision which provided that

176. In pertinent part, the Treasury's 1959 bill proposed to amend section 613(c) as follows:

(2) MINING.—The term "mining" means the extraction of the ores or minerals from the ground, the treatment processes considered as mining described in paragraphs (3) and (4), 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. . . .

(3) TREATMENT PROCESSES CONSIDERED AS MINING.—The following treatment processes where applied by the mine owner or operator with respect to the minerals or ores extracted from the ground by him shall be considered as mining—

(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 all other minerals or ores—*(i) where applied to crude minerals or ores - crushing, grinding, sorting, screening, washing, and drying to remove free moisture; (ii) beneficiation by concentration, and the processes necessary thereto; (iii) beneficiation by cyanidation, leaching, crystallization, or precipitation, and the processes necessary thereto; (iv) *any additional process, if necessary, to bring the mineral or ore to form and condition suitable for shipment; and (v) loading for shipment. . . .* The processes referred to in (iv) are those processes which are necessary to bring the mineral or ore to the physical form and condition in which it is capable of being transported as distinguished from those processes applied to make the mineral or ore saleable. The term "loading for shipment" shall not include the cost of packaging unless otherwise provided for under (iv), nor shall it include the cost of containers, bags, or any similar items;

(4) TREATMENT PROCESSES NOT CONSIDERED AS MINING.—The following treatment processes shall not be considered as "mining"—

(A) In the case of all minerals or ores - 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, *unless such processes are otherwise provided for in paragraph (3); and*

(B) Notwithstanding any other provisions of this subsection, *any treatment process which follows a process that is not considered as "mining" will not be considered as mining for the purpose of this subsection.*

Hearings on Mineral Treatment Processes for Percentage Depletion Purposes Before the House Comm. on Ways and Means, 86th Cong., 1st Sess. 1b-2 (1959) [hereinafter cited as 1959 Hearings] (emphasis added).

any treatment process which follows a nonmining process is itself a nonmining process.¹⁷⁷

The purpose of the Treasury's 1959 bill was to reverse cases such as *Cherokee Brick* and *Dragon Cement*, and restate more clearly what had been Congress' intention in the Revenue Acts of 1932 and 1943—namely, that gross income from the property should *not* be based on the sales price of the refined or manufactured mineral product, but rather should be based on the sales price of the mineral product at the mine after the application of concentration processes. This objective of the 1959 bill was explained by the Treasury at hearings before the House Ways and Means Committee:

The draft bill on mining is intended to restore the rules for computing gross income from mining which were applied prior to the recent court decisions. No attempt has been made to roll back those processes which are treated as mining under express provisions of the statute or by administrative practice.

. . . .

*In broad outline, the draft bill eliminates the commercially marketable product test for determining what processes enter into mining. Instead of the marketability test, which is the source of most of the trouble under the present statute, the draft bill specifies the allowable mining processes and also those which are not allowable as mining.*¹⁷⁸

. . . .

*[T]he present definition of mining in the statute was for the most part added back in 1943 with its cutoff points about what they are now. At that time when Congress enacted the 1943 law, it thought it was simply enacting the past practices of the Service, so that we feel that the courts have gone far beyond the congressional intent in this cutoff area. All we are asking is to push back to the point that we think Congress had in mind when it passed the 1943 law.*¹⁷⁹

. . . .

177. *Id.* (§ 613(c)(4)(B)).

... We propose merely the enactment of the total scheme as it existed under the regulations and the statute from the 1920's to at least 1955, the year of the Cherokee case decision.¹⁸⁰

The inclusion of loading for shipment in the 1959 bill as a mining process for both "C" and "D" minerals is significant because it shows that the Treasury thought it was Congress' intent to treat loading for shipment of ores and concentrates at the mine site (for both "C" and "D" minerals) as a mining process under the existing statute. Several statements made by the Treasury at hearings before the Ways and Means Committee indicate that loading for shipment was specified as a mining process for "D" minerals in the 1959 bill (subject to the sudden death rule) because the Treasury had always treated loading for shipment of a "D" ore or concentrate at the mine site as a mining process under long-standing administrative practice.¹⁸¹ In fact, Mr. Lindsay, Assistant to the Secretary of the Treasury, provided the Committee with a summary of the legislative history of the depletion statute, including a statement made at hearings before the Ways and Means Committee in 1950 that "percentage depletion does not go on the delivery price of potash [a "D" mineral] but rather *it is free on board at the mine.*"¹⁸² Obviously, free on board at the mine includes loading for shipment of the potash at the mine site.

The mining industry, through the American Mining Congress, supported the basic thrust of the Treasury's pro-

178. *Id.* at 7 (emphasis added).

179. *Id.* at 21 (emphasis added).

180. *Id.* at 49.

181. *Id.* at 7, 9. The Treasury stated: "In addition, the definition of processes considered to be mining is broadened in the draft bill to include those ministrative practice: *Id.* In addition, the Treasury stated: The sudden death provision is "needed to prevent processes such as crushing, grinding, and loading for shipment, which are recognized as mining processes when applied to a crude material, from being treated as mining processes when applied after manufacturing has begun." *Id.* at 9 (emphasis added). See also D. Fernald, *Gross Income from Mining: A Critique of Cannelton*, 23 N.Y.U. Institute 1379, 1393 (1965). Mr. Fernald comments: "Where loading [for shipment of "D" minerals] occurs during or at the end of the allowable processes, for example, the loading of concentrates for shipment to a smelter, the long existing practice has been to include such loading as mining." *Id.*; L. Sherfy, *Recent Developments in Meaning of "Gross Income From Mining" for Computation of Percentage Depletion*, 6 ROCKY MTN. MIN. L. INST. 147, 157 (1961).

182. 1959 Hearings, *supra* note 176, at 30, 33 (emphasis added).

posed legislation that marketability should be eliminated as the test of determining what processes should be classified as mining processes.¹⁸³ The American Mining Congress admitted that "the marketability test . . . allows results which go beyond the original concept of the percentage depletion deduction. . . ."¹⁸⁴ However, the Mining Congress pointed out various deficiencies in the bill which were unrelated to the marketability test, but which cut back on existing law in several respects.¹⁸⁵

The Ways and Means Committee deferred action on the Treasury's 1959 bill because of the objections expressed by the American Mining Congress, and also because the Supreme Court had granted certiorari in the *Cannelton* case.¹⁸⁶ In 1960, the Treasury's 1959 depletion bill was offered as an

183. *Id.* at 70.

184. *Id.*

185. Some of the important points of criticism lodged against the 1959 bill by the American Mining Congress were the following. First, the Mining Congress argued that the bill should include a provision that mining processes include not only the listed processes, but also processes "necessary, appropriate, or incidental" to the listed processes. *Id.* at 73. Such a provision was needed because "it is impossible to name and classify all of the countless little actions and processes properly considered as part of the mining process." *Id.* Second, the Mining Congress contended that the bill, in order to accommodate technological changes in the mining industry, should provide that mining processes include processes or combination of processes which produce substantially equivalent results to the listed processes. *Id.* Third, the Mining Congress expressed serious reservations about the "sudden death" provision in the 1959 bill:

Our last problem is our most vexing one—the "sudden death" provision in proposed section 613(c) (4) (B), under which any process which is normally treated as "mining" is not to be so treated if it follows a process which is not considered as "mining."

Obviously, the tax law should not operate to prohibit progress or economical operation. For example, if the producer of a given mineral is obtaining his product solely through the application of "mining" processes, he gets all of those processes, including "loading for shipment."

If this producer then finds that his customers desire a slight improvement in his product, which requires the application of processes not considered "mining," under the proposed draft the producer will no longer get "loading for shipment" because of the application of the "sudden death" clause.

In circumstances such as these, we believe the producer should at least continue to be allowed his "loading for shipment," even though it occurs after a process which he is required to eliminate from "mining."

Naturally, we do not contend that a producer of coal who makes coke [a manufactured product] should get either the conversion to coke or the loading of the coke. But there are many circumstances today where an intervening nonmining process is thrown out of the computation without affecting the permissibility of the remainder of the mining processes.

Id. at 77 (emphasis added).

186. L. Sherfy, *supra* note 181.

amendment to the Public Debt and Tax Rate Extension Act of 1960.¹⁸⁷ Subsequently, the Senate-House Conference Committee agreed to a revised amendment. Like the Treasury's 1959 bill and the original 1960 amendment, the amendment agreed to by the Conference Committee eliminated the marketability test from the definition of mining processes. However, unlike the 1959 bill and the original 1960 amendment, the Conference Committee amendment tracked the existing statute more closely, so as not to change existing Treasury practices in the depletion area which were within the intent of Congress when it passed the Revenue Act of 1943 and which were not involved in the end product depletion cases.¹⁸⁸

Congress passed the Conference Committee amendment, which is commonly referred to as the "Gore amendment."¹⁸⁹ The Gore amendment made no change in the processes which had been specified as mining for "D" minerals under the existing statute.¹⁹⁰ However, the Gore amendment eliminated

187. 196 CONG. REC. (pt. 10) 13216-13218 (1960).

188. Congressman Mills of the House Ways and Means Committee explained the reason for the new amendment as follows:

The language accepted by the House conferees accomplishes the objective of the original amendment. *The language of the original amendment was the same language which was proposed by the Treasury Department and on which the Ways and Means Committee held public hearings last year. In general, we concluded from the hearings that this language would have a number of unintended effects in the way of upsetting long-established Treasury practices in the depletion area which were clearly within the congressional intent and were not involved in the court decisions.*

The new language adopted by the conferees follows much more closely the language in the existing statute to avoid these unintended effects.

106 CONG. REC. (pt. 11) 14546 (1960) (emphasis added). Similarly, Senator Byrd stated:

The amendment the Senator from Tennessee offered was one prepared by the Treasury Department, on which the House Committee on Ways and Means held hearings in March 1959. *Those hearings disclosed certain technical deficiencies in the earlier Treasury draft; and to correct these, the Treasury and committee staffs this last summer made certain technical corrections in the earlier draft. This revised draft, with a relatively few changes, is the one which is in the conference agreement. These changes were suggested by the Treasury and staff to the conferees.*

106 CONG. REC. (pt. 11) 14513 (1960) (emphasis added).

189. Public Debt and Tax Rate Extension Act of 1960, Pub. L. No. 86-564, § 302(b) and (c), 74 Stat. 290 codified at I.R.C. § 613 (c) (2), (4) and (5) (1976).

190. Both before and after the Gore amendment, section 613(c) (4) (D) specified crushing, grinding, beneficiation by concentration, cyanidation, leaching, crystallization, precipitation and substantially equivalent processes as "mining" for "D" minerals. The Gore amendment amended section 613(c) (2) to provide that processes which were "necessary or incidental" to min-

the prior language in section 613(c) (2) that mining included "the ordinary treatment processes normally applied by mine owners or operators in order to obtain the commercially marketable mineral product or products." The Gore amendment also added a new paragraph (c) (5) to section 613 listing certain processes which are not to be considered as mining, unless they are specified as mining processes in section 613(c) (4) or are necessary or incidental to such specified mining processes. Congress' intent in passing the Gore amendment was to reverse the end product depletion cases of the 1950's, without changing existing administrative practices in the depletion area or otherwise cutting back on the depletion allowance allowed miners.¹⁰¹

VIII. CASE LAW

There are no depletion cases which specifically address the question of whether storage and loading for shipment of "D" minerals are mining processes.¹⁰² However, several cases support the proposition that gross income from mining is the f.o.b. mine price of an ore or mineral which has been produced solely by mining processes, including storage and loading for shipment of the mineral product at the mine site.

In *United States v. Cannelton Sewer Pipe Co.*,¹⁰³ the Supreme Court discussed the Shepherd Report and the recommendation therein that gross income from mining be based on "the competitive market receipts, or its equivalent, received from the sale of the crude products, or concentrates on an f.o.b. mine, mill or well basis."¹⁰⁴ The Supreme Court concluded that "[e]ver since the first percentage depletion statute, the cut-off point where 'gross income from mining' stopped has been the same, i.e., where the *ordinary* miner shipped the product of his mine."¹⁰⁵ Thus, it is clear that

ing processes designated in section 613(c) (4) (D) were themselves mining processes. *Id.*

191. 106 CONG. REC. (pt. 11) 14546 (1960).

192. The question of whether storage and loading for shipment of "D" minerals are mining processes is one of the issues to be decided in a case presently pending before the United States Tax Court, *Ideal Basic Industries, Inc. v. Commissioner*, No. 11847-78 (tried Feb. 23-26, 1981).

193. 364 U.S. 76 (1960).

194. *Id.* at 83.

195. *Id.* at 87 (emphasis added).

the Supreme Court considered storage and loading for shipment at the mine by the "ordinary" miner (*i.e.*, the unintegrated miner who does not process his ore or mineral into a manufactured product) to be allowable mining processes.

In *Dow Chemical Co. v. Commissioner*,¹⁹⁶ the taxpayer extracted natural brine from the ground and processed the brine to obtain bromine, sodium chloride, potassium chloride (potash), calcium chloride, magnesium hydroxide and magnesium chloride.¹⁹⁷ The Tax Court held that the brine was an ore not customarily sold in the form of a crude mineral product within the meaning of section 613(c)(4)(D), and that the processes which the taxpayer used to extract the various minerals from the brine were precipitation, crystallization, leaching and other equivalent processes denominated as mining in section 613(c)(4)(D).¹⁹⁸

The Tax Court held that Dow Chemical's gross income from mining was the "actual sales price" of the minerals which it extracted from the brine, with minor adjustments for added ingredients.¹⁹⁹ The Tax Court specifically held that Dow Chemical's gross income from mining with respect to potassium chloride (potash) was the "actual sales price" of the potash.²⁰⁰ In addition, the Court held that Dow Chemical's depletion base with respect to bromine was the "f.o.b. plant price," which clearly included storage and loading for shipment of the bromine at the mine.²⁰¹

In Revenue Ruling 73-538, the Internal Revenue Service held that a miner's storage of potash at the mine pending loading for shipment and sale to customers was a nonmining process because storage is not designated as a mining process in section 613(c)(4)(D), and because the storage merely facilitated the subsequent loading for shipment of the pot-

196. 51 T.C. 669 (1969), *aff'd*, 433 F.2d 283 (6th Cir. 1970).

197. 51 T.C. at 672.

198. *Id.* at 679 n.2, 681, 683-84.

199. *Id.* at 672-73, 684.

200. *Id.* at 673.

201. *Id.* at 672. Loading for shipment of a "D" mineral was also treated as a mining process in *Filtrol Corp. v. United States*, 727 CCH ¶ 7911 (1972), *aff'd per curiam on other grounds*, 487 F.2d 536 (Ct. Cl. 1973).

ash.²⁰² The motivation for the ruling may be that potash miners—due to the seasonal nature of the fertilizer industry—store their mineral product at the mine site for longer periods of time than other “D” miners. The Commissioner might be concerned that potash producers will stockpile muriate until the peak fertilizer season (generally February through April), at which time they can sell the muriate for a higher price and, incidentally, claim a greater percentage depletion deduction than they would have been entitled to if they had sold the potash during the off-season.²⁰³

The absurdity of the Service's position is vividly illustrated by Cominco Ltd.'s zinc and lead mine at Little Cornwallis Island, Northwest Territories, Canada. Cominco's mine is only 900 miles from the North Pole and, because of frozen seas, Cominco can ship the concentrate it produces at the mine site only during the summer months when vessels are able to navigate the ice-jammed waters.²⁰⁴ As a result, Cominco stockpiles the zinc and lead concentrate at the mine for most of the year.²⁰⁵ Would the Service take the position in that situation that storage and loading for shipment were nonmining processes, simply because the miner was unable to ship the concentrate as it was produced?

In effect, the Commissioner is arguing in Revenue Ruling 73-538 that the miner is engaged in two activities, *i.e.*, (i) mining and concentrating potash, and (ii) storing potash for sale at an opportune time. The Commissioner's position in this regard is similar to an argument which the Court of

202. Rev. Rul. 73-538, 1973-2 C.B. 198, 199.

203. As a practical matter, it is unlikely that a potash producer would stockpile muriate in anticipation of receiving a higher price. The inventory and carrying costs associated with storing muriate generally exceed any price premium which the miner might receive for the muriate during the peak spring season. Moreover, there is no basis in the statute, regulations or case law for the Service's legal premise that storage of a “D” mineral is a nonmining process if the miner—for whatever reason—stores the mineral product for extended periods of time. Similarly, the characterization of loading for shipment as a mining process should not depend upon how quickly the miner loads his mineral product after completion of the concentrating processes.

204. Urquhart, *Northward Ho! Canada's Mining Firms Turn to Arctic Islands, Site of Rich Resources*, Wall St. J., Feb. 5, 1982, at 1, col. 2.

205. *Id.*

Appeals for the Eighth Circuit rejected in *Lumaghi Coal Co. v. Helvering*.²⁰⁶

The issue before the Court in *Lumaghi* was whether the taxpayer was engaged only in the business of mining coal, as contended by the Commissioner, or in two businesses, mining coal and storage operations, as contended by the taxpayer. The taxpayer shipped most of its coal by rail cars which, prior to 1931, were loaded at the tipple of the mine.²⁰⁷ During 1931, the taxpayer erected six concrete bins or silos, approximately 800 feet from the mine, and adopted the practice of transporting a portion of its coal to the silos.²⁰⁸ The Court found the purpose of the silos to be as follows:

The advantage of having the silos lay principally in the fact that *the mine was operating only fourteen or fifteen days per month and ordinarily coal could be delivered at the tipple only when the mine was in operation*. By having the silos, purchasers of coal could be supplied at any time and the coal could be loaded in trucks for immediate shipment. *The erection of the silos enabled petitioner to sell substantially more coal than it otherwise could have sold.*²⁰⁹

The taxpayer in *Lumaghi* had excluded all expenses attributable to the operation of the silos and storage plants in computing its "net income from the property" for percentage depletion purposes. The Board of Tax Appeals had held that the taxpayer was not entitled to exclude those expenses in computing its net income from the property. According to the Board, the expenses the taxpayer incurred in operating its silos and storage plants were "attributable to its [single] business of mining and selling coal."²¹⁰

On appeal, the taxpayer argued that it was not engaged in only one business and that the expenses which it incurred in connection with the silos and storage plants should not be

206. 124 F.2d 645 (8th Cir. 1942).

207. *Id.* at 646.

208. *Id.*

209. *Id.* (emphasis added).

210. *Id.* at 647.

charged against the income of its mining operations. The Court of Appeals rejected the taxpayer's arguments, stating:

But a coal mine in operation implies as a usual and customary incident some kind of a plant for the extraction of the coal and making it accessible for transportation. The addition of the silos and storage to the mine tipple of the taxpayer effecting more continuous service and larger volume of output can scarcely be said to have changed the nature of the mining or to have split what was concededly one activity into two.²¹¹

Similarly, the fact that most miners have storage warehouses on their mine premises should not change the nature of their mining operations, or cause them to be engaged in a separate business of storing the mineral products they produce.

The only cases which arguably support the holding of Revenue Ruling 73-538 that loading for shipment of "D" minerals is a nonmining process are two Tenth Circuit cases, *Utco Products, Inc. v. United States*²¹² and *American Gilsonite Co. v. Commissioner*.²¹³ The issue before the court in both *Utco* and *American Gilsonite* was whether bagging or sacking was an ordinary treatment process under the pre-Gore depletion statute. Neither case involved loading for shipment of the mineral product in bulk. However, in the course of holding that bagging and sacking were nonmining processes, the Court of Appeals in both of those cases analogized bagging and sacking to loading for shipment, and noted in dictum that loading for shipment was not an ordinary treatment process for minerals which are not customarily sold in the form of a crude mineral product. A close examination of the facts in those cases and subsequent Tenth Circuit cases clearly indicates, however, that the Tenth Circuit does *not* consider loading for shipment of "D" minerals to be a nonmining process.

211. *Id.* at 648 (emphasis added).

212. 52 AFTR 1823 [57-2 USTC ¶ 10,013] (D. Utah 1957), *rev'd*, 257 F.2d 65 (10th Cir. 1958).

213. 28 T.C. 194 (1957), *rev'd*, 259 F.2d 654 (10th Cir. 1958), *cert. denied*, 359 U.S. 925 (1959).

The taxpayer in *Utco* mined perlite from a deposit located near Milford, Utah.²¹⁴ After extraction, the raw perlite was shipped from Milford to the taxpayer's processing plant at Salt Lake City, Utah.²¹⁵ At the processing plant, the raw perlite was crushed and then introduced into a rotary kiln where it was expanded in size by the application of heat.²¹⁶ The expansion of perlite by thermal action is commonly referred to as "popping." After popping, the taxpayer placed the expanded perlite in storage bins, from which it was bagged and sold to lumber yards and other retailers of building materials.²¹⁷

The Court of Appeals held that bagging of the expanded perlite was not an ordinary treatment process normally applied by mine owners or operators, and therefore was not a mining process.²¹⁸ Then the court proceeded to make the following statement:

It is significant that the statute, in dealing with certain minerals: Coal, sulphur, iron ore, bauxite, ball and sagger clay, rock asphalt and minerals which are customarily sold in the form of the crude mineral product, *includes in the term "mining" loading for shipment, but makes no such provision with respect to perlite or for the placing of the perlite in containers for shipment or marketing.*

*Expanded perlite is not a crude mineral. Rather, it is a refined product.*²¹⁹

Several points can be made about the *Utco* decision. First, the Court of Appeals held that expanded perlite was a manufactured product, not a mined product. It is well-established that the process of popping perlite by the application of heat is a nonmining process.²²⁰ Thus, even if the taxpayer

214. 257 F.2d at 66.

215. *Id.*

216. *Id.*

217. 52 AFTR at 1823 (finding of fact no. 4); 257 F.2d at 66.

218. 257 F.2d at 68.

219. *Id.* (emphasis added).

220. Treas. Reg. § 1.613-4(g) (6) (viii) (1972). This regulation states that "the term 'thermal action' refers to processes which involve the application of artificial heat to ores or minerals, such as, for example, . . . the expansion or popping of perlite" See also Prop. Reg. § 1.613-3(g) (6) (viii) (1968).

in *Utco* had loaded the expanded perlite in bulk, rather than bagging the product, the process of loading for shipment would have been a nonmining process because the perlite had been subjected to a nonmining process (*i.e.*, popping) prior to loading. There is no question that loading for shipment of a manufactured product, such as expanded perlite, is a nonmining process.²²¹

Second, the analogy the Court of Appeals made in *Utco* between bagging or "placing . . . perlite in containers for shipment" and loading for shipment is legally unsound. Bagging and loading for shipment have consistently been treated in the cases and regulations as two completely different processes.²²² Thus, the bagging process at issue in *Utco* would have been a nonmining process even if the perlite had not been subjected to popping prior to bagging.

Third, the court's statement that the statute treats loading for shipment as a mining process in the case of minerals customarily sold in the form of a crude mineral product, "but makes no such provision with respect to perlite," rests upon an inaccurate assumption that perlite is a mineral not customarily sold in the form of a crude mineral product. In fact, perlite is customarily sold in the form of a crude mineral product (*i.e.*, before popping), and thus is a "C" mineral.²²³

For the foregoing reasons, *Utco* does *not* support the proposition that loading for shipment in bulk of a "D" mineral is a nonmining process, where the "D" mineral is *not* upgraded by the application of nonmining processes prior to loading.

The Commissioner may be also relying on the Tenth Circuit's opinion in *American Gilsonite* as authority for the

221. Treas. Reg. § 1.613-4(d)(3)(iii)(b) (1972).

222. Compare Treas. Reg. § 1.613-4(d)(3)(iii)(a) (1972) (bagging is a nonmining process without regard to whether the mineral product which is bagged is a mined or a manufactured product) with Treas. Reg. § 1.613-4(d)(3)(iii)(b) (1972) (loading for shipment in bulk is a nonmining process only if the mineral product which is loaded is a manufactured product).

223. See Treas. Reg. § 1.613-4(f)(3)(ii) (1972) (refers to the popping of perlite as an example of a nonmining process which can be applied to a "C" mineral). See also Prop. Reg. § 1.613-3(f)(5)(iii)(f) (1968) (specifically states that perlite is a "C" mineral customarily sold in the form of a crude mineral product).

proposition that loading for shipment of "D" minerals is a nonmining process. Like *Utco*, the issue in *American Gilsonite* was whether bagging or sacking was an ordinary treatment process under the pre-Gore depletion statute.

The taxpayer in *American Gilsonite* mined gilsonite near Bonanza, Utah.²²⁴ After extraction from the ground, the gilsonite ore was cleaned by washing and blowing, crushed, screened and sorted into three different sizes.²²⁵ The three sizes of gilsonite were stored in separate bins until the receipt of customers' orders.²²⁶ Upon receipt of customers' orders, the taxpayer hauled the gilsonite by truck from Bonanza to Craig, Colorado, a distance of 113 miles, where the taxpayer maintained a plant for bagging the gilsonite into 100-pound sacks.²²⁷ The gilsonite was not subjected to any process other than bagging at the Craig plant.²²⁸

Relying upon its decision in *Utco*, the court of appeals in *American Gilsonite* held that income attributable to bagging and loading for shipment of the bagged gilsonite at Craig was not includible in gross income from mining.²²⁹ The Court stated that "since gilsonite is not customarily sold in the form of a crude mineral product, 'loading for shipment' is not an ordinary treatment process."²³⁰

For several reasons, the Tenth Circuit's holding in *American Gilsonite* is not inconsistent with the proposition that storage and loading for shipment of "D" minerals can be mining processes. First of all, the process in dispute in *American Gilsonite* was bagging, and, as previously discussed, bagging and loading for shipment in bulk are two completely different processes. The former is always a nonmining process, whereas the latter is a nonmining process only if the mineral product which is loaded is a manufactured product.

224. 28 T.C. at 195.

225. *Id.*

226. *Id.* at 198.

227. *Id.* at 196, 198.

228. *Id.* at 198.

229. 259 F.2d at 657.

230. *Id.*

Second, the taxpayer's storage of the gilsonite at the mine near Bonanza, and the taxpayer's bulk loading of the gilsonite onto trucks at Bonanza, were *not* challenged by the Commissioner as nonmining processes. Indeed, it is clear from the opinion that storage and bulk loading at the mine were treated as mining processes.²³¹ The storage and loading for shipment which took place at Bonanza were treated as mining processes because the mineral product which was stored and loaded had been produced solely by mining processes.

Finally, the Tenth Circuit's statement that gilsonite is not customarily sold in the form of a crude mineral product is plainly erroneous. Indeed, the Treasury has acknowledged that gilsonite is a "C" mineral customarily sold in the form of a crude mineral product.²³² Furthermore, the Tenth Circuit's own opinion in *American Gilsonite* states that only the mining processes of cleaning, crushing and screening were applied to the gilsonite at Bonanza. The subsequent nonmining bagging process at Craig certainly did not change the character of the gilsonite from a crude mineral product to one which is not customarily sold in the form of a crude mineral product.²³³

In summary, the Tenth Circuit's opinions in *Utco* and *American Gilsonite* do not support the Commissioner's position in Revenue Ruling 73-538 that loading for shipment of "D" minerals is categorically a nonmining process. Indeed, *American Gilsonite* indicates that loading for shipment at the mine site—as distinguished from bagging—is a mining process where the mineral product has not been subjected to nonmining processes prior to loading.

In any event, the most recent depletion case decided by the Tenth Circuit shows that the court considers loading for shipment of "D" minerals at the mine to be a mining process, where the mineral product has not been subjected to prior

231. *Id.* at 656.

232. Prop. Reg. § 1.613-3(f) (5) (iii) (f) (1968).

233. See Treas. Reg. § 1.613-4(f) (3) (iv) (1972).

nonmining processes. In *Ranchers Exploration and Development Corp. v. United States*,²³⁴ the taxpayer corporation produced copper at its Bluebird Mine in Arizona by solvent extraction and electrowinning processes. The court of appeals held that the solvent extraction and electrowinning processes were mining processes under section 613(c)(4)(D).²³⁵ Accordingly, the corporation was permitted to claim percentage depletion "upon the gross sales of the electrowon copper cathodes produced at the Bluebird Mine. . . ."²³⁶

Although loading for shipment at the mine was not an issue in the case, one of plaintiff's trial exhibits shows that the copper cathodes were loaded for shipment at the mine.²³⁷ The Commissioner's failure to challenge loading for shipment as a nonmining process in *Ranchers* is inconsistent with the Service's position in Revenue Ruling 73-538. Copper and potash are both "D" minerals. The copper cathodes in *Ranchers* and the potash in Revenue Ruling 73-538 were both produced exclusively by mining processes. There appears to be no reason why loading for shipment of both of those mineral products should not be classified as a mining process. As mentioned above, the Commissioner's inconsistent position may be based on the fact that the potash producer in the ruling stockpiled his mineral product for several months before loading it, while the copper producer in *Ranchers* may have loaded its copper cathodes almost immediately after producing them.

A recent ruling also indicates that the Commissioner may not be consistently treating storage and loading for shipment as nonmining processes for all similarly situated "D" producers. In Revenue Ruling 81-235, the Commissioner held that the decarbonation (by calcining) of trona, a "D" mineral, to produce soda ash was essentially a concentration process and therefore a mining process.²³⁸ Although

234. 42 AFTR 2d 5561 [78-2 USTC ¶ 9556] (D.N.M. 1978), *aff'd*, 46 AFTR 2d 6124 [80-2 USTC ¶ 9815] (10th Cir. 1980).

235. 46 AFTR 2d at 6126-6129.

236. *Id.* at 6125.

237. *Id.* ["the cathodes . . . are removed from the cells, washed, bundled and shipped for sale"] (emphasis added). Plaintiff's trial exhibit 13 shows that the copper was loaded for shipment at the mine.

238. Rev. Rul. 81-235, 1981-2 C.B. 140.

the ruling does not discuss storage and loading for shipment of the soda ash at the mine site, the ruling clearly indicates that if decarbonation were considered a mining process, percentage depletion would be based on the *market value* of the soda ash extracted from the trona.²³⁹ Because soda ash is generally sold f.o.b. mine,²⁴⁰ the market value of soda ash must include storage and loading for shipment by the miner at the mine site.

IX. CONCLUSION

The position taken by the Internal Revenue Service in Revenue Ruling 73-538 finds no support in the depletion statute or the case law, and, moreover, is contrary to the legislative history of the statute and to various provisions in the Treasury regulations. The legislative history clearly shows that Congress intended the f.o.b. mine price of the mineral product produced by the unintegrated miner to constitute "gross income from the property." The Treasury regulations reflect that Congressional intent. For many years, the regulations have provided that storage and loading for shipment of "manufactured" products are nonmining processes, thus indicating that storage and loading for shipment are mining processes if the mineral products which are stored and loaded have been beneficiated exclusively by mining processes.

The practical effect of Revenue Ruling 73-538 is to force all unintegrated producers of "D" minerals to calculate their percentage depletion deduction by the proportionate profits method. By classifying storage and loading for shipment at the mine site as nonmining processes, the Service is able to prevent "D" miners from using their actual sales prices or representative market or field prices to establish gross income from the property. As a result, income which is really attributable to the profits of an efficient, productive mine and concentrating facility can be subtracted from the deple-

239. *Id.*

240. 1980 MINERAL FACTS AND PROBLEMS, *supra* note 41, at 846; 1978-1979 MINERALS YEARBOOK, *supra* note 59, at 838.

tion base and asserted to represent "profit" from on-site storage and loading operations.

Ironically, the Service's position in Revenue Ruling 73-538 is the opposite extreme of the position which taxpayers had argued prior to 1960. Prior to the *Cannelton* decision and the Gore amendment, some integrated miner-manufacturers had successfully argued that they were entitled to percentage depletion on the sales price of their first commercially marketable product, even if that first commercially marketable product were a manufactured product. The *Cannelton* decision and the Gore amendment overturned those end-product depletion cases. The Internal Revenue Service in Revenue Ruling 73-538 now goes to the other extreme and holds that even ordinary miners of "D" minerals are integrated miner-manufacturers if they temporarily store their mineral product at the mine site, and load the mineral product in bulk for shipment to customers. This position should not be accepted by the courts.