

# Fertilizer or Nutrients Acquired with Land

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The following text is taken from *Agricultural Income Tax Issues, 2011*, pages 1-13. This text is used to conduct educational programs for professional income tax preparers and farmers.

This discussion explores the application of income tax law to the purchase or inheritance of farm land and the allocation of cost basis to various properties that may be acquired with the land. For nearly two decades there has been a question as to the allowance of recovering the allocated cost of “residual fertilizer” under T.A.M. 92-11-007. The authors explore another avenue that of cost segregation, following the guidance of the *Hospital Corporation of America v. Commissioner* 109 T.C. 21 (1997) as it may apply to the recovery of purchase cost allocated to “available nutrients” by purchasers or inheritors of farm land.

Persons considering this approach relative to their acquisition of farm land are strongly encouraged to consult with various professionals (e.g. income tax, agronomists or soil scientists) to determine the application of cost segregation to their specific facts and circumstances.

## ISSUE 1: FERTILIZER OR NUTRIENTS ACQUIRED WITH LAND

Some buyers of farmland are allocating part of their purchase price to fertilizer that was applied to the land before the purchase. This issue reviews the tax rules that require buyers and sellers to allocate the purchase price of a group of assets and applies those rules to fertilizer acquired with farmland.

Tax law requires the purchase price of a group of assets to be allocated among the assets. When improved land is purchased, the price must be divided between the land and the various assets that are purchased with the land, such as fences, wells, roads, buildings, and timber.

With the increases in the price of farmland and the cost of fertilizer, some buyers are allocating part of the purchase price of the land to fertilizer that was applied to the land before the purchase. Similarly, some taxpayers are allocating part of the date-of-death fair market value (FMV) of farmland to fertilizer that was applied to the land before the decedent's death. That allocation lets them amortize and deduct the basis allocated to the fertilizer instead of including that portion of the basis in the nondepreciable basis of the land.

### Practitioner Note

#### Land Acquired by Gift

Taxpayers who acquire land by gift cannot argue that part of the value of the gift is allocated to the basis of the fertilizer purchased with the land because the donee's basis in assets is a carryover basis from the donor. Because the donor deducted the cost of the fertilizer in most cases, the donor's basis in the fertilizer is zero, and that zero basis carries over to the donee.

## Background

As background for the discussion of allocating purchase price to land, this section summarizes the rules for determining the basis of assets, allocating the purchase price of a group of assets, and deducting the cost of fertilizer.

### Basis of Assets

A taxpayer's beginning (unadjusted) income tax basis in an asset is determined by one or more of several rules. The unadjusted basis of a purchased asset is the asset's cost [I.R.C. § 1012(a)]. The unadjusted basis of an inherited asset is generally the asset's FMV on the decedent's date of death or the estate tax alternate valuation date [I.R.C. § 1014(a)]. The unadjusted basis of an asset acquired by gift is generally the donor's basis in the asset [I.R.C. § 1015(a)]. If a taxpayer acquires an asset in a transaction that defers recognition of gain, the beginning basis is in whole or in part transferred from another asset. Examples of those transactions include like-kind exchanges [I.R.C. § 1031(d)], involuntary conversions [I.R.C. § 1033(b)], tax-free incorporations [I.R.C. §§ 358 and 362], and contributions of property to a partnership [I.R.C. §§ 722 and 723].

## Cost Allocation Rules

I.R.C. § 1060 requires taxpayers who buy a group of assets that constitute a trade or business to use a residual method to allocate the purchase price among the assets. Treas. Reg. § 1.1060-1(b)(2)(i) says a group of assets constitutes a trade or business if the use of such assets constitutes a trade or business, or if goodwill or going-concern value could attach to the group of assets. Sellers must follow the same allocation rules to report their gain or loss on the sale of a group of assets that constitutes a trade or business.

### **Cross-Reference**

Example Included in “Business Entities”

See Issue 4 in the “Business Entities” chapter of this book for an illustration of the I.R.C. § 1060 rules to a business that is sold for less than the FMV of its assets.

### *Asset Classes*

IRS Form 8594, Asset Acquisition Statement Under Section 1060, lists the following seven classes of assets that are identified in Treas. Reg. § 1.338-6(b):

#### **Class I**

1. Cash
2. General deposit accounts (including savings and checking accounts, but excluding certificates of deposit)

#### **Class II**

1. Certificates of deposit
2. U.S. government securities
3. Foreign currency
4. Personal property such as stock and securities that is actively traded (this means that an established financial market exists for it)

#### **Class III**

1. Accounts receivable
2. Other debt instruments, excluding related-party debt instruments, contingent debt instruments, and debt instruments that are convertible into stock or other property
3. Assets that are marked-to-market annually for federal income tax purposes

#### **Class IV**

1. Property properly includable in inventory
2. Property held primarily for sale to customers in the ordinary course of business

#### **Class V**

1. Furniture and fixtures
2. Equipment that is part of the business
3. Buildings and land
4. Vehicles

5. Any other assets that are not included in any of the other six classes

#### **Class VI**

1. Workforce in place
2. Books and records, operating systems, and other information bases
3. Patents, copyrights, formulas, processes, designs, know-how, format, and similar items
4. Customer-based intangibles
5. Supplier-based intangibles
6. Licenses, permits, and other rights granted by a government agency
7. Covenants not to compete
8. Franchises, trademarks, and trade names
9. Any other I.R.C. § 197 intangibles other than goodwill and going-concern value

#### **Class VII**

1. Goodwill (reputation and good standing)
2. Going-concern value (the ability to conduct business in the future)

The purchase price is allocated first to assets in Class I to the extent of the FMV of the assets in that class. The remaining purchase price is then allocated to the assets in Class II to the extent of the FMV of the assets in that class. This process is repeated until the remaining purchase price is less than the sum of the FMVs of the assets in the next class. At that point, the remaining purchase price is allocated pro rata among the assets in that class using the ratio of their individual FMVs to the total FMV of all assets in the class. If a portion of the purchase price remains after the price has been allocated to all assets in Class VI, the remainder is allocated to assets in Class VII.

#### ***Sales of Farmland***

Most sales of farmland are not subject to the I.R.C. § 1060 allocation rules because farmland generally is not purchased with a group of assets that constitutes a trade or business or includes goodwill. If I.R.C. § 1060 does not apply to a transaction, the buyer and seller do not have to file Form 8594 to report an allocation of the purchase price. However, the buyer still must allocate the purchase price to determine basis in the land and each depreciable improvement [Treas. Reg. § 1.167(a)-5], and the seller must allocate the purchase price to determine gain on the land and each improvement [I.R.C. § 1.61-6(a)]. The parties could choose to use the residual method of allocating the purchase price even if I.R.C. § 1060 does not require them to use it.

If the parties to a transaction have adverse interests, deal at arm's length, and agree to an allocation of the purchase price, courts generally will honor that allocation if there is no reason to question the bona fides of the transaction [*Black Industries, Inc. v. Commissioner*, T.C. Memo. 1979-61]. IRS Publication 225, *Farmer's Tax Guide* (2010), at page 31, states that the IRS generally will accept an allocation that is agreed upon by a buyer and a seller if it is based on the value of each asset and the buyer and seller have adverse tax interests.

In most cases, unrelated buyers and sellers have adverse interests because the buyer wants to allocate as much of the purchase price as possible to depreciable or deductible assets. The seller wants to allocate as little of the selling price as possible to those assets because gain on those assets is generally taxed as ordinary income. The seller wants to allocate as much as possible to the land, because long-term gain on land is taxed at lower rates, whereas the buyer wants to allocate as little as possible to the land because basis in land cannot be depreciated.

### Example 1. Allocation of Purchase Price

Hominy Gritts paid \$80,000 to buy farmland from an unrelated party. Neither Hominy nor the seller is required to file Form 8594 or use the residual method for allocating the price because the farm property is not a trade or business. As shown in Figure 1, the total FMV of the land and improvements is \$100,000.

*Figure 1: Allocation of Purchase Price to Assets*

Asset	FMV	Percent of FMV	Allocated Purchase Price
Tillable land	\$ 65,000	65%	\$ 52,000
Barn	5,000	5%	4,000
Fences	2,000	2%	1,600
Timberland	13,000	13%	10,400
Standing timber	<u>15,000</u>	<u>15%</u>	<u>12,000</u>
Total	<u>\$ 100,000</u>	<u>100%</u>	<u>\$ 80,000</u>

Hominy can prorate the \$80,000 price among the purchased assets using the ratio of the FMV of each parcel or improvement to \$100,000, as shown in Figure 1. Note that all of the assets would be in Class V if the residual method were required.

If Hominy paid \$120,000 for the farm, he could allocate the \$120,000 purchase among the assets in the same manner as the \$80,000 purchase price, which will result in a basis equal to 120% of the FMV of each of the parcels and improvements.

Hominy may prefer to use the residual method if he pays more than \$100,000 for the farmland. Each asset would then have a basis equal to its FMV, and the excess \$20,000 would be allocated to going concern value. I.R.C. § 197 permits purchased going concern value to be amortized over 15 years (180 months), so Hominy would have less basis in the nondepreciable tillable land and timberland.

### Deducting Cost of Fertilizer

I.R.C. § 180 allows farmers to elect to deduct expenses paid or incurred during the tax year “for the purchase or acquisition of fertilizer, lime, ground limestone, marl, or other materials to enrich, neutralize, or condition land used in farming, or for the application of such material to such land.” If a farmer does not make this election, the cost of the fertilizer or other materials is amortized over the useful life of the material. Farmers make the election simply by deducting the cost of the fertilizer or other material on their income tax return.

Treas. Reg. § 1.180-1(b) refers to Treas. Reg. § 1.175-3 for the definition of *farmer* for purposes of I.R.C. § 180. Treas. Reg. § 1.175-3 says a taxpayer is in the business of farming if he or she cultivates, operates, or manages a farm for gain or profit, either as owner or tenant. It also treats a landowner who receives rent (either in cash or as a share of the crop) as a farmer if the rent is based on farm production. However, a taxpayer who receives a fixed rental without reference to production is engaged in the business of farming only if he or she participates to a material extent in the operation or management of the farm. The I.R.C. § 180 election to deduct fertilizer expenses is effective for only 1 year, and the election for a tax year can be revoked only with the IRS’s consent [Treas. Reg. § 1.180-2].

## Allocating Basis to Fertilizer or Nutrients

If taxpayers can show that fertilizer or nutrients are a separate asset that can be distinguished from the soil, they can allocate part of the purchase price of farmland to fertilizer or nutrients that are in the soil at the time of purchase. Similarly, taxpayers who receive land from a decedent can adjust the basis in the fertilizer or nutrients on the land to the date-of-death (or the estate tax alternate valuation date) value. However, the taxpayer has the burden of proving the existence and FMV of the fertilizer or nutrients.

### Residual Fertilizer Supply

In T.A.M. 92-11-007 (December 3, 1991), the taxpayer was a corporation owned by A and B. The corporation purchased the buildings, irrigators, pumps, wells, grain bins, and the residual fertilizer supply on land that A and B purchased in their individual names and leased to the corporation on a 1-year lease. The lease automatically renewed each year unless either party notified the other party that it wanted to terminate the lease. The corporation amortized the amount allocated to the residual fertilizer supply over 7 years. The IRS held that a taxpayer must be the beneficial owner of the fertilizer to claim an amortization deduction for it, and it concluded that the corporation was not entitled to the deduction because A and B were the beneficial owners of the fertilizer.

The memo cited *Helvering v. F. & R. Lazarus & Co.*, 308 U.S. 252 (1939), a case in which a corporation claimed depreciation on three buildings that it occupied and used in its business as a department store. A bank held legal title because of a lending arrangement, but the stores had 99-year leases, with renewal and purchase options. The Supreme Court noted that someone who is not the owner “may nevertheless bear the burden of exhaustion of capital investment” and allowed the depreciation deductions.

The difference in the fertilizer ruling and the depreciation decision was the length of the leases.

#### Practitioner Note

##### Position Is Not Precedent

A technical advice memorandum (TAM) is guidance from the IRS Office of Chief Counsel in response to technical or procedural questions that develop during an examination of a taxpayer’s return, a consideration of a claim for a refund or credit, or any other matter involving a specific. TAMs are issued only on closed transactions; they provide an interpretation of the proper application of tax laws, tax treaties, regulations, revenue rulings, or other precedents. The advice is a final determination of the IRS’s position only with respect to the specific issue in the specific case in which the advice is issued.

I.R.C. § 6110(k)(3) provides that a TAM may not be used or cited as precedent. However, its conclusion may indicate the position the IRS will take in future cases, and the authorities cited in the TAM can be cited as precedents. In addition, Treas. Reg. § 1.6662-4(d)(3)(iii) lists private letter rulings and technical advice memoranda issued after October 31, 1976, as authority that may be cited to avoid the accuracy-related penalty if tax is understated.

#### *Additional Requirements for Amortization*

Although T.A.M. 92-11-007 denied the amortization deductions because the corporation was not the beneficial owner of the fertilizer, the ruling also explains that a taxpayer must take the following four actions to qualify for an amortization deduction for the cost of fertilizer acquired with land:

1. Establish the presence and extent of the fertilizer.
2. Show the level of soil fertility that is attributable to the fertilizer applied by the prior owner.

3. Provide a base for measuring the increased fertility.
4. Provide evidence indicating the period over which the fertility attributable to the residual fertilizer will be exhausted.

If the advice memo is an indication of current IRS thinking, under the right set of facts the IRS will allow a purchaser of land to allocate part of the purchase price to the residual fertilizer supply and amortize that cost over the period during which the fertility attributable to the residual fertilizer will be exhausted.

#### **Example 2. Fall Application of Fertilizer**

Bernadine Chavas applied \$15,000 of fertilizer to 100 acres of her farmland in the fall of 2010 to prepare her land for the corn crop she intended to plant in 2011. Bernadine deducted the \$15,000 on her 2010 Schedule F (Form 1040). Her plans changed, and she sold the 100 acres to Frederick Schmidt in February 2011 for \$520,000.

In the sales contract, Bernadine and Frederick agreed that \$483,000 of the purchase price was for the unimproved farmland, \$22,000 was for tile line, and \$15,000 was for the fertilizer Bernadine applied in the fall of 2010. Because Bernadine had applied the fertilizer, Frederick did not apply the fertilizer that he otherwise would have applied to the 100 acres for his 2011 corn crop.

The IRS is likely to agree that Frederick can allocate \$15,000 of his purchase price to the fertilizer. If Frederick can show the rate in which the residual fertilizer supply is exhausted, the IRS is likely to allow him to amortize the \$15,000 over the period in which it is exhausted.

The taxpayer in T.A.M. 92-11-007 amortized the cost of the residual fertilizer supply over 7 years, so the TAM does not discuss the possibility of claiming a deduction for the residual fertilizer supply under I.R.C. § 180. On its face, I.R.C. § 180 appears to allow Frederick to deduct the \$15,000 on his 2011 income tax return because it does not limit the deduction to fertilizer applied by the taxpayer.

#### **Practitioner Note**

##### **Period of Exhaustion**

If Frederick deducts the \$15,000 on his 2011 income tax return under I.R.C. § 180, he does not have to provide evidence indicating the period over which the fertility attributable to the residual fertilizer will be exhausted because he is not amortizing the cost over that period. I.R.C. § 180 does not require a taxpayer to show that fertilizer or other material is exhausted.

The IRS is also likely to require Bernadine to report the \$15,000 sale of fertilizer as the sale of an input with a zero basis that results in \$15,000 of ordinary income.

#### **Practitioner Note**

##### **State Reporting Requirements**

Although Bernadine and Frederick are not required to agree on an allocation of the \$520,000 purchase price or file Form 8594, most states require buyers and sellers of real property to report the transaction and identify the parties to the transaction. Therefore, the IRS and the state tax authority can identify the other party to the transaction and compare the allocations of the purchase price. If the buyer and seller have made the same allocation, the IRS or state tax authority is less likely to challenge the taxpayers' allocations.

**Practitioner Note****Land Received from a Decedent**

If Bernadine, from Example 2, died in February 2011 after applying \$15,000 of fertilizer in the fall of 2010, her heirs could argue that they inherited \$483,000 of farmland, \$22,000 of tile line, and \$15,000 of fertilizer. The \$483,000 basis in the farmland is not depreciable; the \$22,000 basis in the tile line is depreciable over its 15-year recovery period; and the \$15,000 basis in the fertilizer may be amortizable over the period of exhaustion. Because the heirs did not pay or incur an expense to the fertilizer, they cannot elect to deduct the \$15,000 under I.R.C. § 180.

***Satisfying the TAM Criteria***

The requirements set out in T.A.M. 92-11-007 may be very difficult to satisfy in fact situations that are not as straightforward as Example 2. However, taxpayers may be successful in challenging the more onerous requirements in T.A.M. 92-11-007.

**Beneficial Ownership**

The facts in T.A.M. 92-11-007 were unusual in that the taxpayer paid for residual fertilizer on land purchased by related parties. In most cases, the same taxpayer will purchase the fertilizer and land, and that taxpayer will have no trouble showing that he or she has beneficial ownership of the fertilizer.

**Presence and Extent of Fertilizer**

Soil test technology makes it possible for taxpayers to document the presence and extent of nutrients in soil. Because soil test results are affected by how and where the soil samples are collected, taxpayers should be careful to document the sampling procedure. The sample should be taken before the buyer applies any additional fertilizer and ideally should be taken at the time of the purchase.

**Level Attributable to Previous Owner**

Presumably this requirement is a corollary of the previous requirement and is intended to distinguish fertilizer in the soil at the time the farmland is purchased from fertilizer applied after the purchase. It emphasizes the importance of having the soil tested at the time of the purchase.

**Base for Measuring Increased Fertility**

This is likely to be the most difficult requirement for the buyer to satisfy. Although taxpayers have found agronomists who will establish a base fertility for land and compare that base fertility with the fertility at the time of the purchase, the IRS can find other agronomists and soil scientists who will establish a different level of base fertility.

In T.A.M. 92-11-007, the taxpayer submitted information about the fertility of similar parcels of land in the area, but the IRS said that information did not provide a basis for measuring the increase in fertility because of the variability of soil fertility in general. It is not clear whether the baseline for comparing fertility to determine increased fertility is land in its native condition, land as normally maintained by farmers in the area, or some other baseline.

**Period of Exhaustion**

The period over which fertilizer is exhausted varies dramatically by the type of nutrient, soil type, and crop rotation. Therefore, it could be very difficult and expensive for a buyer to prove the period over which each nutrient in the residual fertilizer supply is exhausted.



In future cases, the IRS may look for other criteria than those discussed in T.A.M. 92-11-007. For example, the IRS could require the buyer to show that the residual fertilizer supply reduced or eliminated the need to apply fertilizer to the land. If the buyer applies fertilizer to the land without regard to the level of residual fertilizer, the IRS could argue that the residual fertilizer has no value and that none of the purchase price can be allocated to it.

#### **Observation**

##### **Presence of Residual Fertilizer**

Land owners generally have no incentive to apply more purchased fertilizer than the amount needed for the current year's crop. They will get no immediate return from the excess fertilizer, and heavy rains could leach the excess out of the soil before it is used by a future crop. But there may be cases in which the landowner "stockpiled" fertilizer by applying more than was necessary because the cost of fertilizer was low or because he or she wanted to accelerate deductible expenses to reduce his or her taxable income.

Livestock farmers may apply more manure than is required to meet the current crop's nutrient need in order to dispose of the manure. In that case, land may have an excess nutrient supply when it is sold.

## **Cost Segregation**

An alternative to the residual fertilizer supply approach is a cost-segregation approach in which the buyer allocates the price among the components of the purchased property according to the FMV of each component. Although this approach is not commonly used to allocate the cost of land, the Tax Court sanctioned allocating part of the cost of a building to the I.R.C. § 1245 components that are part of the building so that the taxpayer can depreciate part of the cost over a shorter recovery period [*Hospital Corporation of America v. Commissioner*, 109 T.C. 21 (1997)]. The IRS acquiesced to the concept in A.O.D. 1999-008 (September 8, 1999).

Under the cost-segregation approach, it is more useful to refer to the asset acquired with the land as *available nutrients* rather than *residual fertilizer supply*, because the scientific benchmarks are based on the amount of nutrients in the soil that are available for use by a crop.

### ***Authority for Other Asset Allocations***

Regulations and case law allow taxpayers to allocate part of the purchase price of land to assets acquired with the land and by analogy are precedents for allocating part of the purchase price of land to available nutrients acquired with the land.

## **Timber**

Treas. Reg. § 1.611-3(f) allows taxpayers to use scientific methodology to allocate part of the purchase price of land to standing timber acquired with the land. A consulting forester estimates the value of trees on the land at the time the land was purchased by carrying out a *back cruise*, as explained in Issue 8, "Tree Farming."

The value of the timber on the date the land was purchased is the estimated volume of each type of timber product multiplied by the historic price for each product. The purchase price is then allocated to the basis of the land and the basis of the timber using the FMV of each, as illustrated in Example 1.

## **Water Rights**

In *Gladden v. Commissioner*, 262 F.3d 851 (9th Cir. 2001), the taxpayers sold water rights and argued that part or all of the purchase price of the land to which the rights were attached could be allocated to the basis of the water rights and reduce the gain they must recognize upon sale of the water rights. At the time the taxpayers purchased the land, the water rights were expected but had not yet legally vested.

The court stated that if the water rights had legally vested at the time the land was purchased, Treas. Reg. § 1.61-6(a) would clearly allow the taxpayers to allocate the purchase price between the basis in the land and the water rights.

The court also noted that if the water rights were not expected at the time the land was purchased, then none of the purchase price could be allocated to the water rights because the taxpayers would not have paid a premium for the land in order to acquire the water rights. In *Plow Realty Co. of Texas v. Commissioner*, 4 T.C. 600 (1945), the Tax Court held that because land was originally valued solely for cattle-grazing qualities, a subsequent sale of the mineral rights had a zero cost basis. In Rev. Rul. 66-58, 1966-1 C.B. 186, the IRS did not allow any of the cost basis in land to be allocated to a cotton allotment that was acquired after the land was purchased and was sold separately from land.

In *Gladden*, the appellate court concluded that the purchase price could be allocated to the water rights to the extent of the premium the taxpayer paid for the land because of the expected water rights, and it remanded the case to the Tax Court to determine that premium. Citing *Inaja Land Co., Ltd. v. Commissioner*, 9 T.C. 727 (1947), the court also held that if it is “impracticable or impossible” to determine that premium, then the taxpayers could use their entire cost basis in the land to reduce their gain on sale of the water rights.

Under Rev. Proc. 66-11, 1966-1 C.B. 624, the basis of water rights for land in the Ogallala formation is the difference in value of land with a supply of ground water and land without a supply of ground water.

## Sod

In *Meyers v. Commissioner*, 66 T.C. 235 (1976), the Tax Court held that sod is a natural deposit, and it allowed the taxpayer to claim a depletion allowance under I.R.C. § 611. The taxpayer showed that after 16 cuttings of sod, the available topsoil would be exhausted and it would not be economically feasible to raise sod or grain crops. The residual value of the land would be 66% of its former value as grain- or sod-producing land. In Rev. Rul. 79-411, 1979-2 C.B. 246, the IRS ruled that soil and loam are natural deposits and taxpayers can reduce their gain from the sale of topsoil and loam by an allowance for cost depletion.

### Practitioner Note

#### Exhaustion of Soil Nutrients

In the *Meyers* case, the IRS argued that the taxpayer’s operations were more properly characterized as a farming activity in which there is a foreseen diminution in the capacity of the land to produce crops with each planting. The court rejected that analogy but did concur with the IRS that “owners of farmland are specifically denied a deduction for exhaustion and wear and tear due to erosion, wind, or *privation of soil nutrients*” (emphasis added), and it cited Treas. Reg. §§ 1.167(a)-6(b) and 1.612-1(b)(1).

If taxpayers cannot claim a deduction for privation of soil nutrients, then purchasers of land may be denied a deduction for the available nutrients they purchase with the land. However, contrary to the court’s statement, Treas. Reg. §§ 1.167(a)-6(b) and 1.612-1(b)(1) do not appear to specifically prohibit a deduction for privation of soil nutrients.

Treas. Reg. § 1.167(a)-6(b) allows taxpayers to depreciate buildings, farm machinery, and other physical property, but not land. If taxpayers can show that the available nutrients are an asset other than the land, this regulation does not prohibit a deduction for the exhaustion of the available nutrients.

Treas. Reg. § 1.612-1(b)(1) states, “In the case of any mineral property the basis for cost depletion does not include amounts representing the cost or value of land for purposes other than mineral production.” That does not prohibit a deduction for the exhaustion of available nutrients.

#### Cost Segregation of Available Nutrients

Under the cost-segregation approach, the purchase price is first allocated among the land, buildings, fences, tile lines, timber, mineral rights, and other assets purchased with the land. Then

the amount allocated to the land is further allocated between the soil as a vessel for holding nutrients and the available nutrients in the soil. There is no case history for this approach, but it is similar to the cost segregation allowed in the *Hospital Corporation of America* case.

By analogy, taxpayers can argue that they can allocate part of the cost of land to the nutrients in the soil and amortize the cost of those nutrients over their expected period of exhaustion.

### Example 3. Cost Segregation for Nutrients

Steiner Olsen paid \$520,000 (\$505,000 purchase price plus \$15,000 transaction costs) to buy 100 acres of land that had a drainage tile system and high levels of available nutrients (as measured by soil tests) because the seller, Gloria Brown, had spread more manure than was needed for annual crop production. Steiner and Gloria did not discuss, and had no agreement regarding, an allocation of the purchase price to the tile line or available nutrients in the soil. Because the purchase was not a purchase of a trade or business, neither Steiner nor Gloria was required to file Form 8594.

Shortly after the purchase, Steiner's tax preparer told him that he could allocate part of the purchase price to the tile line and the nutrients in the soil if he could prove their value. Steiner obtained a map of the tile line from Gloria that showed the tiling system is 10 years old. Steiner took the map to a tiling contractor who estimated that the system had another 40 years of life and would cost \$27,500 to replace. Therefore, Steiner estimates the value of the tiling system to be \$22,000 [ $\$27,500 \times (40 \text{ years} \div 50 \text{ years})$ ]. The cost recovery period for drainage tile is 15 years.

Steiner paid an agronomist \$2,000 to analyze the soil. The agronomist compared the available nutrients in the soil with the optimal level of available nutrients according to the recommendations of the land grant university in Steiner's state and found there were excess amounts of phosphorus (P) and potassium (K). The agronomist valued the excess available nutrients by multiplying the excess amount by the cost of purchasing and applying that much of each nutrient. Finally, the agronomist determined the period over which the excess available nutrients would be used up by crops in a normal crop rotation if no additional nutrients were added to the soil. Figure 2 reports the agronomist's findings.

*Figure 2: Amount, Value, and Exhaustion Period of Excess Available Nutrients*

Nutrient	Phosphorus	Potassium	Total
Available nutrients as measured by soil tests	35 ppm	113 ppm	
Optimal available nutrients <sup>1</sup> (ppm P or K)	20 ppm	100 ppm	
Excess available nutrients (ppm P or K)	15 ppm	13 ppm	
Conversion factor <sup>2</sup>	18	7	
Excess available nutrients <sup>3</sup> (pounds P <sub>2</sub> O <sub>5</sub> or K <sub>2</sub> O/acre)	270	91	
Cost per pound	59¢	47¢	
Value (\$/acres)	\$159	43	\$202
Pounds removed per year per acre	75	90	
Exhaustion period (excess pounds ÷ removal rate)	3.6 years	1 year	

<sup>1</sup> *Optimal available nutrients* is the level recommended by the land grant university in Steiner's state for his crop rotation.

<sup>2</sup> The conversion factors are the number of pounds of P<sub>2</sub>O<sub>5</sub> per acre that must be added to increase the phosphorus by 1 ppm or removed to decrease phosphorus by 1 ppm, and the pounds of K<sub>2</sub>O per acre that must be added to increase the potassium by 1 ppm or removed to decrease potassium by 1 ppm.

<sup>3</sup> The *excess pounds per acre* of each nutrient are the excess ppm of that nutrient multiplied by the conversion factor described in footnote 2.

Based on this information, Steiner estimated the FMV of the excess phosphorus to be \$15,900 (\$159 per acre × 100 acres) and the FMV of the excess potassium to be \$4,300 (\$43 per acre × 100 acres).

Steiner hired an appraiser who reported that the FMV of comparable farmland without a tile system and without excess nutrients was \$510,000. Therefore, Steiner allocated the \$520,000 purchase price among the land, tile system, and available nutrients, as shown in Figure 3.

*Figure 3: Allocation of Steiner Olsen's \$520,000 Purchase Cost*

Asset	FMV	Allocation Formula	Allocated Cost
Land	\$ 510,000	$(\$510,000 \div \$552,200) \times \$520,000$	\$ 480,261
Tile system	22,000	$(\$22,000 \div \$552,200) \times \$520,000$	20,717
Phosphorus	15,900	$(\$15,900 \div \$552,200) \times \$520,000$	14,973
Potassium	<u>4,300</u>	$(\$4,300 \div \$552,200) \times \$520,000$	<u>4,049</u>
Total	<u>\$ 552,200</u>		<u>\$ 520,000</u>

Steiner amortized the \$14,973 purchase price allocated to the phosphorus straight-line over the 3.6-year estimated period of exhaustion (Figure 2), deducting \$4,159 ( $\$14,973 \div 3.6$ ) in the year of the purchase and each of the next 2 years, and the remaining \$2,496 in the fourth year. Steiner deducted the entire \$4,049 allocated to the potassium in the year he purchased the land because the agronomist estimated the period of exhaustion for the potassium to be 1 year.

**Practitioner Note**

**I.R.C. § 180 Deduction**

Because Steiner has allocated part of the purchase price to *available nutrients* in the soil rather than to a *residual fertilizer supply*, he is likely to be ineligible for the I.R.C. § 180 election to deduct the \$15,022 ( $\$14,973 + \$4,049$ ) that he allocated to the nutrients in the year he purchased the land.

**Question 1.**

Does Gloria Brown (the seller) have to allocate the same amounts as the sales price of the land, tile system, and nutrients?

**Answer 1.**

Tax law does not require Steiner and Gloria to agree on and report the same amounts as the sale and purchase price of each asset. However, if the IRS or the state tax authority audits either of their returns, it could identify the other party and require the other party to use the same FMVs of each asset to allocate the price.

For example, if the IRS audited Steiner's return and agreed with his allocation of the purchase price, it could identify Gloria as the seller from state land records and require her to use the same FMVs to allocate her net proceeds from the sale. If her transactions costs were \$25,000, her \$480,000 ( $\$505,000 - \$25,000$ ) net proceeds would be allocated as shown in Figure 4.

*Figure 4: Allocation of Gloria Brown's \$480,000 Net Proceeds*

Asset	FMV	Allocation Formula	Allocated Price
Land	\$ 510,000	$(\$510,000 \div \$552,200) \times \$480,000$	\$ 443,318
Tiling system	22,000	$(\$22,000 \div \$552,200) \times \$480,000$	19,123
Phosphorus	15,900	$(\$15,900 \div \$552,200) \times \$480,000$	13,821
Potassium	<u>4,300</u>	$(\$4,300 \div \$552,200) \times \$480,000$	<u>3,738</u>
Total	<u>\$ 552,200</u>		<u>\$ 480,000</u>

Gloria's gain or loss on the land is I.R.C. § 1231 gain or loss; her gain on the tile system is ordinary income under the I.R.C. § 1245 depreciation recapture rules; and the proceeds from the nutrients are ordinary income without any reduction for basis because the manure spread on the land had no income tax basis.

**Question 2.**

Can Steiner allocate any of the purchase price to nutrients if the soil tests show there was less than the optimal level of each of the nutrients?

**Answer 2.**

If the nutrient levels are at or below the optimal level, the agronomist is likely to conclude that none of the purchase price can be allocated to the available nutrients. Steiner must then allocate his \$520,000 purchase price between the land and tile system using their respective FMVs.

**Question 3.**

How should Steiner report the \$2,000 fee he paid to the agronomist?

**Answer 3.**

The agronomist's work is required only because of the income tax reporting requirements. Therefore, Steiner can deduct the \$2,000 fee as a miscellaneous expense on line 32 of Schedule F (Form 1040). It does not matter whether he was able to use the agronomist's report to allocate some of the purchase price to nutrients.

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**Planning Pointer**

**Effect of a Like-Kind Exchange**

If a taxpayer acquires land in a like-kind exchange, improvements on the land (such as buildings, fences, and tile lines) and natural resources on the land (such as timber, gravel, and minerals) are treated as like-kind property. Fertilizer and real estate are probably not like-kind property. Therefore, any value allocated to fertilizer is likely to not be qualified replacement property in a like-kind exchange. Taxpayers could argue that nutrients are part of the land and are therefore real property that is qualified replacement property.

**Conclusion**

Although there is very little guidance on allocating part of the purchase price of land to fertilizer purchased with the farmland, if taxpayers can show the amount and value of the residual fertilizer supply or excess available nutrients in the soil and the period during which the excess nutrients will be exhausted, they have a reasonable argument for amortizing the value of the fertilizer or nutrients over the period of exhaustion. Taxpayers can arguably elect to deduct the cost of the residual fertilizer in the year of the purchase under I.R.C. § 180 and in that case do not need to show the period of exhaustion.

Similarly, taxpayers who receive farmland from a decedent can arguably adjust the basis of the residual fertilizer supply or excess available nutrients to the FMV on the date of death or alternate valuation date.

Until there is further guidance from the IRS or court cases, it is difficult to know what baselines will be accepted for measuring residual fertilizer supply or excess available nutrients. It is also hard to predict what precision of soil sampling will be required to prove the presence of residual fertilizer or available nutrients. Consequently, it is hard to predict whether a taxpayer will succeed in allocating part of the purchase price of land to fertilizer or nutrients or in adjusting the basis of fertilizer or nutrients to the date-of-death (or alternate valuation date) value.

If the courts or the IRS sanction a high baseline for measuring residual fertilizer supply or excess available nutrients, there may be only a few instances in which there is residual fertilizer or excess nutrients over the baseline. If the courts or the IRS sanction a very precise method of sampling soil, the cost of sampling may exceed the tax savings from allocating basis to fertilizer or nutrients.