

(4) Direct payment permit holders. A direct payment permit holder must obtain a registration number as required by paragraph (1) of this subsection in order to claim an exemption under this section. A direct payment permit holder with a registration number must file an annual information report for each year the number is effective as required by paragraph (3) of this subsection.

(5) Cancellation of registration number by the comptroller. The comptroller will cancel the registration number of a registrant who fails to comply with the provisions of this section. For example, the comptroller may ~~will~~ cancel the registration number of a registrant who fails to file an annual information report or who claims the franchise tax research and development activities credit without first cancelling its registration number, as required by paragraph (8) of this subsection. The comptroller shall give written notice of the cancellation to the registrant. The notice may be personally served on the registrant or sent by regular mail to the registrant's address as shown in the comptroller's records. The former registrant may not claim an exemption under this section during the period when the registration number is cancelled. A former registrant that purchases an item under a cancelled registration number may be subject to a criminal penalty under Tax Code, §151.707 (Resale or Exemption Certificate; Criminal Penalty) and §3.287(d)(3) of this title (relating to Exemption Certificates).

(6) Effective date of cancellation. A registrant whose registration number is cancelled by the comptroller is responsible for remitting Texas sales and use tax, and penalty and interest from the date of purchase, on any items purchased tax-free pursuant to Tax Code, §151.3182 on or after the effective date of cancellation. In the case of a registrant whose registration number is cancelled because of a failure to file an annual information report, the effective date of the cancellation is December 31 of the last year for which the registrant filed an annual information report. In the case of a registrant whose registration number is cancelled because the registrant, as a taxable entity or as a member of a combined group, claimed the franchise tax research and development activities credit, the effective date of cancellation is the beginning date of the accounting period covered by the franchise tax report on which the credit was claimed.

(7) Reinstatement following cancellation. A former registrant who has had its registration number cancelled by the comptroller may submit a request in writing to have the registration number reinstated.

(A) A former registrant whose registration number has been cancelled may request reinstatement of the number be given retroactive effect. The registrant must file an annual information report for each prior year for which the registration number is to be effective.

(B) A registration number will not be reinstated for periods during which the former registrant is not eligible for the exemption under this section.

(C) Before the comptroller will reinstate a registration number, the former registrant must remit any Texas sales and use taxes, as well as applicable penalties and interest from the date of purchase, on all purchases made tax-free under this section during periods when the registrant was not eligible for the exemption under this section.

(8) Cancellation of registration number by registrant. A registrant who has received a registration number and subsequently chooses to claim the franchise tax research and development activities credit must cancel the registration number. The registrant is responsible for remitting Texas sales and use tax, and penalty and interest from the date of purchase, on any items purchased tax-free under this section during any accounting periods covered by a franchise tax report on which the credit is claimed.

~~(f)~~ ~~[(d)]~~ Texas Qualified Research Sales and Use Tax Exemption Certificate. Beginning January 1, 2014, a retailer may accept a valid and complete Form 01-931, Texas Qualified Research Sales and Use Tax Exemption Certificate or any form promulgated by the comptroller or that succeeds such form, in lieu of Texas sales and use tax on the sale of depreciable tangible personal property that qualifies for exemption under subsection (b) of this section. To be valid and complete, a Texas Qualified Research Sales and Use Tax Exemption Certificate must bear the registration number issued to the registrant by the comptroller and must be signed by the registrant or the registrant's authorized agent. Texas Qualified Research Sales and Use Tax Exemption Certificates are subject to the requirements of §3.287(d) of this title. A retailer must maintain a copy of the Texas Qualified Research Sales and Use Tax Exemption Certificate accepted in lieu of tax on a sale and all records supporting that transaction. Refer to §3.281 of this title (relating to Records Required; Information Required).

~~(g)~~ ~~[(e)]~~ Divergent use. When a registrant uses an item purchased under a valid Texas Qualified Research Sales ~~[Sale]~~ and Use Tax Exemption Certificate in a taxable manner, the registrant is liable for payment of Texas sales and use tax, plus penalty and interest as applicable, based on the fair market rental value of the tangible personal property for the period of time used in the taxable manner. This subsection applies to an item that is used for any purpose other than for use in qualified research, whether that use occurs before, during, or after the time when the item is used in qualified research. Refer to Tax Code, §151.155 (Exemption Certificate).

~~(h)~~ ~~[(f)]~~ Refund of Texas sales and use tax paid on depreciable tangible personal property used in qualified research. A registrant with a valid registration number may file a claim for refund of Texas sales and use tax paid on purchases made on or after the later of January 1, 2014, or the effective date of the registration number, that qualify for exemption under subsection (b) of this section in accordance with the requirements of §3.325 of this title.

~~(i)~~ ~~[(g)]~~ Expiration. The sales and use tax exemption for depreciable tangible personal property used in qualified research expires on December 31, 2026.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on April 5, 2021.

TRD-202101421

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Comptroller of Public Accounts

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For further information, please call: (512) 475-0387



## SUBCHAPTER V. FRANCHISE TAX

### 34 TAC §3.599

The Comptroller of Public Accounts proposes amendments to §3.599, concerning margin: research and development activities credit. The comptroller amends this section to provide guidance regarding the franchise tax research and development activities credit.

Throughout the section, the comptroller adds titles to statutory citations and makes minor revisions to improve readability.

The comptroller amends subsection (b)(1) by deleting the term "affiliated group" and adding a new term, "business component." The comptroller deletes the term "affiliated group" because the definition of combined group refers to Tax Code, §171.1014 (Combined Reporting; Affiliated Group Engaged in Unitary Business), which provides sufficient guidance. The comptroller defines the term, "business component," and bases this term on Internal Revenue Code (IRC), §41(d)(2)(B) (Business component defined), with non-substantive changes.

The comptroller adds new paragraph (4) to define the term "Four-Part Test" and renumbers subsequent paragraphs. The comptroller derives this term from IRC, §41(d) (Qualified research defined) and the regulations applicable to that section.

The comptroller amends the definition of "Internal Revenue Code (IRC)" in renumbered paragraph (5) to explain that a regulation adopted after December 31, 2011 must require a taxable entity to apply that regulation to the 2011 federal income tax year to be included in this definition. The definition of IRC in Tax Code, §171.651 (1) states: "'Internal Revenue Code' means the Internal Revenue Code of 1986 in effect on December 31, 2011, excluding any changes made by federal law after that date, but including any regulations adopted under that code applicable to the tax year to which the provisions of the code in effect on that date applied."

The current version of Treasury Regulation, §1.41-4 (Qualified research for expenditures paid or incurred in taxable years ending on or after Dec. 31, 2003), adopted on November 3, 2016, is an example of a regulation that does not fully apply to the 2011 federal income tax year. With respect to its applicability, Treasury Regulation, §1.41-4 (e) provides: "Other than subsection (c)(6) of this section, this section is applicable for taxable years ending on or after December 31, 2003. Paragraph(c)(6) of this section is applicable for taxable years beginning on or after October 4, 2016. For any taxable year that both ends on or after January 20, 2015 and begins before October 4, 2016, the IRS will not challenge return positions consistent with all of subsection (c)(6) of this section or all of subsection (c)(6) of this section as contained in the Internal Revenue Bulletin (IRB) 2015-5 (see [www.irs.gov/pub/irs-irbs/irb15-05.pdf](http://www.irs.gov/pub/irs-irbs/irb15-05.pdf)). For taxable years ending before January 20, 2015, taxpayers may choose to follow either all of §1.41-4(c)(6) as contained in 26 CFR part 1 (revised as of April 1, 2003) and IRB 2001-5 (see [www.irs.gov/pub/irs-irbs/irb01-05.pdf](http://www.irs.gov/pub/irs-irbs/irb01-05.pdf)) or all of §1.41-4(c)(6) as contained in IRB 2002-4 (see [www.irs.gov/pub/irs-irbs/irb02-04.pdf](http://www.irs.gov/pub/irs-irbs/irb02-04.pdf))." The first sentence quoted above shows that, other than paragraph (c)(6), the current version of Treasury Regulation, §1.41-4 applies to the 2011 federal income tax year. With respect to subsection (c)(6), the third sentence quoted above shows that the current language in Treasury Regulation §1.41-4 (c)(6) does not apply to the 2011 federal income tax year. The fourth sentence quoted above allows taxable entities to choose one of two proposed regulations described in the Internal Revenue Bulletins incorporated by reference. The proposed regulations referenced in those Internal Revenue Bulletins were finalized prior to the 2011 federal income tax year. Although the federal regulations allow taxable entities to choose whether they follow this prior IRS guidance, the options are not included in the term "Internal Revenue Code" because Treasury Regulation, §1.41-4 (e) does not require taxable entities to follow either of those options.

Another example of a regulation that does not apply to the 2011 federal income tax year is Treasury Regulation 1.174-2 (Defini-

tion of research and experimental expenditures), adopted July 21, 2014. With respect to its applicability, Treasury Regulation, §1.174-2 (d) provides: "The eighth and ninth sentences of §1.174-2(a)(1); §1.174-2(a)(2); §1.174-2(a)(4); §1.174-2(a)(5); §1.174-2(a)(11) Example 3 through Example 10; §1.174-2(b)(4); and §1.174-2(b)(5) apply to taxable years ending on or after July 21, 2014. Taxpayers may apply the provisions enumerated in the preceding sentence to taxable years for which the limitations for assessment of tax has not expired." While the federal statute of limitations for the assessment of tax for the 2011 federal income tax year had not expired at the time this regulation was adopted, the provisions enumerated in this applicability provision are not included in the term "Internal Revenue Code" because the regulation does not require taxable entities to apply those provisions to the 2011 federal income tax year.

The comptroller amends the definition of "qualified research" in renumbered paragraph (7) to explain that qualified research must satisfy the Four-Part Test.

The comptroller amends the definition of "qualified research expense (QRE)" in renumbered paragraph (8) based on IRC, §41(b) (Qualified research expenses) and Treasury Regulation, §1.41-2 (Qualified research expenses). The amended definition of QREs does not limit the applicability of any provisions of IRC, §41(b) or Treasury Regulation, §1.41-2. Rather, the amended definition describes the basic requirements for an expense to be a QRE. QREs are the sum of all in-house research expenses and contract research expenses.

The comptroller adds subparagraph (A) to explain that in-house research expenses include wages paid to an employee for qualified services, supplies, and amounts paid to another person for the right to use computers. The comptroller adds clause (i) to explain that qualified services include engaging in qualified research, or the direct supervision or direct support of qualified research. In subclauses (I) through (III), the comptroller defines the terms "engaging in qualified research," "direct supervision," and "direct support."

The comptroller adds clause (ii) to explain that supplies include any tangible personal property other than land, improvements to land, or property of a character subject to the allowance for depreciation.

The comptroller adds clause (iii) to explain that certain items purchased without paying sales or use tax are not included in the definition of in-house research expenses. This is because certain sales or use tax exemptions require that the item be used in specific ways that are not compatible with the item's use in qualified research. The comptroller provides five examples illustrating this clause.

Subclause (I) contains examples illustrating this clause. Item (-a-) identifies two sales or use tax exemptions which are excluded under this clause: the manufacturing exemption under Tax Code, §151.318 (Property Used in Manufacturing) and the sale for resale exemption under Tax Code, §151.302 (Sales for Resale). To qualify for the manufacturing exemption, items used by a manufacturer must be used in or during the actual manufacturing, processing, or fabricating of tangible personal property for ultimate sale. IRC §41 (d)(4)(A) excludes: "any research conducted after the beginning of commercial production of the business component." A taxable entity cannot claim both the franchise tax credit and sales tax exemption for the same purchases or activities. The sales tax manufacturing exemption applies to items used to produce items for ultimate sale to a cus-

tomers, while the franchise tax R&D credit excludes items that are ready for commercial sale or use. Thus, a taxable entity cannot claim both the credit and exemption for the same activities. Furthermore, under Tax Code, §151.318 (c)(3), the manufacturing exemption excludes "equipment or supplies used in research or development of new products." While this exclusion to the manufacturing exemption is not directly tied to the definition of qualified research applicable to the franchise tax R&D credit, it does indicate that the manufacturing exemption was not intended to apply to research and development activities. To qualify for the sale for resale exemption, an item must be purchased with the intent to resell it to someone else, either in the form or condition in which it is acquired or as an attachment to or an integral part of other tangible personal property or taxable service. See Tax Code, §151.006 ("Sale for Resale."). Items used in qualified research are not resold and do not qualify for the sale-for-resale exemption.

Item (-b-) identifies three types of purchases that are not excluded under this clause: purchases of water, Sulphur, and items for which sales or use tax was paid to another state. These items are not taxable for reasons unrelated to the use of the items so there is not an inherent conflict with these items being used in qualified research, unlike the manufacturing or resale exemptions.

Subclause (II) explains that if the item were actually used in qualified research after claiming an exemption, that item may be included as an in-house research expense if sales or use tax, penalty, and interest is paid on the item.

The comptroller adds clause (iv) to explain that wages are defined by reference to IRC §3401(a) (Definitions). The comptroller adds clause (v) to explain how to allocate wages between qualified services and nonqualified services when an employee performs both types of services. The comptroller adds clause (vi) to explain that if over 80% of the services an employee provides are qualified services, then all of the services provided by that employee are qualified services.

The comptroller adds subparagraph (B) to provide that contract research expenses are 65% of any amount paid by the taxable entity to another person for qualified research. In this subparagraph, the comptroller explains: the type of agreement that is necessary for an expense to be a contract research expense; that payments contingent upon the success of the research are not contract research expenses; that qualified research is performed on behalf of a taxable entity if that taxable entity has a right to the research results; and with respect to which report year the contract research expenses can be taken. The comptroller cross-references IRC, §41(b), which provides that the allowable percentage of contract research expenses can change in certain circumstances.

The comptroller deletes paragraph (10), which contained a definition for the term research and development credit. This term is only used once in the section, in subsection (j)(2)(A), which includes information concerning the January 1, 2008 repeal of Tax Code, Chapter 171, Subchapter O (Tax Credit for Certain Research and Development Activities). This information sufficiently distinguishes the prior credit from the current credit without the need for a separate definition.

The comptroller adds new subsections (c) and (d) and reletters subsequent subsections.

In new subsection (c), the comptroller discusses the application of the Four-Part Test to explain the basic requirements for re-

search activities to be qualified research. The comptroller bases this subsection primarily on IRC, §41(d) and Treasury Regulation, §1.41-4.

In new paragraph (1), the comptroller describes the four individual components of the Four-Part Test: subparagraph (A) describes the Section 174 Test; subparagraph (B) describes the Discovering Technological Information Test; subparagraph (C) describes the Business Component Test; and subparagraph (D) describes the Process of Experimentation Test. In subparagraph (D), the comptroller provides several examples illustrating the Process of Experimentation Test.

In new paragraph (2), the comptroller explains that the Four-Part Test applies separately to each business component of the taxable entity.

In new paragraph (3), the comptroller explains that, if the whole business component does not meet the requirements of the Four-Part Test, the taxable entity may then shrink back the business component to the next most significant subset of elements of the business component. This process continues until the Four-Part Test is satisfied, or the most basic element of the product fails the Four-Part Test.

In new paragraph (4), the comptroller explains how the Four-Part Test applies to software development activities. The comptroller also identifies a list of software development activities that are likely to be qualified research and a list of software development activities that are unlikely to be qualified research. The explanation and lists in this paragraph are adapted from the Internal Revenue Service's Audit Guidelines on the Application of Process of Experimentation for all Software.

In new subsection (d), the comptroller lists activities that do not constitute qualified research. This list is based on IRC, §41(d)(4) and Treasury Regulation, §1.41-4(c) (Excluded activities). The discussion of the funded research exclusion is also based on Treasury Regulation, §1.41-4A(d) (Qualified research for taxable years beginning before January 1, 1986). This subsection contains examples for the research after commercial production exclusion and the adaptation of existing business components exclusion.

The comptroller amends relettered subsection (e) by moving the current language to paragraph (1) and adding two new paragraphs. The comptroller adds new paragraph (2) to explain that the taxable entity has the burden of proof to establish its entitlement to, and value of, the credit by clear and convincing evidence. In subparagraph (A), the comptroller explains that all qualified research expenses must be connected to specific qualified research activities. In subparagraph (B), the comptroller explains that all qualified research expenses must be supported by contemporaneous business records. The comptroller defines these contemporaneous business records for wages, supplies, and contract research expenses, including a non-exhaustive list of examples for each type of expense. The comptroller adds new paragraph (3) to explain that any determination by the IRS that a taxable entity is entitled to the federal research and development credit does not bind the comptroller when determining a taxable entity's eligibility for the credit.

The comptroller amends relettered subsection (g)(3) to change the term "this state" to "Texas."

The comptroller amends paragraph (5) to provide additional details regarding verification of prior year QREs when those prior years are outside of the statute of limitations.

The comptroller adds paragraph (6) to explain that if a taxable entity has any QREs under a higher education contract, then all of its QREs are included in the calculation at the higher rate allowed by paragraph (3) or (4) of subsection (g). This is the case even if not all of the QREs relate to higher education contracts.

The comptroller restructures relettered subsection (i) into five paragraphs. The first sentence of the current subsection is now new paragraph (1). New paragraph (2) provides that each member of a combined group determines the amount of the credit separately and then the combined group includes the credits of each member on the combined report. New paragraph (3) explains that a combined group must prorate any carryforward of the credit among the members of the combined group. This prorated carryforward credit remains with the member of the combined group for future tax periods, regardless of whether the member remains in the same combined group. New paragraph (4) explains that the higher education rate described in relettered subsections (g)(3) - (4) applies separately to each member of the combined group, and not to the combined group as a whole. One member of a combined group qualifying for the higher education rate does not qualify any other member of the combined group for that rate. New paragraph (5) contains the second sentence of the current subsection, which the comptroller amends to state that a combined group is the taxable entity for the purposes of claiming the credit.

The comptroller amends relettered subsection (l) by adding paragraph (3) to explain that the comptroller may verify credit carryforwards by verifying the qualified research activities on which the credit that created the carryforward was based. This verification may occur even if the statute of limitations has expired for the report year on which the original credit was claimed. This verification will not result in an assessment of tax, penalty, or interest for any period for which the statute of limitation is closed, but may result in an adjustment to the credit carryforward for any periods for which the statute of limitations is open.

Tom Currah, Chief Revenue Estimator, has determined that during the first five years that the proposed amendment is in effect, the amendment: will not create or eliminate a government program; will not require the creation or elimination of employee positions; will not require an increase or decrease in future legislative appropriations to the agency; will not require an increase or decrease in fees paid to the agency; will not increase or decrease the number of individuals subject to the rules' applicability; and will not positively or adversely affect this state's economy. This proposal amends a current rule.

Mr. Currah also has determined that for each year of the first five years the rule is in effect, proposed amendment would benefit the public by improving the clarity and implementation of the section. This rule is proposed under Tax Code, Title 2, and does not require a statement of fiscal implications for small businesses. The proposed amendment would have no significant fiscal impact on the state government, units of local government, or individuals. There would be no significant anticipated economic costs to the public.

Comments on the proposal may be submitted to Teresa G. Bostick, Director, Tax Policy Division, P.O. Box 13528, Austin, Texas 78711-3528. Comments must be received no later than 30 days from the date of publication of the proposal in the Texas Register.

The amendments are proposed under Tax Code, §111.002 (Comptroller's Rules; Compliance; Forfeiture), which provides

the comptroller with the authority to prescribe, adopt, and enforce rules relating to the administration and enforcement of the provisions of Tax Code, Title 2 (State Taxation).

The amendments implement Tax Code, Chapter 171, Subchapter M (Tax Credit for Certain Research and Development Activities).

§3.599. *Margin: Research and Development Activities Credit.*

(a) Effective dates.

(1) The provisions of this section apply to franchise tax reports originally due on or after January 1, 2014.

(2) These provisions expire on December 31, 2026. The credits allowed under this section cannot be established on a report originally due after December 31, 2026. The expiration does not affect the carryforward of a credit authorized under these provisions as provided in subsection (l) [(†)] of this section and established on a report originally due prior to the expiration date of these provisions.

(b) Definitions. The following words and terms, when used in this section, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Business component--A business component is any product, process, computer software, technique, formula, or invention, which is to be held for sale, lease, or license, or used by the taxable entity in a trade or business of the taxable entity. [~~Affiliated group--Entities in which a controlling interest is owned by a common owner, either corporate or noncorporate, or by one or more of the member entities.~~]

(2) Combined group--Taxable entities that are part of an affiliated group engaged in a unitary business and that are required to file a combined group report under Tax Code, §171.1014 (Combined Reporting; Affiliated Group Engaged in Unitary Business).

(3) Controlling interest--

(A) For a corporation, either more than 50%, owned directly or indirectly, of the total combined voting power of all classes of stock of the corporation, or more than 50%, owned directly or indirectly, of the beneficial ownership interest in the voting stock of the corporation.

(B) For a partnership, association, trust, or other entity other than a limited liability company, more than 50%, owned directly or indirectly, of the capital, profits, or beneficial interest in the partnership, association, trust, or other entity.

(C) For a limited liability company, either more than 50%, owned directly or indirectly, of the total membership interest of the limited liability company or more than 50%, owned directly or indirectly, of the beneficial ownership interest in the membership interest of the limited liability company.

(4) Four-Part Test--The test described in IRC, §41(d) (Qualified research defined) that determines whether research activities are qualified research. The four parts of the test are the Section 174 Test, the Discovering Technological Information Test, the Business Component Test, and the Process of Experimentation Test.

(5) [(4)] Internal Revenue Code (IRC)--The Internal Revenue Code of 1986 in effect on December 31, 2011, excluding any changes made by federal law after that date, but including any regulations that are later adopted under that code applicable to the tax year to which the provisions of the code in effect on that date applied. A regulation adopted after December 31, 2011 is only included in this term to the extent that the regulation requires a taxable entity to apply the regulation to the 2011 federal income tax year.

(6) [(5)] Public or private institution of higher education--

(A) an institution of higher education, as defined by Education Code, §61.003 (Definitions); or

(B) a private or independent institution of higher education, as defined by Education Code, §61.003.

(7) [(6)] Qualified research--This term has the meaning given in IRC [Internal Revenue Code], §41(d), except that the research must be conducted in Texas. Qualified research activities must satisfy each part of the Four-Part Test.

(8) [(7)] Qualified research expense--This term has the meaning given in IRC [Internal Revenue Code], §41(b) (Qualified research expenses), except that the expense must be for qualified research conducted in Texas. IRC, §41(b) defines qualified research expenses as the sum of in-house research expenses and contract research expenses.

(A) In-house research expenses include any wages paid or incurred for qualified services performed by an employee; any amount paid or incurred for supplies used in the conduct of qualified research; and any amount paid or incurred to another person for the right to use computers in the conduct of qualified research.

(i) Qualified services include an employee either engaging in qualified research or engaging in the direct supervision or direct support of qualified research.

(I) For the purposes of this clause, the term "engaging in qualified research" means the actual conduct of qualified research. For example, a scientist conducting laboratory experiments could be engaging in qualified research.

(II) For the purposes of this clause, the term "direct supervision" means the immediate supervision (first-line management) of qualified research. For example, a research scientist who directly supervises laboratory experiments, but who may not actually perform experiments, could be directly supervising qualified research. "Direct supervision" does not include supervision by a higher-level manager to whom first-line managers report, even if that manager is a qualified research scientist.

(III) For the purposes of this clause, the term "direct support" means services in the direct support of either: Persons engaging in actual conduct of qualified research, or persons who are directly supervising persons engaging in the actual conduct of qualified research.

(-a-) Direct support of research includes, but is not limited to, the services of: a secretary for typing reports describing laboratory results derived from qualified research; a laboratory worker for cleaning equipment used in qualified research; a clerk for compiling research data; and a machinist for machining a part of an experimental model used in qualified research.

(-b-) Direct support of research activities does not include general administrative services, or other services only indirectly of benefit to research activities. For example, services of: payroll personnel in preparing salary checks of laboratory scientists; an accountant for accounting for research expenses; a janitor for general cleaning of a research laboratory; or officers engaged in supervising financial or personnel matters do not qualify as direct support of research. This is true whether general administrative personnel are part of the research department or in a separate department.

(-c-) Direct support does not include supervision. Supervisory services constitute "qualified services" only to the extent provided in subclause (II) of this clause.

(ii) Supplies are any tangible property other than land, improvements to land, or property of a character subject to the allowance for depreciation.

(iii) If a taxable entity claimed a sales or use tax exemption under Tax Code, Chapter 151 (Limited Sales, Excise, and Use Tax) when it purchased a taxable item, and that exemption is for a use other than use in qualified research, the item is excluded from being an in-house research expense, even if it otherwise meets the definition of supplies in clause (ii) of this subparagraph. Exemptions or exclusions that are not based on the use of an item do not result in an exclusion from being an in-house research expense under this clause.

(I) For example:

(-a-) An item for which a taxable entity claimed the manufacturing exemption under Tax Code, §151.318 (Property Used in Manufacturing) or the sale for resale exemption under Tax Code, §151.302 (Sales for Resale) is excluded from being an in-house research expense under this clause.

(-b-) Water, sulphur, and items for which a taxable entity paid sales or use tax to another state are not subject to sales or use tax under Tax Code, §151.315 (Water), Tax Code, §151.3171 (Sulphur), and Tax Code, §151.303 (Previously Taxed Items: Use Tax Exemption or Credit), but are not excluded from being an in-house research expense under this clause.

(II) If an item is excluded from being an in-house research expense under this clause, and the taxable entity used that item in qualified research activities rather than the use for which the sales or use tax exemption was granted, the taxable entity may pay any sales or use tax, and any applicable penalty or interest, related to the purchase or use of the item. Once the applicable sales or use tax, penalty, and interest is paid, the taxable entity may include the cost of that item as an in-house research expense.

(iv) The term wages has the meaning given such term by IRC, §3401(a) (Wages). In the case of an employee within the meaning of IRC, §401(c)(1) (Self-employed individual treated as employee) the term wages includes the earned income as defined in IRC, §401(c)(2) (Earned income) of such employee. The term wages does not include any amount taken into account in determining the work opportunity credit under IRC, §51(a) (Determination of amount).

(v) If an employee performed both qualified services and nonqualified services, only wages for qualified services constitute an in-house research expense. Unless the taxable entity can demonstrate another method is more appropriate, the amount of wages that are in-house research expenses shall be determined by multiplying the total amount of wages paid to or incurred for the employee during the report year by the ratio of the total time actually spent by the employee in the performance of qualified services for the taxable entity to the total time spent by the employee in the performance of all services for the taxable entity during the report year.

(vi) Notwithstanding clause (v) of this subparagraph, if the ratio of the total time actually spent by an employee in the performance of qualified services for the taxable entity to the total time spent by the employee in the performance of all services for the taxable entity during the report year is greater than 80%, all services performed by that employee are considered qualified services.

(B) Contract research expenses are 65% of any amount paid or incurred by the taxable entity to any person, other than an employee of the taxable entity, for qualified research. If a taxable entity satisfies the requirements of IRC §41 (b)(3)(C) (Amounts paid to certain research consortia) or IRC §41 (b)(3)(D) (Amounts paid to eligible small businesses, universities, and Federal laboratories) the percentage

of allowable contract research expenses is increased as provided by those subparagraphs.

(i) An expense is paid or incurred for qualified research only to the extent that it is paid or incurred pursuant to an agreement that:

(I) is entered into prior to the performance of the qualified research;

(II) provides that research be performed on behalf of the taxable entity; and

(III) requires the taxable entity to bear the expense even if the research is not successful.

(ii) If an expense is paid or incurred by the taxable entity pursuant to an agreement under which payment is contingent on the success of the research, then the expense is not a contract research expense because the expense is considered paid for the product or result of the research rather than the performance of the research. This clause only applies to that portion of a payment that is contingent on the success of the research.

(iii) Qualified research is performed on behalf of the taxable entity if the taxable entity has a right to the research results, even if that right is not exclusive.

(iv) If any contract research expenses are paid or incurred during one report year for qualified research that is conducted in a subsequent report year, the expenses shall be treated as paid or incurred during the report year in which the qualified research is conducted.

(v) See IRC, §41(b) for special circumstances that change the percentage that applies to contract research expenses.

(9) [(8)] Registration Number--The Texas Qualified Research Registration Number [number] issued by the comptroller to a person who submits the Texas Registration for Qualified Research and Development Sales Tax Exemption form.

(10) [(9)] Research and development activities credit (credit)--A credit against franchise tax for qualified research expenses that is allowed under Tax Code, Chapter 171, Subchapter M (Tax Credit for Certain Research and Development Activities).

[(10) Research and development credit--A credit against franchise tax for research and development expenses allowed under Tax Code, Chapter 171, Subchapter O, and established on a franchise tax report originally due prior to January 1, 2008.]

(11) Tax period--The period on which a franchise tax report is based as provided by §3.584(c) of this title (relating to Margin: Reports and Payments).

(c) Application of the Four-Part Test. Research activities must satisfy each part of the Four-Part Test, as described in paragraph (1) of this subsection, to be qualified research.

(1) Four-Part Test.

(A) Section 174 Test. Expenditures related to the research must be eligible to be treated as expenses under IRC, §174 (Research and experimental expenditures).

(i) Expenditures are eligible to be treated as expenses under IRC, §174, if the expenditures are incurred in connection with the taxable entity's trade or business and represent a research and development cost in the experimental or laboratory sense. Expenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover infor-

mation that would eliminate uncertainty concerning the development or improvement of a product. Uncertainty exists if the information available to the taxable entity does not establish the capability or method for developing or improving the product or the appropriate design of the product.

(ii) For the purposes of this test, the term "product" includes any pilot model, process, formula, invention, technique, patent, or similar property, and includes products to be used by the taxable entity in its trade or business as well as products to be held for sale, lease, or license.

(iii) Expenditures for the following are not eligible to be treated as expenses under IRC, §174:

(I) land;

(II) depreciable property;

(III) the ordinary testing or inspection of materials or products for quality control;

(IV) efficiency surveys;

(V) management studies;

(VI) consumer surveys;

(VII) advertising or promotions;

(VIII) the acquisition of another's patent, model, production, or process; or

(IX) research in connection with literary, historical, or similar projects.

(B) Discovering Technological Information Test. The research must be undertaken for the purpose of discovering information that is technological in nature.

(i) Research is undertaken for the purpose of discovering technological information if it is intended to eliminate uncertainty concerning the development or improvement of a business component. Uncertainty exists if the information available to the taxable entity does not establish the capability or method for developing or improving the business component, or the appropriate design of the business component.

(ii) In order to satisfy the requirement that the research is technological in nature, the process of experimentation used to discover information must fundamentally rely on principles of the physical or biological sciences, engineering, or computer science. A taxable entity may employ existing technologies and may rely on existing principles of the physical or biological sciences, engineering, or computer science to satisfy this requirement.

(iii) A determination that research is undertaken for the purpose of discovering information that is technological in nature does not require that the taxable entity:

(I) seek to obtain information that exceeds, expands, or refines the common knowledge of skilled professionals in the particular field of science or engineering in which the taxable entity is performing the research; or

(II) succeed in developing a new or improved business component.

(C) Business Component Test. The application of the technological information for which the research is undertaken must be intended to be useful in the development of a new or improved business component of the taxable entity, which may include any product, process, computer software, technique, formula, or invention that is to

be held for sale, lease, or license, or used by the taxable entity in a trade or business of the taxable entity.

(i) If a taxable entity provides a service to a customer, the service provided to that customer is not a business component because a service is not a product, process, computer software, technique, formula, or invention. However, a product, process, computer software, technique, formula, or invention used by a taxable entity to provide services to its customers may be a business component.

(ii) A design is not a business component because a design is not a product, process, computer software, technique, formula, or invention. While uncertainty as to the appropriate design of a business component is a qualifying uncertainty for the Section 174 Test and the Discovering Technological Information test, the design itself is not a business component. For example, the design of a structure is not a business component, although the structure itself may be a business component. Similarly, a blueprint or other plan used to construct a structure that embodies a design is not a business component.

(D) Process of Experimentation Test. Substantially all of the research activities must constitute elements of a process of experimentation for a qualified purpose. A process of experimentation is undertaken for a qualified purpose if it relates to a new or improved function, performance, reliability, or quality of a business component. Any research relating to style, taste, cosmetic, or seasonal design factors does not satisfy the Process of Experimentation Test.

(i) A process of experimentation is a process designed to evaluate one or more alternatives to achieve a result where the capability or the method of achieving that result, or the appropriate design of that result, is uncertain as of the beginning of the taxable entity's research activities.

(ii) A process of experimentation must:

(I) be an evaluative process and generally should be capable of evaluating more than one alternative; and

(II) fundamentally rely on the principles of the physical or biological sciences, engineering, or computer science and involve:

(-a-) the identification of uncertainty concerning the development or improvement of a business component;

(-b-) the identification of one or more alternatives intended to eliminate that uncertainty; and

(-c-) the identification and the conduct of a process of evaluating the alternatives through, for example, modeling, simulation, or a systematic trial and error methodology.

(iii) A taxable entity may undertake a process of experimentation if there is no uncertainty concerning the taxable entity's capability or method of achieving the desired result so long as the appropriate design of the desired result is uncertain as of the beginning of the taxable entity's research activities. Uncertainty concerning the development or improvement of the business component (e.g., its appropriate design) does not establish that all activities undertaken to achieve that new or improved business component constitute a process of experimentation.

(iv) The substantially all requirement of this subparagraph is satisfied only if 80% or more of a taxable entity's research activities, measured on a cost or other consistently applied reasonable basis constitute elements of a process of experimentation that relates to a new or improved function, performance, reliability, or quality. The substantially all requirement is satisfied even if the remainder of a taxable entity's research activities with respect to the business component do not constitute elements of a process of experimentation

that relates to a new or improved function, performance, reliability, or quality.

(v) Non-experimental methods, such as simple trial and error, brainstorming, or reverse engineering, are not considered a process of experimentation.

(vi) Factors considered in determining whether a trial and error methodology is experimental systematic trial and error or non-experimental simple trial and error include, but are not limited to:

(I) whether the person conducting the trial and error methodology stops testing alternatives once a single acceptable result is found or continues to find multiple acceptable results for comparison;

(II) whether all the results of the trial and error methodology are recorded for evaluation;

(III) whether there is a written procedure for conducting the trial and error methodology; and

(IV) whether there is a written procedure for evaluating the results of the trial and error methodology.

(vii) Examples.

(I) Example 1. A taxable entity is engaged in the business of developing and manufacturing widgets. The taxable entity wants to change the color of its blue widget to green. The taxable entity obtains several different shades of green paint from various suppliers. The taxable entity paints several sample widgets, and surveys its customers to determine which shade of green its customers prefer. The taxable entity's activities to change the color of its blue widget to green do not satisfy the Process of Experimentation Test because its activities are not undertaken for a qualified purpose. All of the taxable entity's research activities are related to style, taste, cosmetic, or seasonal design factors.

(II) Example 2. The taxable entity in Example 1 chooses one of the green paints. The taxable entity obtains samples of the green paint from a supplier and determines that it must modify its painting process to accommodate the green paint because the green paint has different characteristics from other paints it has used. The taxable entity obtains detailed data on the green paint from its paint supplier. The taxable entity also consults with the manufacturer of its paint spraying machines. The manufacturer informs the taxable entity that it must acquire new nozzles that operate with the green paint it wants to use because the current nozzles do not work with the green paint. The taxable entity tests the new nozzles, using the green paint, to ensure that they work as specified by the manufacturer of the paint spraying machines. The taxable entity's activities to modify its painting process are not qualified research. The taxable entity did not conduct a process of evaluating alternatives in order to eliminate uncertainty regarding the modification of its painting process. Rather, the manufacturer of the paint machines eliminated the taxable entity's uncertainty regarding the modification of its painting process. The taxable entity's activities to test the nozzles to determine if the nozzles work as specified by the manufacturer of the paint spraying machines are in the nature of routine or ordinary testing or inspection for quality control.

(III) Example 3. A taxable entity is engaged in the business of manufacturing food products and currently manufactures a large-shred version of a product. The taxable entity seeks to modify its current production line to permit it to manufacture both a large-shred version and a fine-shred version of one of its food products. A smaller, thinner shredding blade capable of producing a fine-shred version of the food product is not commercially available. Thus, the

taxable entity must develop a new shredding blade that can be fitted onto its current production line. The taxable entity is uncertain concerning the design of the new shredding blade because the material used in its existing blade breaks when machined into smaller, thinner blades. The taxable entity engages in a systematic trial and error process of analyzing various blade designs and materials to determine whether the new shredding blade must be constructed of a different material from that of its existing shredding blade and, if so, what material will best meet its functional requirements. The taxable entity's activities to modify its current production line by developing the new shredding blade satisfy the Process of Experimentation Test. Substantially all of the taxable entity's activities constitute elements of a process of experimentation because it evaluated alternatives to achieve a result where the method of achieving that result, and the appropriate design of that result, were uncertain as of the beginning of the taxable entity's research activities. The taxable entity identified uncertainties related to the development of a business component, and identified alternatives intended to eliminate these uncertainties. Furthermore, the taxable entity's process of evaluating identified alternatives was technological in nature and was undertaken to eliminate the uncertainties.

(IV) Example 4. A taxable entity is in the business of designing, developing and manufacturing automobiles. In response to government-mandated fuel economy requirements, the taxable entity seeks to update its current model vehicle and undertakes to improve aerodynamics by lowering the hood of its current model vehicle. The taxable entity determines, however, that lowering the hood changes the air flow under the hood, which changes the rate at which air enters the engine through the air intake system, which reduces the functionality of the cooling system. The taxable entity's engineers are uncertain how to design a lower hood to obtain the increased fuel economy, while maintaining the necessary air flow under the hood. The taxable entity designs, models, simulates, tests, refines, and re-tests several alternative designs for the hood and associated proposed modifications to both the air intake system and cooling system. This process enables the taxable entity to eliminate the uncertainties related to the integrated design of the hood, air intake system, and cooling system. Such activities constitute 85% of its total activities to update its current model vehicle. The taxable entity then engages in additional activities that do not involve a process of evaluating alternatives in order to eliminate uncertainties. The additional activities constitute only 15% of the taxable entity's total activities to update its current model vehicle. In this case substantially all of the taxable entity's activities constitute elements of a process of experimentation because it evaluated alternatives to achieve a result where the method of achieving that result, and the appropriate design of that result, were uncertain as of the beginning of its research activities. The taxable entity identified uncertainties related to the improvement of a business component and identified alternatives intended to eliminate these uncertainties. Furthermore, the taxable entity's process of evaluating the identified alternatives was technological in nature and was undertaken to eliminate the uncertainties. Because 85% of the taxable entity's activities to update its current model vehicle constitute elements of a process of experimentation that relates to a new or improved function, performance, reliability, or quality, all of its activities satisfy the Process of Experimentation Test.

(V) Example 5. A taxable entity is in the business of providing building and construction services, including the construction of warehouses, strip malls, office buildings, and other commercial structures. The taxable entity is engaged to construct a structure in a part of Texas where foundation problems are common. The taxable entity's engineers were uncertain how to design the structure to ensure stability of the structure's foundation because the taxable entity had never designed a structure in a similar location. The taxable entity's engineers used their professional experience and various building

codes to determine how to design the foundation based on the conditions at the construction site. The engineers chose to use piles in the foundation. The taxable entity constructed a test pile on site to confirm whether this would work in the conditions present on the construction site. This test pile would become part of the foundation of the structure regardless of whether the engineers had to redesign the additional piles required for the foundation. The taxable entity's activities in using professional experience and business codes to design the foundation did not meet the Process of Experimentation Test because the activities did not resolve technological uncertainties through an experimental process. Constructing the test pile also did not meet the Process of Experimentation Test because it was not an evaluative process.

(VI) Example 6. A taxable entity is in the business of providing building and construction services, including the construction of warehouses, strip malls, office buildings, and other commercial structures. For one of its projects to construct an office building, the taxable entity was uncertain how to design the layout of the electrical systems. The taxable entity's employees held on-site meetings to discuss different options, such as running the wire under the floor or through the ceiling, but did not actually experiment by installing wire in different locations. The taxable entity did use computer-aided simulation and modeling to produce the final electrical system layout, but, in this case, such use was not an experimental process. The taxable entity's activities did not satisfy the Process of Experimentation Test because it did not conduct an experimental process of evaluating alternatives to eliminate a technological uncertainty.

(VII) Example 7. A taxable entity is an oil and gas operator that recently acquired rights to drill in an area in which it had not previously operated. The taxable entity decided to use horizontal drilling in this area, but it had never drilled a horizontal well and was uncertain how to successfully execute the horizontal drilling. At the time the taxable entity began horizontal drilling, the technology to drill horizontal wells was established. The taxable entity selected technology from existing commercially available options to use in its horizontal drilling program. The taxable entity's activities did not satisfy the Process of Experimentation Test because evaluating commercially available options does not constitute a process of experimentation.

(VIII) Example 8. A taxable entity is an oil and gas operator that recently acquired rights to drill in an area in which it had not previously operated. The taxable entity decided to use horizontal drilling in this area. The taxable entity had drilled a horizontal well before in a different formation and at different depths. However, it had never drilled a horizontal well in this formation or at the required depths and was uncertain how to successfully execute the horizontal drilling. The taxable entity utilized its existing technology to perform its horizontal drilling operations in this area and the existing technology was successful. The taxable entity's activities did not satisfy the Process of Experimentation Test because the taxable entity did not evaluate any alternative drilling methods.

(IX) Example 9. A taxable entity sought to discover novel cancer immunotherapies. The taxable entity was uncertain as to the appropriate design of the proteins to be used as a drug candidate. The taxable entity identified several alternative protein constructs and used a process to test them. The taxable entity's process involved testing the constructs using in vitro functional assays and binding assays, and either modifying the designs or discarding them and repeating the previous steps. The taxable entity took the resulting products from the in vitro testing and tested the drug candidate in living organisms. This process evaluated the various alternatives identified by the taxable entity. The taxable entity's activities satisfied the Process of Experimentation Test.

(2) Application of the Four-Part Test to business components. The Four-Part Test is applied separately to each business component of the taxable entity. Any plant process, machinery, or technique for commercial production of a business component is treated as a separate business component from the business component being produced.

(3) Shrink-back rule. The Four-Part Test is first applied at the level of the discrete business component used by the taxable entity in a trade or business of the taxable entity. If the requirements of the Four-Part Test are not met at that level, then they are applied at the next most significant subset of elements of the business component. This shrinking back of the product continues until either a subset of elements of the product that satisfies the requirements of the Four-Part Test is reached, or the most basic element of the product is reached, and such element fails to satisfy any part of the Four-Part Test.

(4) Software development as qualified research. In determining if software development activities constitute qualified research, the comptroller will consider the facts and circumstances of each activity.

(A) Application of Four-Part Test to software development activities.

(i) A taxable entity must prove that a software development activity is qualified research and meets all the requirements of the Four-Part Test under paragraph (1) of this subsection, even if the activity is likely to qualify as described in subparagraph (B) of this paragraph.

(ii) A taxable entity may prove that a software development activity described as unlikely to qualify in subparagraph (C) of this paragraph, is qualified research by providing evidence that the activity meets all the requirements of the Four-Part Test under paragraph (1) of this subsection.

(B) Software development activities likely to qualify. Types of activities likely to qualify include, but are not limited to:

(i) developing the initial release of an application software product that includes new constructs, such as new architectures, new algorithms, or new database management techniques;

(ii) developing system software, such as operating systems and compilers;

(iii) developing specialized technologies, such as image processing, artificial intelligence, or speech recognition; and

(iv) developing software as part of a hardware product where the software interacts directly with that hardware in order to make the hardware/software package function as a unit.

(C) Software development activities unlikely to qualify. Types of activities unlikely to qualify include, but are not limited to:

(i) maintaining existing software applications or products;

(ii) configuring purchased software applications;

(iii) reverse engineering of existing applications;

(iv) performing studies, or similar activities, to select vendor products;

(v) detecting flaws and bugs directed toward the verification and validation that the software was programmed as intended and works correctly;

(vi) modifying an existing software business component to make use of new or existing standards or devices, or to be compliant with another vendor's product or platform;

(vii) developing a business component that is substantially similar in technology, functionality, and features to the capabilities already in existence at other companies;

(viii) upgrading to newer versions of hardware or software or installing vendor-fix releases;

(ix) re-hosting or porting an application to a new hardware such as from mainframe to PC, or software platform, such as Windows to UNIX, or rewriting an existing application in a new language, such as rewriting a COBOL mainframe application in C++;

(x) writing hardware device drivers to support new hardware, such as disks, scanners, printers, or modems;

(xi) performing data quality, data cleansing, and data consistency activities, such as designing and implementing software to validate data fields, clean data fields, or make the data fields consistent across databases and applications;

(xii) bundling existing individual software products into product suites, such as combining existing word processor, spreadsheet, and slide presentation software applications into a single suite;

(xiii) expanding product lines by purchasing other products;

(xiv) developing interfaces between different software applications;

(xv) developing vendor product extensions;

(xvi) designing graphic user interfaces;

(xvii) developing functional enhancements to existing software applications/products;

(xviii) developing software as an embedded application, such as in cell phones, automobiles, and airplanes;

(xix) developing software utility programs, such as debuggers, backup systems, performance analyzers, and data recovery;

(xx) changing from a product based on one technology to a product based on a different or newer technology; and

(xxi) adapting and commercializing technology developed by a consortium or open software group.

(d) Excluded research activities. Qualified research does not include the activities described in this subsection.

(1) Research after commercial production. Any research conducted after the beginning of commercial production of the business component.

(A) Activities are conducted after the beginning of commercial production of a business component if such activities are conducted after the component is developed to the point where it is ready for commercial sale or use or meets the basic functional and economic requirements of the taxable entity for the component's sale or use.

(B) The following activities are deemed to occur after the beginning of commercial production of a business component:

(i) preproduction planning for a finished business component;

(ii) tooling-up for production;

- (iii) trial production runs;
- (iv) troubleshooting involving detecting faults in production equipment or processes;
- (v) accumulating data relating to production processes;
- (vi) debugging flaws in a business component; and
- (vii) any activities that involve the use of an item for which the taxable entity claimed the manufacturing exemption under Tax Code, §151.318.

(C) In cases involving development of both a product and a manufacturing or other commercial production process for the product, the research after commercial production exclusion applies separately for the activities relating to the development of the product and the activities relating to the development of the process. For example, even after a product meets the taxable entity's basic functional and economic requirements, activities relating to the development of the manufacturing process may still constitute qualified research, provided that the development of the process itself separately satisfies the requirements of this section, and the activities are conducted before the process meets the taxable entity's basic functional and economic requirements or is ready for commercial use.

(D) Clinical testing of a pharmaceutical product prior to its commercial production in the United States is not treated as occurring after the beginning of commercial production even if the product is commercially available in other countries. Additional clinical testing of a pharmaceutical product after a product has been approved for a specific therapeutic use by the Food and Drug Administration and is ready for commercial production and sale is not treated as occurring after the beginning of commercial production if such clinical testing is undertaken to establish new functional uses, characteristics, indications, combinations, dosages, or delivery forms for the product. A functional use, characteristic, indication, combination, dosage, or delivery form shall be considered new only if such functional use, characteristic, indication, combination, dosage, or delivery form must be approved by the Food and Drug Administration.

(E) Examples.

(i) Example 1. A taxable entity is a tire manufacturer and develops a new material to use in its tires. The taxable entity conducts research to determine the changes that will be necessary for it to modify its existing manufacturing processes to manufacture the new tire. The taxable entity determines that the new tire material retains heat for a longer period of time than the materials it currently uses for tires, and, as a result, the new tire material adheres to the manufacturing equipment during tread cooling. The taxable entity evaluates several alternatives for processing the treads at cooler temperatures to address this problem, including a new type of belt for its manufacturing equipment to be used in tread cooling. Such a belt is not commercially available. Because the taxable entity is uncertain of the belt design, it develops and conducts sophisticated engineering tests on several alternative designs for a new type of belt to be used in tread cooling until it successfully achieves a design that meets its requirements. The taxable entity then manufactures a set of belts for its production equipment, installs the belts, and tests the belts to make sure they were manufactured correctly. The taxable entity's research with respect to the design of the new belts to be used in its manufacturing of the new tire may be qualified research under the Four-Part Test. However, the taxable entity's expenses to implement the new belts, including the costs to manufacture, install, and test the belts were incurred after the belts met the taxable entity's functional and economic requirements and are excluded as research after commercial production.

(ii) Example 2. For several years, a taxable entity has manufactured and sold a particular kind of widget. The taxable entity initiates a new research project to develop a new or improved widget. The taxable entity's activities to develop a new or improved widget are not excluded from the definition of qualified research under this paragraph. The taxable entity's activities relating to the development of a new or improved widget constitute a new research project to develop a new business component and are not considered activities conducted after the beginning of commercial production.

(iii) Example 3. For the purposes of this example, assume that the taxable entity's development of its products satisfies the Four-Part Test described by subsection (c) of this section and is not otherwise excluded under this subsection. A taxable entity is a manufacturer of integrated circuits for use in specific applications. The taxable entity designs various integrated circuit devices and assembles various product configurations for testing. After an internal process of testing, the taxable entity delivers a sample quantity of the integrated circuit to a potential customer for further testing. At the time when the samples are delivered to the taxable entity's potential customer, the potential customer has not agreed to purchase any integrated circuits from the taxable entity. This process of testing by both the taxable entity and its potential customer continues until an acceptable design is achieved. At that point, the taxable entity and the potential customer enter into an agreement for the delivery of an order of the integrated circuits. In some cases, no acceptable design is achieved, and no agreement is reached with the potential customer. Research activities occurring prior to an agreement are not considered activities conducted after the beginning of commercial production because the integrated circuits were not yet ready for commercial use. Any research that occurs after an agreement is reached are excluded as activities conducted after the beginning of commercial production because the integrated circuits were ready for commercial use once the design was accepted by the potential customer.

(2) Adaptation of existing business components. Activities relating to adapting an existing business component to a particular customer's requirement or need. This exclusion does not apply merely because a business component is intended for a specific customer. For example:

(A) Example 1. A taxable entity is a computer software development firm and owns a general ledger accounting software core program that it markets and licenses to customers. The taxable entity incurs expenditures in adapting the core software program to the requirements of one of its customers. Because the taxable entity's activities represent activities to adapt an existing software program to a particular customer's requirement or need, its activities are excluded from the definition of qualified research under this paragraph.

(B) Example 2. Assume that the customer from Example 1 pays the taxable entity to adapt the core software program to the customer's requirements. Because the taxable entity's activities are excluded from the definition of qualified research, the customer's payments to the taxable entity are not for qualified research and are not considered to be contract research expenses.

(C) Example 3. Assume that the customer from Example 1 uses its own employees to adapt the core software program to its requirements. Because the customer's employees' activities to adapt the core software program to its requirements are excluded from the definition of qualified research, the wages the customer paid to its employees do not constitute in-house research expenses.

(D) Example 4. A taxable entity manufactures and sells rail cars. Because rail cars have numerous specifications related to performance, reliability and quality, rail car designs are subject to exten-

sive, complex testing in the scientific or laboratory sense. A customer orders passenger rail cars from the taxable entity. The customer's rail car requirements differ from those of the taxable entity's other existing customers only in that the customer wants fewer seats in its passenger cars and a higher quality seating material and carpet that are commercially available. The taxable entity manufactures rail cars meeting the customer's requirements. The rail car sold to the customer was not a new business component, but merely an adaptation of an existing business component that did not require a process of experimentation. Thus, the taxable entity's activities to manufacture rail cars for the customer are excluded from the definition of qualified research because the taxable entity's activities represent activities to adapt an existing business component to a particular customer's requirement or need.

(E) Example 5. A taxable entity is a manufacturer and undertakes to create a manufacturing process for a new valve design. The taxable entity determines that it requires a specialized type of robotic equipment to use in the manufacturing process for its new valves. Such robotic equipment is not commercially available. Therefore, the taxable entity purchases existing robotic equipment for the purpose of modifying it to meet its needs. The taxable entity's engineers identify uncertainty that is technological in nature concerning how to modify the existing robotic equipment to meet its needs. The taxable entity's engineers develop several alternative designs, conduct experiments using modeling and simulation in modifying the robotic equipment, and conduct extensive scientific and laboratory testing of design alternatives. As a result of this process, the taxable entity's engineers develop a design for the robotic equipment that meets its needs. The taxable entity constructs and installs the modified robotic equipment on its manufacturing process. The taxable entity's research activities to determine how to modify the robotic equipment it purchased for its manufacturing process are not considered an adaptation of an existing business component.

(F) Example 6. A taxable entity is an oil and gas operator and has been engaged in horizontal drilling for the past ten years. Recently, the taxable entity was hired by a customer to drill in a formation. The drilling objectives included targeting an interval within that formation for horizontal drilling. The taxable entity was uncertain about the successful execution of the horizontal drilling because it had not previously drilled a horizontal well in that formation. The taxable entity was also uncertain about the economic results from the targeted interval. The taxable entity drilled several horizontal wells before its customer was satisfied with the economic results. The taxable entity modified its existing horizontal drilling program based on these results. The taxable entity's activities to identify a horizontal drilling process are excluded from the definition of qualified research because the activities consisted of adapting an existing business component (its existing horizontal drilling process) to meet a particular customer's need.

(G) Example 7. For the purposes of this example, assume that the taxable entity's development of its products satisfies the Four-Part Test described by subsection (c) of this section and is not otherwise excluded under this subsection. A taxable entity is a manufacturer of rigid plastic containers. The taxable entity contracts with major food and beverage manufacturers to provide suitable bottle and packaging designs. The products designed by the taxable entity may be for repeat customers and the sizes and types of bottle may be similar to previous products. The development of each new product, and the production process necessary to produce the products at sufficient production volume, starts from new concept drawings developed by engineers. The taxable entity uses a qualifying process of experimentation to evaluate alternative concepts for the product and production processes. The taxable entity's activities related to both the product and the production process are not excluded from the definition of qualified research as an adaptation of an existing business component.

(3) Duplication of existing business component. Any research related to the reproduction of an existing business component, in whole or in part, from a physical examination of the business component itself or from plans, blueprints, detailed specifications, or publicly available information with respect to such business component. This exclusion does not apply merely because the taxable entity examines an existing business component in the course of developing its own business component.

(4) Surveys, studies, etc. Any efficiency survey; activity relating to management function or technique; market research, testing or development (including advertising or promotions); routine data collection; or routine or ordinary testing or inspection for quality control.

(5) Computer software. Any research activities with respect to internal use software.

(A) For the purposes of this paragraph, internal use software is computer software developed by, or for the benefit of, the taxable entity primarily for internal use by the taxable entity. A taxable entity uses software internally if the software was developed for use in the operation of the business. Computer software that is developed to be commercially sold, leased, licensed, or otherwise marketed for separately stated consideration to unrelated third parties is not internal use software.

(B) Software developed by a taxable entity primarily for internal use by an entity that is part of an affiliated group to which the taxable entity also belongs shall be considered internal use software for purposes of this paragraph.

(C) This exclusion does not apply to software used in:

- (i) an activity that constitutes qualified research, or
- (ii) a production process that meets the requirements

of the Four-Part Test.

(D) The determination as to whether software is internal use software depends on the facts and circumstances existing at the beginning of the development of the software.

(6) Social sciences, etc. Any research in the social sciences, arts, or humanities.

(7) Funded research. Any research funded by any grant, contract, or otherwise by another person or governmental entity.

(A) Research is considered funded if:

(i) the taxable entity performing the research for another person retains no substantial rights to the results of the research; or

(ii) the payments to the researcher are not contingent upon the success of the research.

(B) For the purposes of determining whether a taxable entity retains substantial rights to the results of the research:

(i) Incidental benefits to the researcher from the performance of the research do not constitute substantial rights. For example, increased experience in a field of research is not considered substantial rights.

(ii) A taxable entity does not retain substantial rights in the research it performs if the taxable entity must pay for the right to use the results of the research.

(C) If a taxable entity performing research does not retain substantial rights to the results of the research, the research is considered funded regardless of whether the payments to the researcher are

contingent upon the success of the research. In this case, all research activities are considered funded even if the researcher has expenses that exceed the amount received by the researcher for the research.

(D) If a taxable entity performing research does retain substantial rights to the results of the research and the research is considered funded under subparagraph (A)(ii) of this paragraph, the research is only funded to the extent of the payments and fair market value of any property that the taxable entity becomes entitled to by performing the research. If the expenses related to the research exceed the amount the researcher is entitled to receive, the research is not considered funded with respect to the excess expenses. For example, a taxable entity performs research for another person. Based on the contract, the research activities are considered funded under subparagraph (A)(ii) of this paragraph because payments to the researcher are not contingent on the success of the research. The taxable entity retains substantial rights to the results of the research. The taxable entity is entitled to \$100,000 under the contract but spent \$120,000 on the research activities. In this case, the research is considered funded with respect to \$100,000 and is not considered funded with respect to \$20,000.

(E) A taxable entity performing research for another person must identify any other person paying for the research activities and any person with substantial rights to the results of the research.

(F) All agreements, not only research contracts, entered into between the taxable entity performing the research and the party funding the research shall be considered in determining the extent to which the research is funded.

(G) The provisions of this paragraph shall be applied separately to each research project undertaken by the taxable entity.

(c) [(e)] Eligibility for credit.

(1) A taxable entity is eligible to claim a [research and development activities] credit for the periods in which the taxable entity is engaged in qualified research and incurs qualified research expenses. The credit may be claimed on a franchise tax report for qualified research expenses incurred during the period on which the report is based.

(2) A taxable entity has the burden of establishing its entitlement to, and the value of, the credit by clear and convincing evidence, including proof that the research activities meet the definition of qualified research, the amount of any qualified research expenses, and applying the shrink-back rule described in subsection (c)(3) of this section.

(A) All qualified research expenses must be paid or incurred in connection with research activities that are qualified research.

(B) All qualified research expenses must be supported by contemporaneous business records.

(i) Contemporaneous business records for wages are records that were created and maintained during the period in which the taxable entity paid the employee to engage in qualified services. This includes, but is not limited to, payroll records, employee job descriptions, performance evaluations, calendars, and appointment books.

(ii) Contemporaneous business records for supplies are records that were created and maintained during the period in which the supplies were purchased. This includes, but is not limited to, inventory records, invoices, purchase orders, and contracts.

(iii) Contemporaneous business records for contract research expenses are records that were created and maintained during the period in which the contract research expenses were paid or incurred. This includes, but is not limited to, contracts and invoices.

(3) An Internal Revenue Service audit determination of eligibility for the federal research and development credit under IRC, §41 (Credit for increasing research activities), whether that determination is that the taxable entity qualifies or does not qualify for the federal research and development credit, is not binding on the comptroller's determination of eligibility for the credit.

(f) [(d)] Ineligibility for credit.

(1) A taxable entity is not eligible to claim a credit on a franchise tax report for qualified research expenses incurred during the period on which the report is based if the taxable entity, or a member of the taxable entity's combined group[; if the taxable entity is a combined group], received an exemption from sales and use tax under Tax Code, §151.3182 (Certain Property Used in Research and Development Activities; Reporting of Estimates and Evaluation) during that period.

(2) A taxable entity that is not eligible to claim a credit under this subsection may carry forward an unused credit under subsection (l) of this section. [entity's ineligibility under this subsection does not affect the taxable entity's eligibility to claim a carryforward of unused credit under subsection (j) of this section.]

(g) [(e)] Amount of credit.

(1) Qualified research expenses in Texas. Subject to subsection (h) [(f)] of this section, and except as provided by paragraphs (2), (3), and (4) of this subsection, the credit allowed for any report equals 5.0% of the difference between:

(A) all [the] qualified research expenses incurred during the period on which the report is based; and

(B) 50% of the average amount of all qualified research expenses incurred during the three tax periods preceding the period on which the report is based.

(2) Entities without qualified research expenses in each of the three preceding tax periods. Except as provided by paragraph (4) of this subsection, if the taxable entity has no qualified research expenses in one or more of the three tax periods preceding the period on which the report is based, the credit for the period on which the report is based equals 2.5% of the qualified research expenses incurred during that period.

(3) Qualified research expenses under a higher education contract. Subject to subsection (h) [(f)] of this section, and except as provided by paragraph (4) of this subsection, if the taxable entity contracts with one or more public or private institutions of higher education for the performance of qualified research and the taxable entity incurs qualified research expenses in Texas [this state] under the contract during the period on which the report is based, then the credit for the report equals 6.25% of the difference between:

(A) all qualified research expenses incurred during the period on which the report is based; and

(B) 50% of the average amount of all qualified research expenses incurred during the three tax periods preceding the period on which the report is based.

(4) Entities with qualified research expenses under higher education contracts but without qualified research expenses in each of the three preceding tax periods. If the taxable entity incurs qualified research expenses in Texas under a contract with one or more public or private institutions of higher education for the performance of qualified research during the period on which the report is based, but the taxable entity has no qualified research expenses in one or more of the three tax periods preceding the period on which the report is based, then the

credit for the period on which the report is based equals 3.125% of all qualified research expenses incurred during that period.

(5) Same method of computing qualified research expenses required. Notwithstanding whether the statute of limitations for claiming a credit under this section has expired for any tax period used in determining the average amount of qualified research expenses under paragraph (1)(B) or (3)(B) of this subsection, the determination of which research expenses are qualified research expenses for purposes of computing that average must be made in the same manner as that determination is made for purposes of paragraph (1)(A) or (3)(A) of this subsection. The comptroller may verify the qualified research expenses used to compute the prior year average, even if the statute of limitations for the prior year has expired. This verification will not result in an adjustment to tax, penalty, or interest for any report year for which the statute of limitations is closed.

(6) A taxable entity with any qualified research expenses under higher education contracts in a tax period may include all of its qualified research expenses in the calculations under paragraphs (3) and (4) of this subsection, even if not all of the qualified research expenses are related to higher education contracts. For taxable entities in a combined group, see subsection (i) of this section.

(h) ~~[(f)]~~ Attribution of expenses following transfer of controlling interest.

(1) If a taxable entity acquires a controlling interest in another taxable entity, or in a separate unit of another taxable entity, during a tax period with respect to which the acquiring taxable entity claims a credit under this section, then the amount of the acquiring taxable entity's qualified research expenses equals the sum of:

(A) the amount of qualified research expenses incurred by the acquiring taxable entity during the period on which the report is based; and

(B) subject to paragraph (4) of this subsection, the amount of qualified research expenses incurred by the acquired taxable entity or unit during the portion of the period on which the report is based that precedes the date of the acquisition.

(2) A taxable entity that sells or otherwise transfers to another taxable entity a controlling interest in another taxable entity, or in a separate unit of a taxable entity, during a period on which a report is based may not claim a credit under this section for qualified research expenses incurred by the transferred taxable entity or unit during the period if:

(A) the taxable entity that makes the sale or transfer is ineligible for the credit under subsection (f) ~~[(d)]~~ of this section; or

(B) the acquiring taxable entity claims a credit under this section for the corresponding period.

(3) If during any of the three tax periods following the period in which a sale or other transfer described by paragraph (2) of this subsection occurs, the taxable entity that sold or otherwise transferred the controlling interest reimburses the acquiring taxable entity for research activities conducted on behalf of the taxable entity that made the sale or other transfer, the amount of the reimbursement is:

(A) included as qualified research expenses incurred by the taxable entity that made the sale or other transfer for the tax period during which the reimbursement was paid, subject to paragraph (5) of this subsection; and

(B) excluded from the qualified research expenses incurred by the acquiring taxable entity for the tax period during which the reimbursement was paid.

(4) An acquiring taxable entity may not include on a report the amount of qualified research expenses otherwise authorized by paragraph (1)(B) of this subsection if the taxable entity that made the sale or other transfer described by paragraph (2) of this subsection received an exemption under Tax Code, §151.3182 during the portion of the period on which the acquiring taxable entity's report is based that precedes the date of the acquisition.

(5) A taxable entity that makes a sale or other transfer described by paragraph (2) of this subsection may not include on a report the amount of reimbursement otherwise authorized by paragraph (3)(A) of this subsection if the reimbursement is for research activities that occurred during a tax period in which the entity that makes a sale or other transfer received an exemption under Tax Code, §151.3182.

(i) ~~[(g)]~~ Combined reporting.

(1) A credit under this section for qualified research expenses incurred by a member of a combined group must be claimed on the combined report for the group required by Tax Code, §171.1014[~~(Combined Reporting; Affiliated Group Engaged in Unitary Business)~~].

(2) Each member of a combined group determines its credit under this section as if it were an individual taxable entity. The total credits of each member of the combined group shall be added together to determine the total credit claimed on the combined report.

(3) Each member of a combined group is entitled to that portion of the carryforward of the credit under subsection (1) of this section in proportion to the amount of the credit created by each member's qualified research. Each member of a combined group remains entitled to its portion of the carryforward even if the member changes combined groups for any reason.

(4) The higher education rate described by subsection (g)(3) and (4) of this section applies to each member of a combined group separately and not to the combined group as a whole.

(5) The combined group is the taxable entity for purposes of claiming the credit. Eligibility for and the amount of the credit is determined by each member as if it were an individual taxable entity [this section].

(j) ~~[(h)]~~ Tiered partnership reporting.

(1) An upper tier entity and a lower tier entity may claim a credit under this section for qualified research expenses; however, an upper tier entity and a lower tier entity cannot claim a credit under this section for the same qualified research expense.

(2) An upper tier entity that includes the total revenue of a lower tier entity for purposes of computing its taxable margin as authorized by Tax Code, §171.1015 (Reporting for Certain Partnerships in Tiered Partnership Arrangement) may claim the credit under this section for qualified research expenses incurred by the lower tier entity to the extent of the upper tier entity's ownership interest in the lower tier entity.

(k) ~~[(i)]~~ Limitation. The total credit claimed under this section for a report, including the amount of any carryforward credit under subsection (l) ~~[(j)]~~ of this section, may not exceed 50% of the amount of franchise tax due for the report before any other applicable tax credits.

(l) ~~[(j)]~~ Carryforward.

(1) If a taxable entity is eligible for a credit that exceeds the limitation under subsection (k) ~~[(i)]~~ of this section, the taxable entity may carry the unused credit forward for not more than 20 consecutive reports.

(2) Research and development credits [~~Credits~~], including credit carryforwards, are considered to be used in the following order:

(A) a credit carryforward of unused research and development credits accrued under Tax Code, Chapter 171, Subchapter O (Tax Credit for Certain Research and Development Activities), before its repeal on January 1, 2008, and claimed as authorized by §3.593 of this title (relating to Margin: Franchise Tax Credits);

(B) a credit carryforward under this section; and

(C) a current year credit.

(3) If a taxable entity claims a carryforward on a report within the statute of limitations, the comptroller may verify that the credit that established the carryforward was based on qualified research activities, even if the statute of limitations for the year in which the credit was created has expired. This verification will not result in an adjustment to tax, penalty, or interest for any report year for which the statute of limitations has expired. The verification may result in an adjustment to the carryforward for all periods within the unexpired statute of limitations and for all future periods in which the taxable entity may claim the carryforward.

(m) [~~(k)~~] Assignment prohibited. A taxable entity may not convey, assign, or transfer the credit allowed under this section to another entity unless all of the assets of the taxable entity are conveyed, assigned, or transferred in the same transaction.

(n) [~~(l)~~] Application for credit.

(1) [~~A taxable entity must apply for a credit under this section.~~] A taxable entity applies for the credit by claiming the credit on or with the franchise tax report for the period for which the credit is claimed. A [~~To apply for a credit, a~~] taxable entity must also complete Form 05-178, Texas Franchise Tax Research and Development Activities Credits Schedule, its electronic equivalent, or any form promulgated by the comptroller that succeeds such form.

(2) The comptroller may require a taxable entity that claims a credit under this section to provide all data and information required for the comptroller to evaluate the credit and to comply with Tax Code, §151.3182(c).

(o) [~~(m)~~] Amending reports.

(1) If a report was originally due and filed after the effective date of this section and a credit allowed under this section was not claimed, a taxable entity may file an amended report within the statute

of limitation to claim a credit, if the taxable entity or a member of its combined group does not have an active Registration Number for that period. See §3.584 of this title for information about filing an amended report.

(2) If a taxable entity or member of the combined group has or had a Registration Number for a period for which it intends to claim a credit allowed under this section, the taxable entity or member of the combined group must submit a written request to cancel the registration before claiming a credit. The written request must contain [~~with~~] the following information:

(A) the tax period(s) covered by the report for which it intends to claim a credit allowed under this section; and

(B) a statement whether any tax-exempt purchases were made. If tax-exempt purchases were made, include an original or amended sales and use tax report with tax due, penalty, and interest for the sales tax periods that cover the tax-exempt purchases.

(3) If a report was filed claiming a credit allowed under this section and the taxable entity later decides to claim a sales and use tax exemption under Tax Code §151.3182, the taxable entity must:

(A) file an amended franchise tax report that does not claim the credit under this section and pay any tax, penalty, and interest due;

(B) apply for a Registration Number; and

(C) file a request for a sales and use tax refund for taxes paid on purchases under Tax Code, §151.3182.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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