

SC PRIVATE LETTER RULING #08-3

SUBJECT: Production of Genetically Enhanced Tree Seedlings for Sale
(Sales and Use Tax)

REFERENCES: S. C. Code Ann. Section 12-36-2120(17) (Supp. 2007)
S. C. Code Ann. Section 12-36-2120(16) (2000)
S. C. Code Ann. Section 12-36-2120(56) (Supp. 2007)
SC Regulation 117-302.5 (Supp. 2007)
SC Regulation 117-301.5 (Supp. 2007)

AUTHORITY: S. C. Code Ann. Section 12-4-320 (2000)
S. C. Code Ann. Section 1-23-10(4) (2005)
SC Revenue Procedure #05-2

SCOPE: A Private Letter Ruling is an advisory opinion issued to a specific taxpayer by the Department to apply principles of law to a specific set of facts or a particular tax situation. It is the Department's opinion limited to the specific facts set forth, and is binding on agency personnel only with respect to the person to whom it was issued and only until superseded or modified by a change in statute, regulation, court decision, or another Departmental advisory opinion, providing the representations made in the request reflect an accurate statement of the material facts and the transaction was carried out as proposed.

Questions:

1. Is XYZ LLC engaged in processing tangible personal property for sale and entitled to the exemption in Code Section 12-36-2120(17) for "machines used in ... processing ... tangible personal property for sale?"
2. Is XYZ LLC engaged in the production of farms crops for sale and entitled to the exemption in Code Section 12-36-2120(16) for "farm machinery ... used in planting, cultivating or harvesting farm crops" for sale?
3. Are sales of machines to XYZ for use by XYZ LLC to develop new or improved seedlings exempt from the sales and use tax as "machines used in research and development" under Code Section 12-36-2120(56)?

Conclusion:

1. XYZ LLC is not engaged in processing tangible personal property for sale and therefore is not entitled to the exemption in Code Section 12-36-2120(17) for “machines used in ... processing ... tangible personal property for sale.”
2. XYZ LLC is engaged in the production of farms crops for sale and therefore is entitled to the exemption in Code Section 12-36-2120(16) for “farm machinery ... used in planting, cultivating or harvesting farm crops” for sale.

Note: This would include the sale to, or purchase by, XYZ of the following machines (or parts used to fabricate such machines) used in the mass production of seedlings: (1) machines used to uniformly place media on plates; (2) machines used to place bulked up tissue on media trays to stimulate the production of embryos; (3) machines used to place embryos in plugs and place plugs in trays¹; and (4) machines used to place soil and seedlings in containers. However, the cryogenic tanks used to store tissue are not machines used in “planting, cultivating or harvesting of farm crops” and not exempt under Code Section 12-36-2120(16).

3. Sales of machines (or parts used to fabricate such machines) to XYZ for use by XYZ LLC to develop new or improved seedlings are exempt as machines “machines used in research and development” under Code Section 12-36-2120(56), provided such machines are used by XYZ directly and primarily in research and development, in the experimental or laboratory sense, of new seedlings or improvement of existing seedlings. (See SC Revenue Ruling #08-3.)

Note: The exemption for “machines used in research and development” under Code Section 12-36-2120(56) only applies to machines and parts, attachments, and replacements as defined in Code Section 12-36-2120(56). It does not apply to laboratory supplies, such as Petri dishes and solutions, that are not a part of a machine used in research and development as defined in Code Section 12-36-2120(56).

Facts:

XYZ LLC (“XYZ”), with its principal place of business located in Someplace, USA, is engaged in tree improvement and production and produces more than 300,000,000 seedling and cuttings in four countries. It is the world’s largest producer of tree planting stock for landowners and the forest product industry. In August 2007, XYZ acquired tree improvement and nursery and orchard businesses from International Paper, MeadWestvaco and Rubicon. To this base, XYZ adds research, development and commercialization of biotechnology products that will improve the productivity and wood quality of elite, purpose-grown trees. These trees will grow faster, producing more wood on less land and have improved processing characteristics to increase efficiencies and reduce chemical use in the manufacture of paper and other precuts made from wood.

¹ This machine is in the developmental stage. At the time of the drafting of the private letter ruling, the placing of embryos in plugs and the placing of these plugs in a tray was a manual operation.

XYZ believes its biotech products represent the greatest value and will displace conventional seedlings currently available in the market as customers integrate higher value biotech planting stock into their forestry practices and develop a better understanding of, and increased confidence in, the benefit of high value trees.

The XYZ production process can be broken into three interlinked segments:

- varietal tree production;
- biotech tree production; and
- nurseries and orchards.

Varietal Tree Production: The varietal tree production process begins when cones are delivered to XYZ from customers or XYZ's own orchards. These cones are the result of extensive tree improvement programs designed to produce increasingly genetically superior seed with characteristics desired by the customer. Each seed within the cone will result in an individual variety with a unique genetic make-up that can be mass produced.

After the cones are received, the seed is extracted and tissue from the seed is bulked up on growth media. Multiple vials of this tissue are preserved in cryogenic storage where it can be retrieved at a later date. A portion of the tissue is then pulled from cryogenic storage and bulked up. The bulked up tissue is then placed on media that stimulates the production of embryos that will later form individual trees. These embryos are then allowed to germinate and grow into trees that will enter XYZ's field testing program. All of the trees produced from a single seed will have an identical genetic make-up. In XYZ's field testing program, each variety is planted at various locations and observed for characteristics that would be desirable to a customer such as fast growth and straightness. XYZ selects the top performing varieties based on these characteristics.

Tissue from the top performing varieties is then pulled from cryogenic storage and mass production of trees begins through a scaled-up version of this same process that incorporates various mass production and automation technologies. This allows the production of trees that are genetically uniform providing additional value to the landowner relative to conventional seedlings. Some of these trees will be delivered to customers, some will be delivered to XYZ's orchards where they will be used to produce seed that will be cycled back through the process, and others will be enhanced through genetic engineering for the production of biotech trees with improved traits.

Some of the machines used, or that may be used, by XYZ in the varietal tree production are:

- (1) machines used to uniformly place media on plates;
- (2) machines used to place bulked up tissue on media trays to stimulate the production of embryos;

(3) machines used to place embryos in plugs and place plugs in trays²; and,

(4) machines used to place soil and seedlings in containers

Biotech Tree Production: The varietal tree production process described above is the basis for XYZ's value-enhanced, biotechnology portfolio through the provision of top performing, genetically uniform trees that can be further enhanced through genetic engineering. XYZ has a large portfolio of revolutionary biotech products in various stages of commercialization and product development.

The production of biotech trees begins with the identification of a gene that is believed to confer a desirable characteristic such as improved growth. XYZ acquires these genes through licenses and through its internal gene discovery program.

Candidate genes must be isolated and the transformation plasmid (the vehicle through which the gene is introduced into genetic material of a tree) must be constructed. The gene is then transferred (transformed) into genetic material of a tree through a process that utilizes a bacterium that will naturally insert the foreign DNA into the tree's genome. These initial transformations are done on a small scale for proof-of-concept testing to ensure that the inserted gene confers the desired trait. If the gene of interest confers the desired trait in proof-of-concept testing, large scale transformations are performed. Each time a transformation is performed, the gene will be inserted differently into the genome of the tree resulting in varying levels of performance.

Each transformation results in what is termed a genetic "event." Multiple copies of these events are produced through the varietal tree production process to achieve quantities sufficient for field testing. Field testing of biotech trees or "events" is very similar to field testing of varietal trees. The trees are observed for the characteristic of interest and top performing trees are selected for larger scale field tests.

Selections continue until a small number of top performing events remain for mass production and delivery to the customer. If XYZ develops a new gene during this process, a patent will be filed that will allow XYZ to license the technology to other companies providing an additional revenue stream for XYZ.

Nursery and Orchard Business: XYZ's nursery and orchard business is the path through which XYZ delivers its commercially viable trees to the customer. The nursery and orchard business is also the path through which XYZ produces conventional seedlings. XYZ's orchards receive top quality trees from traditional tree improvement programs and XYZ's varietal program. These trees are used to produce seed for the production of trees to be delivered to customers. A portion of this seed will also be funneled back into XYZ's varietal program.

² This machine is in the developmental stage. At the time of the drafting of the private letter ruling, the placing of embryos in plugs and the placing of these plugs in a tray was a manual operation.

Discussion:

The primary issue in question is whether XYZ is engaged in processing, farming, or both. To address this issue, we must review the exemption for machines used in processing and the exemption for farm machinery.

Code Section 12-36-2120(17) exempts from sales and use tax the gross proceeds of sales, or sales price of:

machines used in ... processing, ... tangible personal property for sale. "Machines" include the parts of machines, attachments, and replacements used, or manufactured for use, on or in the operation of the machines and which (a) are necessary to the operation of the machines and are customarily so used, or (b) are necessary to comply with the order of an agency of the United States or of this State for the prevention or abatement of pollution of air, water, or noise that is caused or threatened by any machine used as provided in this section. This exemption does not include automobiles or trucks. ...

SC Regulation 117-302.5 concerns the above exemption, which applies to machines used in manufacturing tangible personal property for sale as well as machines used in processing tangible personal property for sale. For purposes of this exemption, the guidelines for determining whether the exemption is applicable are the same regardless of whether the machine is used in manufacturing or processing (See SC Regulation 117-302.5(B)(1).). As such, the principles discussed in the regulation concerning manufacturing are applicable for purposes of this advisory opinion in determining whether XYZ is engaged in processing.

SC Regulation 117.302.5 states in part:

(A) Introduction:

Machines used in manufacturing, processing, compounding, mining, or quarrying tangible personal property for sale, and the replacement parts and attachments to such machines, are exempt from the sales and use tax under Code Section 12-36-2120(17). Materials or equipment which might constitute a machine or machinery when not used for manufacturing, processing, compounding, mining, or quarrying tangible personal property for sale are not exempted.

(B) General Guidance:

(1) A "machine used in manufacturing ... tangible personal property for sale" is exempt from the sales and use tax. For purposes of this regulation subsection (117-302.5), manufacturing includes processing, compounding, mining and quarrying.

A machine qualifies for the exemption under Code Section 12-36-2120(17) if the machine is integral and necessary to the manufacturing process and the product being manufactured is being manufactured "for sale." A machine, which includes every mechanical device or combination of mechanical powers, parts, attachments and devices to perform some function and produce a certain effect or result, is integral and necessary to the manufacturing process if it meets all of the following:

- (a) The machine is used at a manufacturing facility. This exemption only applies to machines used at a facility whose purpose is that of manufacturing a product "for sale." It does not apply to machines used at a facility whose purpose is retailing, wholesaling, distributing, or some other non-manufacturing purposes. For example, machines used by a large industrial baker in manufacturing breads, cakes, and pies for sale may be purchased tax free; however, similar machines used by a "Ma & Pa" bakery on Main Street may not be purchased tax free since they are used at a facility whose purpose is retailing.
- (b) The machine is used in, and serves as an essential and indispensable component part of the manufacturing process, and is used on an ongoing and continuous basis during the manufacturing process. A machine is not a part of the manufacturing process merely because it is integral and necessary to the manufacturer. For example, machines used for warehouse, distribution, or administrative purposes are integral and necessary to the manufacturer, but not part of the manufacturing process.
- (c) The machine must be substantially "used in manufacturing ... tangible personal property for sale." The statute does not require that the machine be used exclusively in manufacturing; however, incidental manufacturing use will not qualify for the exemption. For purposes of the exemption, more than one-third of a machine's use in manufacturing is substantial.

* * * *

Based on the above and the longstanding position of the department, in order to qualify for the above exemption machines must be used by a processor in processing tangible personal property for sale in a processing facility.

In making this determination, the department looks at several factors, including but not limited to: the purpose of the facility and how the operation is perceived by the general public - manufacturer, processor, retailer, wholesalers, distributor; whether sales are mostly at wholesale or at retail; and, how the operation is taxed for property tax purposes.

When confronted with this question in Commission Decision #87-107, the commissioners denied the machine exemption to a business which made and sold ice cream at retail since the taxpayer's "operation [was] commonly understood to be that of a merchant." This decision did not elaborate on what was meant by the phrase "commonly understood to be that of a merchant;" however, an examination of case law from other jurisdictions provides insight. These cases, while concerning what is manufacturing, are relevant since (as stated above) South Carolina's machine exemption applies to "processing" as well as to "manufacturing."

In *HED, Inc. v. Helen A. Powers, Secretary of Revenue*, 84 N.C. App. 292, 352 S.E. 2d. 265 (1987), the Court of Appeals of North Carolina did not agree that a Hardee's restaurant was a "manufacturing industry or plant" within the meaning of N.C. Section 105-164.4(1)(h). Therefore, HED was not entitled to North Carolina's lower sales tax rate for manufacturing machinery.

In arriving at its decision, the North Carolina court referred to a North Carolina Supreme Court case, *Master Hatcheries, Inc. v. Coble*, 286 N.C. 518, 212 S.E. 2d. 150 (1950) in stating:

The Court [in *Master Hatcheries*] recognized as we do here 'that the term manufacturing as used in tax statutes is not susceptible of an exact and all-embracing definition, for it has many applications and meanings. Where, as here, the statute does not define the term, courts have resorted to the dictionaries to ascertain its generally accepted meaning and have then undertaken to determine its application to the circumstances of the particular case. The court used a comprehensive approach, considering such factors as the general rules regarding statutory interpretation, the commonly accepted meaning of manufacture as found in *Duke Power Co. v. Clayton*, 274 N.C. 505, 164 S.E. 2d. 289 (1968), the complexity of the process involved, and cases from other jurisdictions.

In *Duke Power* the court stated that the connotative meaning of manufacturing is "the making of a new product from raw or partly wrought materials." Although HED relies heavily on this definition, we heed the Court's suggestion in *Master Hatcheries* that we consider the definition in light of the circumstances of the particular case. A literal application of this definition which HED urges, could result in the inclusion of any business that produces a product. For example, word processing companies take in rough drafts of written materials and produce highly literate well-printed documents but word processing operators are hardly referred to as manufacturers.

HED strenuously argues that such processes as the assemblage of hamburgers and mixing of dough to form biscuits fit the technical perimeters of the above definition. However, manufacturing as that term is commonly understood does not include the mere preparation of food items at a restaurant exclusively for sale

on the premises. The essence of Hardee's operation is the selling or merchandising of its products, not production. Moreover, Hardee's food preparation is significantly different from the intricate and elaborate industrial operations that have been classified as manufacturing in the past.

In *McDonald's Corporation v. Oklahoma Tax Commission*, 563 P.2d 635, the Supreme Court of Oklahoma concluded that "preparation of food for immediate retail sale is not manufacturing or processing ..., in that such preparation or cooking of food is not 'generally recognized' as manufacturing or processing." In arriving at its decision, the Court cited *Kansas City v. Manor Baking Company*, 377 S.W. 2d 545 (Mo. App. 1964), which addressed whether a business was a manufacturer or a merchant baker.

The Court, in *McDonald's*, also cited *Roberts v. Bowers*, 170 Ohio St. 99, 182 N.E. 2d 858, a property tax case concerning a restaurant. In ruling against the taxpayer, the Ohio Supreme Court reasoned:

The primary purpose of the appellant here is to serve prepared food to the general public. Preparation and mixing of the food from raw materials (as, for example, Salisbury steak and salads) certainly partake of a manufacturing process, but not heretofore during the many years of existence of the statutory definition has one thought of a restaurant proprietor as a manufacturer.

Based on the above, the machines used by XYZ are not entitled to the sales and use tax exclusions and exemptions for processing tangible personal property for sale³.

However, the General Assembly has authorized a separate and distinct exemption for certain machines used in farm operations.

Code Section 12-36-2120(16) exempts from sales and use tax the gross proceeds of sales, or sales price of:

farm machinery and their replacement parts and attachments, used in planting, cultivating or harvesting farm crops, including bulk coolers (farm dairy tanks) used in the production and preservation of milk on dairy farms, and machines used in the production of poultry and poultry products on poultry farms, when such products are sold in the original state of production or preparation for sale. This exemption does not include automobiles or trucks;

³ While its is only applicable to the taxpayer to whom it was issued, SC Private Letter Ruling #99-3 provides guidance with respect to an analogous situation in which the Department determined that a produce warehouse was not entitled to the exemption for "machines ... used in ... processing ... tangible personal property for sale" in Code Section 12-36-2120(17).

SC Regulation 117-301.5 states in part:

The sale of farm machinery that is used in planting, cultivating or harvesting farms crops for sale is exempt under Code Section 12-36-2120(16). This exemption also applies to replacement parts and attachments. For purposes of this exemption, the terms "planting," "cultivating," and "harvesting" are defined as follows:

"Planting" includes all necessary steps in the preparation of the soil prior to, and including, the planting and sowing of the seed.

"Cultivating" includes the loosening of the soil around growing plants, control of moisture content in the soil, and weed and pest control.

"Harvesting" begins with the gathering of the crop and ends when the crop is placed in a temporary or permanent storage area. It also includes the additional preparation for storage or sale of certain crops such as the curing of tobacco, grains, and peanuts and the grading and packaging of peaches, cucumbers, tomatoes, etc.

The sale of bulk coolers (farm dairy tanks) used in the production and preservation of milk on dairy farms and machines used in the production of poultry and poultry products on poultry farms when such products are sold in the original state of production or preparation for sale are also exempt under Code Section 12-36-2120(16).

The following machines qualify for this exemption:

* * * *

(g) machinery used in planting, cultivating, and harvesting timber products.

* * * *

This separate and distinct exemption for farm machinery further supports the position that XYZ is not a processor. XYZ is a farm operation. In addition, various other exemptions in Code Section 12-36-2120 for electricity and fuel demonstrate the distinction the General Assembly has drawn between processing operations (12-36-2120(9) and (19)) and farming operations (12-36-2120(18), (32) and (44)).

While a person may be engaged in two businesses at the same time as was the case in *Monroe v. Livingston*, 251 SC214, 161 se 2D, 243 (1968), that is not the case with XYZ. XYZ's production operation is not that of a processor processing tangible personal property for sale, but is that of a farm operation. Each phase of its operation is not a

Based on the above, “planting” involves more than preparation of the soil for seeds. It also involves the preparation of soil for seedlings and plants. In addition, “cultivating” involves more than “the loosening of the soil around growing plants, control of moisture content in the soil, and weed and pest control.” It also involves the promoting the growth of a biological culture by a farm operation in the raising of farm crops when such is integral and necessary to the farm operation.

Therefore, machines used by XYZ in the mass production of its farm crop (seedling) for sale are “farm machinery ... used in planting, cultivating or harvesting of farm crops” for sale and exempt under Code Section 12-36-2120(16). This would include the sale to, or purchase by, XYZ of the following machines (or parts used to fabricate such machines) used in the mass production of seedlings: (1) machines used to uniformly place media on plates; (2) machines used to place bulked up tissue on media trays to stimulate the production of embryos; (3) machines used to place embryos in plugs and place plugs in trays⁴; and (4) machines used to place soil and seedlings in containers.

However, the cryogenic tanks used to store tissue are not machines used in “planting, cultivating or harvesting of farm crops” and not exempt under Code Section 12-36-2120(16).

The final issue concerns machines that are not used in the mass production of XYZ’s seedlings but are used to develop better seedlings and therefore better trees for use by XYZ’s customers. These machines are not used in “planting, cultivating or harvesting of farm crops” and not exempt under Code Section 12-36-2120(16).

However, Code Section 12-36-2120(56) exempts from the sales and use tax:

[m]achines used in research and development. "Machines" includes machines and parts of machines, attachments, and replacements which are used or manufactured for use on or in the operation of the machines, which are necessary to the operation of the machines, and which are customarily used in that way. "Machines used in research and development" means machines used directly and primarily in research and development, in the experimental or laboratory sense, of new products, new uses for existing products, or improvement of existing products.

Based on the above, any machine used by XYZ directly and primarily in research and development, in the experimental or laboratory sense, of new seedlings or improvement of existing seedlings are exempt from the tax under Code Section 12-36-2120(56). (See also SC Revenue Ruling #08-3.)

⁴ This machine is in the developmental stage. At the time of the drafting of the private letter ruling, the placing of embryos in plugs and the placing of these plugs in a tray was a manual operation.

In addition, the exemption for “machines used in research and development” under Code Section 12-36-2120(56) only applies to machines and parts, attachments, and replacements as defined in Code Section 12-36-2120(56). It does not apply to laboratory supplies, such as Petri dishes and solutions, that are not a part of a machine used in research and development as defined in Code Section 12-36-2120(56).

Note: As an agricultural operation, XYZ may be entitled to other exemptions related to agriculture if the specific requirements of each such exemption are met. For a list of agricultural exemptions, see the Department’s “2008 Sales and Use Tax Workshop Manual” at <http://www.sctax.org/Publications/default.htm>.

SOUTH CAROLINA DEPARTMENT OF REVENUE

s/Ray N. Stevens

Ray N. Stevens, Director

October 24, 2008
Columbia, South Carolina