Monsanto Company (Monsanto) has appealed from a May 8, 1996, Decision by an Associate Director of the Minerals Management Service (MMS), affirming a May 28, 1993, Decision of the Valuation and Standards Division (VSD), Denver, Colorado. The VSD Decision required Monsanto to report and pay royalties beginning in September 1986 on gross proceeds from the sale of by-products containing "associated and related minerals" recovered from phosphate ore mined on Federal lease Nos. M12-011683-0, M12-015122-0, and M12-011451-0.

Furnace grade phosphate shale from the Federal leases is processed in Monsanto's elemental phosphorus plant located near Soda Springs, Idaho. At the plant, ore is heated in electric furnaces to liberate elemental phosphate as gas. The gas is then cleaned by an electrostatic precipitator and condensed into liquid form to be marketed. This process enables recovery of minerals such as vanadium, chromium, and iron, present in the ore but not economic to mine separately. The three Monsanto leases refer to these marketable and useful by-products as "associated and related..."
minerals." Removal of gaseous phosphorus leaves behind ferrophosphorus, silicate slag, and precipitator dust, materials that have commercial value and are sold for further processing into vanadium alloys and other products. See VSD Decision, enclosure 1, at 5, 6, and 11.

Lease Nos. M12-011683-0 and M12-011451-0 were issued in May 1963 and September 1960, and will be subject to readjustment in May 2003 and September 2000; lease No. M12-015122-0 was readjusted in 1985. Although worded somewhat differently, all three leases require that Monsanto pay a royalty of not less than 5 percent of the gross value of production from leased deposits at the mine, or not less than 25 cents per ton, whichever is greater, for the right "to mine and dispose of all the phosphate rock and associated and related minerals hereafter referred to as leased deposits." See lease Nos. M12-011683-0 and M12-011451-0, Part I, at sec. 2, and Part II, at sec. 2. The readjusted lease grants Monsanto the right to "mine, extract, remove, beneficiate, concentrate or otherwise process and dispose of the phosphate deposits and associated and related minerals here-in-after referred to as 'leased deposits,'" subject to payment of "a production royalty of 5 percent of the value of the phosphate at the mine, but not less than 25 cents per ton," and provides that MMS may "establish reasonable values for the purpose of computing royalty on any of the leased deposits." (Lease No. M12-05122-0, Part I, sec. 2, and Part II, sec. 2.)

The 1993 VSD Decision found that Monsanto had not been paying royalty "on associated and related minerals" included in the phosphate ore, as it was required to do under section 10 of the Mineral Leasing Act of 1920 (MLA), as amended. 30 U.S.C. § 212 (1994). Affirming this finding, the 1996 MMS Decision concluded that "the base value used by [Monsanto] in calculating and paying royalties did not include the value of associated and related minerals." Id. at 4.

For phosphate leasing, the MLA was amended in 1948 to require that

[all leases shall be conditioned upon the payment to the United States of such royalties as may be specified in the lease, which shall be fixed by the Secretary of the Interior in advance of offering the same, at not less than 5 per centum of the gross value of the output of phosphates or phosphate rock and associated or related minerals.

30 U.S.C. § 212 (1994). A regulation implementing this provision of the MLA was promulgated in 1986; it provides for payment of "such royalties as may be specified in the lease" which shall be "not less than 5 per centum of the gross value of the output of phosphates or phosphate rock and associated or related minerals." 43 C.F.R. § 3511.2-2.

It is the position of MMS that, until the VSD Decision was issued, phosphate valuation methods used by the Department did not include a provision for payment of royalty for associated and related minerals, as
required by the MLA and implementing regulations. (MMS Answer at 4.) It is argued by MMS that the issue on appeal is whether Monsanto's royalty payments included payment for associated and related minerals removed and sold from the Federal leases, as required by law. For the answer to this question, both MMS and Monsanto look to the history of phosphate leasing by the Department.

Over the years, several methods for valuing phosphates have been used by the Department. In 1981, the method in use during the time at issue in this appeal was announced by the predecessor of MMS, wherein it was decided that a royalty "base unit value of $0.337 is indexed to the average annual GNP-IPD index for 1979," and will be assessed for "each unit of P₂O₅ [phosphate] mined." 46 Fed. Reg. 9210 (Jan. 26, 1981). The notice concludes that "[t]his method for establishing reasonable values for phosphate rock at the mine will be used for all phosphate production from Federal leases in the States of Idaho, Montana, Utah, and Wyoming." Id. The base value is stated in terms of the value for each unit of phosphate; the notice explains that "[t]his is the same base value that is currently utilized for phosphate mined on Indian lands in Idaho." Id. at 9210.

This reference to phosphate leasing on Indian lands is, MMS states, directed to an agreement thought to be based on the best available data when advance notice of the new method of computing royalty payments was first published in 1980. See 45 Fed. Reg. 74065 (Nov. 7, 1980), reporting that "a valuation method for phosphate rock mined from the Fort Hall Indian Reservation in Idaho was adopted following negotiations between the Shoshone-Bannock Tribe, the Bureau of Indian Affairs, and the producing companies." The referenced agreements were with FMC Corporation (FMC) and J.R. Simplot Company (Simplot).

The phosphate material removed by FMC and Simplot was, according to MMS, not of the same quality. It is by analysis of this circumstance, MMS explains, that it becomes apparent that the Department failed to include associated and related materials in the valuation equation prior to 1993. The FMC material, like that mined by Monsanto, is said to have been low-grade phosphate shale, being 24.63 percent phosphate, from which associated and related minerals are recovered during processing. See MMS Answer at 5; Ex. A to MMS Answer at 2/8. The Simplot material was of higher quality, and contained 30 percent phosphate, making it usable for fertilizer and from which recovery of associated and related minerals does not occur, because preparation of the agricultural-grade material does not require or use similar processing methods. See MMS Answer at 6. Because the agreement with the Indians treated the low-grade furnace shale and the fertilizer-grade phosphate exactly the same for royalty valuation purposes, MMS concludes that associated and related minerals were not included in the formula for valuing phosphate on ore removed from the FMC lease. (MMS Answer at 6.) By extension, then, the Monsanto lease for similar material is also not paying royalty on associated and related minerals produced from like material.

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Monsanto's Statement of Reasons on appeal (SOR) contends that royalty payments made by Monsanto to MMS met all statutory, regulatory, and lease requirements; that the valuation method in use before the 1993 VSD Decision issued took into account the value of associated and related minerals at the mine; and that the change in royalty valuation is duplicative, unreasonable, and should be reexamined. It is argued that, in the case of the readjusted lease, a "duplicative" royalty cannot be legally imposed under its terms; and that changes in royalty valuation policy cannot be imposed retroactively and are barred by the equitable doctrines of estoppel, waiver, and laches.

Monsanto argues that the valuation plan used by MMS until issuance of the Decision under review (called the index method) is an adaptation of an earlier approach adjusted for inflation (called the Kleppe method), and that both ways of valuation represent "a netback valuation method which accounts for the presence of associated and related minerals in the raw phosphate ore." (SOR at 20.) Monsanto maintains that the MLA does not require assessment of royalties on associated and related minerals separately from phosphate ore, and the Department has never done so. (SOR at 14.) By assessing royalties on "the raw phosphate ore, and associated and related minerals," Monsanto contends, MMS is assessing duplicative royalties.

There is no merit in Monsanto's argument that assessment of royalty on gross proceeds from the sale of by-products derived from phosphate ore is outside the authority of MMS. See generally Staffer Chemical Co., 49 IBLA 381, 386 (1980). While it is apparent that royalties were not previously collected on proceeds from by-products obtained during processing under either of the previous ways of calculating phosphate royalty, nothing prevents MMS from now assessing royalty differently for furnace-grade phosphate shale in view of technical advances that produce valuable by-products subject to royalty assessment under the MLA. Id. at 387. We find MMS has adequately justified why this revision is necessary: MMS is required by MLA section 212 to collect, and Monsanto is obligated under the terms of its leases to pay, royalties on "phosphate or phosphate rock and associated and related minerals."

As new technology has developed, markets for associated and related minerals have become a source of income under Monsanto's phosphate leases, unlike when phosphate ore was valuable primarily for its quality phosphate content. The United States is entitled to collect royalty on that production under provisions of the Act, as amended in 1948, and under the terms of Monsanto's leases. Monsanto has not shown error in the conclusion by MMS that, under the index method, royalties are collected only for phosphates and do not adequately compensate the Government for the capture of associated and related minerals.

Under the leases in effect, MMS may change a method used to value phosphate ore, provided it explains why change is needed. See generally Sun Exploration & Production Co., 112 IBLA 373, 387 (1990) and cases cited.
therein. In the 1993 VSD Decision, MMS established a rational basis for the change in royalty valuation, but did not limit application of the new practice to future production. The primary question posed by this appeal is whether the limitation described in Sun Exploration on the application of the new method of valuation should also be applied in this case.

[1] It is suggested by MMS that, in 1981, when the index method was adopted, MMS did not assess royalty on by-products because it did not have access to sufficient information to establish reasonable values, (MMS Answer at 7); MMS concludes that the index method, as a result, did not encompass values for associated and related minerals. In support of this position, MMS points to Monsanto's SOR at Ex. L, an internal Departmental cover memorandum of August 20, 1980, pertaining to phosphate lease readjustments, which states:

Regarding by-products, we recommend, for the time being, 1) that the value assigned to a ton of ore using either our current method or our suggested new procedure be considered as encompassing all mineral values contained in that unit of rock, and 2) that we contract for a study to assist us in determining if another approach would be more feasible. The existing leases, as well as statutory provisions, require that a minimum of 5% royalty is to be paid on phosphates or phosphate rock and associated or related minerals. The question is where, when, and how such royalties are to be assessed. At this point in time, we are without sufficient information on which to base an assessment. If we attempt to assess by-products without an information base, our actions would be indefensible should appeals be filed.

Since 1948, the law has required MMS to collect royalties on associated and related minerals; the authority to do so under the readjusted lease is clear. See lease No. M12-015122-0, Part II, sec. 2. Even under the older 1960 and 1963 leases, the Department had the right to collect data on "the amount of leased deposits and silica, limestone or other rock mined during the month, the character and quality thereof, amount of its products and by-products disposed of and price received therefor, and amount in storage or held for sale." See, e.g., lease Nos. M12-011451-0 and M12-011683-0, sec. 2f. Yet, when the change in phosphate valuation regulations from the Kleppe to the index method occurred in 1981, the Department had not yet settled on a system for valuing by-products. While the approach suggested in the memorandum quoted above sought to preserve the integrity of the Department's enforcement responsibilities until an effective system of valuation could be devised, it recognized that a resolution of the matter turned on developing matters of fact; the law, as stated in MLA section 212, was clear that by-products were to be included in any method of valuation for royalty assessment devised by the Department.

The interpretations advanced by MMS and Monsanto about how phosphate by-products are valued were both reasonable for the times when they were

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applied. The shift in valuation determination methods does not so much represent correction of a mistake of law as it does signal an adjustment in valuation based upon technical shifts in market conditions. Such adjustments are permissible on a prospective basis, but may not be assessed retroactively. Sun Exploration & Production Co., supra. Accordingly, we find that MMS may assess royalties prospectively from the date of and in accordance with the May 28, 1993, VSD Decision.

Departmental regulations promulgated in 1986 require that production royalty rates "shall be set out in a separate schedule attached to and made a part of all leases and shall be determined on an individual case basis by the authorized officer prior to lease offering." 43 C.F.R. § 3503.2-1. That regulation continues, stating that "[f]or leases offered competitively, the rates shall be set out in the notice of lease sale. For leases offered noncompetitively, the schedule shall be sent to the prospective lessee for concurrence and signature prior to lease issuance." By applying this rule, the problems presented by this case should be avoided in future leasing agreements.

To the extent arguments raised by either party are not specifically addressed herein, they have been considered and rejected.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the MMS Decision appealed from is affirmed in part and reversed in part; the valuation method adopted by the 1993 VSD Decision is approved, effective on and after May 28, 1993.

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Franklin D. Arness
Administrative Judge

I concur:

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John H. Kelly
Administrative Judge