OFFICE OF TAX APPEALS

STATE OF CALIFORNIA

In the Matter of the Appeal of: **K. DEMLER AND** **M. DEMLER**	OTA Case No. 20035989

OPINION

Representing the Parties:

For Appellants: Alex J. Velazquez, Attorney

For Respondent: Pamela W. Bertani, Attorney

For Office of Tax Appeals: Linda Frenklak, Attorney

T. LEUNG, Administrative Law Judge: Pursuant to Revenue and Taxation Code (R&TC) section 19045, K. Demler and M. Demler (appellants) appeal an action by Franchise Tax Board (respondent) proposing additional tax of $79,675, plus interest, for the 2012 taxable year.

Appellants waived their right to an oral hearing; this appeal is therefore being decided based on the written record.

ISSUE

Whether appellants have established that they are entitled to claim the California research and development (R&D) credit under R&TC section 17052.12 for the 2012 taxable year.

FACTUAL FINDINGS

1. Appellants are the sole owners and operators of a family-owned egg ranch farming business, dba Pine Hill Egg Ranch (Pine Hill), located in California that produces and sells eggs to egg wholesalers.

2. Respondent's action was based on its disallowance of appellants' claimed California R&D credit for the 2012 taxable year.[1]

3. Appellants filed a California Resident Income Tax Return (Form 540) for the 2012 taxable year. On their return, appellants reported Pine Hill as a Schedule C (i.e., sole proprietorship) business. On Form 3523, Research Credit, appellants claimed a California R&D credit of $79,675 based on claimed qualified research expenses (QREs) consisting of wages of $1,210,423 paid for claimed qualified services and contract research expenses of $903.

4. Respondent audited appellants' claimed R&D credits for taxable years 2008 through 2012. The auditor sent appellants information document requests (IDRs) and conducted a site visit of Pine Hill.

5. Appellants provided the auditor with a research credit study (the Study) prepared on their behalf by Alliantgroup, LP (Alliantgroup).[2] The Study asserts that Alliantgroup reviewed a list of the projects and related design drawings, Food and Drug Administration (FDA) prevention plans, and email correspondences and conducted interviews with Pine Hill's president and manager. As described in the Study, appellants' claimed California R&D credits for taxable years 2008 through 2012 are based on the following four projects conducted during 2008 through 2012:

   A. Chicken Houses and Cages Project.

   The chicken houses and cages project involved the research, design, and construction of new chicken houses and cages to comply with the FDA's regulatory

[1] Appellants did not claim California R&D credits on their original California Resident Income Tax Returns (Forms 540) for taxable years 2008 through 2011. Instead, they filed amended California returns (Forms 540X) for taxable years 2008 through 2011, claiming the California R&D credit; copies of appellants' original and amended California returns for taxable years 2008 through 2011 are not in the record. Respondent subsequently disallowed each of these R&D credits and denied each of these refund claims. Copies of respondent's refund claim denial notices are not in the record. Because appellants failed to timely appeal respondent's denial of their refund claims for taxable years 2008 through 2011, none of these taxable years are at issue in this appeal. These taxable years are discussed herein to the extent that they are relevant to the 2012 taxable year.

[2] Alliantgroup represents appellants in this appeal.

requirements and requirements mandated by the passage of California Proposition 2.[3] Appellants faced uncertainty concerning "the optimal design of the chicken cages to meet the new standards, as well as maintain, if not improve, the quality and functionality of [their] egg collection processes." Appellants hired a consulting firm that developed engineering drawings, models, and reports of a proposed chicken house for appellants' review. Appellants ultimately "selected a cage design allowing for [116] inches per bird, following the European standard, arranging the cages over [12] decks high, in a [400] foot long and [35] foot tall house."

B. Rodent Monitoring Project.

Appellants conducted the rodent monitoring project to develop a process of rodent monitoring and pest control. As of July 2010, FDA imposed a mandatory rodent monitoring system. Appellants faced uncertainty concerning "the optimal method to monitor and control the processes." After evaluating alternative methods for rodent monitoring, appellants elected "to focus primarily on the quail drinkers," a circular water dispenser that holds water mixed with bait.

C. Bird Nutrition Project.

Appellants conducted the bird nutrition project "to develop formulation improvements to the hens' feed to increase the hens' productivity and improve their health." They specifically "sought to develop improvements to the feed formulations to evaluate varying types and ratios of nutrients." Appellants "collaborated with a contractor to develop and test improved formulations," they "utilized and assessed approximately [10-12] different formulas," and they "carefully tracked the nutrients utilized and the eggs produced."

D. Cleaning Processes Project.

Appellants conducted the cleaning processes project to develop and improve the cleaning procedures due to stringent state and federal requirements concerning

[3] The Study explains Proposition 2 as follows: "Proposition 2 was a California ballot proposition enacted following the general election in 2008 to address the prevention of farm animal cruelty," which became operative on January 1, 2015, which "requires that egg-laying hens be able to lie down, stand up, fully extend their limbs and turn around freely," but it "does not give specific parameters for implementing these requirements."

salmonella and other harmful bacteria. Appellants developed a formulation, using foggers operating 24 hours a day inside the building. Initially, appellants used formaldehyde, a widely used disinfectant. After swab test results came back positive for salmonella, appellants consulted with a contractor to develop a fumigation procedure, which led to their effective use of formaldehyde and BioPhene, a disinfectant used in customized foggers. In addition, appellants used wash stations, an improved building enclosure, and improved manure removal procedures.

6. The auditor disallowed appellants' claimed California R&D credits for taxable years 2008 through 2012. The auditor determined that the claimed research failed to qualify for R&D credits and there was insufficient substantiation of the claimed research activities.

7. Respondent issued appellants a Notice of Proposed Assessment (NPA) dated December 31, 2015, for the 2012 taxable year. The NPA disallowed appellants' claimed R&D credit of $79,675, because they did not conduct qualified research activities during 2012. The NPA proposed additional tax of $79,675, plus interest.

8. Appellants protested the NPA for the 2012 taxable year. With their protest letter, appellants submitted a data disk with files.

9. A protest hearing was held on September 22, 2016. The protest hearing officer issued an IDR dated November 1, 2018, which requested detailed information about the four projects. The protest hearing officer issued a report dated January 30, 2020, which stated that, although appellants submitted a response dated December 12, 2018, they provided no additional information for the four projects. The protest hearing officer concluded that the four claimed projects did not constitute qualified research under R&TC section 17052.12 and Internal Revenue Code (IRC) section 41(d), the refund claims for taxable years 2008 through 2011 should be denied, and a Notice of Action – Affirmation should be issued for the 2012 taxable year. Respondent issued a Notice of Action (NOA) affirming the NPA for the 2012 taxable year. The NOA states that interest was abated for the following periods: October 1, 2016, through June 1, 2017; August 12, 2017, through October 17, 2017; October 18, 2017, through April 17, 2019;[4] and May 22, 2018, through

[4] The NOA apparently contains a typo and respondent meant April 17, 2018, rather than April 17, 2019.

July 30, 2018. In addition, the NOA states that appellants' amended returns for taxable years 2008 through 2011 were denied.

10. Appellants appealed the NOA for the 2012 taxable year.

11. After the parties filed their opening briefs, Office of Tax Appeals (OTA) requested by letter that appellants submit revised original and supplemental appeal letters that use a consistent exhibit identification system, as well as an exhibit list, and to identify with numerical references the documents that support each of appellants' contentions on appeal, including (but not limited to) contemporaneous documents that indicate that during 2012, appellants were engaged in qualified research and development activities, and documents that substantiate their claimed base amount and California fixed-base percentage for the 2012 taxable year. OTA provided respondent an opportunity to file a responsive brief. OTA stated:

> We find that there is good cause for requesting appellants to provide more guidance in navigating approximately 2,359 pages of submitted exhibit documents. Appellants have the burden of proof in this appeal. Because appellants request that OTA decide this matter based on the written record, there will be no opportunity for [respondent] and OTA to examine these documents at an oral hearing. Although appellants claimed research and development credits for tax years 2008 through 2012, the only tax year at issue in this appeal is 2012. Yet, most of the submitted documents appear to relate to tax years before and after tax year 2012. Neither the original nor supplemental appeal letter refers to any specific submitted exhibit documents with respect to any of appellants' contentions on appeal. Appellants therefore provide no analysis as to how approximately 2,359 pages of submitted evidence support their position on appeal with respect to their claimed research and development credit for the 2012 tax year. Despite appellants' assertion that they assigned Bates numbers to the submitted documents, there are no Bates numbers on a multitude of pages after the page marked Bates number KJD 1538 and there are some pages with Bates numbers out of sequence. In addition, appellants have included approximately 116 pages beginning with Bates number KJD 1009 and ending with Bates number KJD 1126 and approximately 58 pages beginning with Bates number KJD 320 and ending with Bates number KJD 378 that only contain a few complete and incomplete words formatted vertically on each page. There are duplicate documents contained in the submissions, including but not limited to the [FDA's] Egg Safety Rule Outreach Guidance. Furthermore, appellants have not provided an exhibit list that provides a title identifying each of the relevant documents submitted.

12. In response to OTA's July 22, 2021 letter, the parties filed additional briefs.

DISCUSSION

I. Burden of Proof

Tax deductions and credits are a matter of legislative grace, and taxpayers have the burden of proving that they are entitled to them. (*INDOPCO, Inc. v. Commissioner* (1992) 503 U.S. 79, 84; see also *Appeals of Swat-Fame, Inc., et al*., 2020-OTA-046P.) Statutes granting tax credits are to be construed strictly against the taxpayer with any doubts resolved in respondent's favor. (*Dicon Fiberoptics, Inc. v. Franchise Tax Bd.* (2012) 53 Cal.4th 1227, 1235.) "As with all tax credits, taxpayers who claim the [R&D] credit bear the burden of establishing their entitlement to it." (*Geosyntec Consultants, Inc. v. U.S.* (11th Cir. 2015) 776 F.3d 1330, 1334.)

Treasury Regulation section 1.41-4(d) provides, "A taxpayer claiming a credit under [IRC] section 41 must retain records in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit." (See *Appeal of Pino*, 2020-OTA-375P.) "A taxpayer is not required to keep records in a particular manner so long as the records maintained substantiate his or her entitlement to the [R&D] credit." (*Suder v. Commissioner*, T.C. Memo. 2014-201 [citing authorities] (*Suder*).) To find adequate substantiation for a taxpayer's claimed research activities, however, this panel need not undertake the task of sorting through voluminous and unorganized documentation. (*Appeal of Amaya*, 2021-OTA-328P; *Hale v. Commissioner*, T.C. Memo. 2010-229 ["petitioner offers us what amounts in effect to a shoebox full of papers"]; *Patterson v. Commissioner*, T.C. Memo. 1979-362 [disapproving the "shoebox method" of recordkeeping].)[5]

II. Applicable Law

Under IRC section 41, as modified by R&TC section 17052.12, an individual taxpayer is entitled to claim a California R&D credit for increasing research activities on specific business components. For purposes of the California R&D credit, the term "qualified research" has the same meaning as the term defined in IRC section 41(d) except that the qualified research shall include only research conducted in California. (R&TC, § 17052.12(d).) As relevant to this

[5] Appellants' additional brief and documents submitted in response to OTA's letter fail to cure the defects described therein. Accordingly, this panel will not separately address appellants' additional brief and documents in this Opinion.

appeal, the California R&D credit shall be an amount equal to 15 percent of the excess (if any) of the QREs for the taxable year over a prescribed base amount. (IRC, § 41(a)(1); R&TC, § 17052.12(b)(3).) A taxpayer's QREs include "in-house research expenses" and "contract research expenses." (IRC, § 41(b)(1).) "In-house research expenses" are any wages incurred or paid to employees for qualified services and any amounts paid or incurred for supplies used in qualified research, and "contract research expenses." (IRC, § 41(b)(2)(A).) "Qualified services" are services consisting of engaging in qualified research or engaging in the direct supervision or direct support of qualified research activities. (IRC, § 41(b)(2)(B).)

Four Tests

To be qualified research under IRC section 41, a taxpayer's claimed research activities must satisfy each of the following four qualified research tests: 1) the process of experimentation test; 2) the IRC section 174 test; 3) the technological information test; and 4) the business component test. (IRC, § 41(d)(1); *Union Carbide Corp. and Subsidiaries v. Commissioner*, T.C. Memo. 2009-50, affd. (2d Cir. 2012) 697 F.3d. 104, cert. den. (2013) 568 U.S. 1244 (*Union Carbide*).) Each of the qualified research tests shall be applied separately to each business component of the taxpayer. (IRC, § 41(d)(2)(A); see also *Max v. Commissioner*, T.C. Memo. 2021-37.) A business component is defined as "any product, process, computer software, technique, formula, or invention" that the taxpayer sells, leases, licenses, or uses in a trade or business of the taxpayer. (IRC, § 41(d)(2)(B); see also *Little Sandy Coal Co., Inc. v. Commissioner*, T.C. Memo. 2021-15 (*Little Sandy Coal Co.*).) If a business component fails any of the qualified research tests, the "shrinking-back rule" allows the qualified research test to be applied to decreasing subcomponents of the business component until either the subcomponent meets the qualified research test or the smallest subcomponent fails to meet the qualified research test.[6] (Treas. Reg. § 1.41-4(b)(2).)

The Process of Experimentation Test

The process of experimentation test requires that substantially all the research activities constitute elements of a process of experimentation for a qualified purpose. (IRC,

[6] Appellants do not argue in this appeal that the "shrinking-back rule" applies, so this panel will not endeavor to apply it on appellants' behalf. (See *Max v. Commissioner*, T.C. Memo. 2021-37, fn. 37; *Little Sandy Coal Co*, *supra*.)

§ 41(d)(1)(C).) The process of experimentation test has three elements: (A) the "substantially all" element; (B) the process of experimentation element; and (C) the qualified purpose element. (IRC, § 41(d)(1)(C) & (d)(3); see also *Union Carbide*, *supra*.)

A. "Substantially All" Element

The "substantially all" element means that 80 percent or more of the taxpayer's research activities for each business component, measured on a cost or other consistently applied reasonable basis, must constitute elements of a process of experimentation for a qualified purpose. (Treas. Reg. § 1.41-4(a)(6).) The "substantially all" element is applied separately to each business component. (*Ibid.*; see also *Union Carbide*, *supra*.) A taxpayer does not fail the "substantially all" element even if the remaining 20 percent or less of its research activities with respect to a business component do not constitute elements of a process of experimentation for a qualified business purpose so long as the remaining research activities satisfy the IRC section 174 test and are not otherwise excluded under IRC section 41(d)(4). (Treas. Reg. § 1.41-4(a)(6).)

B. Process of Experimentation Element

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 taxpayer's research activities." (Treas. Reg. § 1.41-4(a)(5)(i).) "A process of experimentation must fundamentally rely on the principles of the physical or biological sciences, engineering, or computer science[.]" (*Ibid.*) A process of experimentation involves the following three factors: 1) "the identification of uncertainty concerning the development or improvement of a business component"; 2) "the identification of one or more alternatives intended to eliminate that uncertainty"; and 3) "the identification and the conduct of a process of evaluating the alternatives (through, for example, modeling, simulation, or a systematic trial and error methodology)." (*Ibid.*) "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." (Treas. Reg. § 1.41-4(a)(5)(i).)

C. Qualified Purpose Element

Research shall be treated as conducted for a qualified purpose when it relates to a new or improved function, performance, reliability, or quality of the business component. (IRC, § 41(d)(3)(A); see also Treas. Reg. § 1.41-4(a)(5)(ii).) Research shall not be treated as conducted for a qualified purpose if the research "relates to style, taste, cosmetic, or seasonal design factors." (IRC, § 41(d)(3)(B); see also Treas. Reg. § 1.41-4(a)(5)(ii).)

In *United Stationers, Inc. v. U.S.* (7th Cir. 1998) 163 F.3d 440, cert. den., (1999) 527 U.S. 1023 (*United Stationers*), the taxpayer purchased a software package from a consulting firm to create eight separate, but related, software programs. The Seventh Circuit Court of Appeals held that the taxpayer's related eight projects did not involve a process of experimentation for purposes of IRC section 41, because they involved the modification of a commercially available software package to meet the taxpayer's specific operational needs, and there was "no technical uncertainty from the outset." (*Id*. at p. 446.)

In *Suder v. Commissioner*, T.C. Memo. 2014-201, the U.S. Tax Court distinguished *United Stationers*, *supra*, 163 F.3d 440, because the 12 projects at issue in *Suder* involved the development of new software and there was uncertainty as to capability, method, or design, whereas in *United Stationers* the taxpayer modified existing software programs with no associated technical uncertainty. The U.S. Tax Court found that for purposes of IRC section 41, 80 percent or more of the activities conducted with respect to each of the 12 projects constituted elements of a process of experimentation.

Excluded Activities

IRC section 41(d)(4) provides that certain types of activities are specifically excluded from the definition of qualified research, including adaptation or duplication of an existing business component, routine data collection, routine or ordinary testing, and inspection for quality control. With respect to the adaptation of an existing business component, Treasury Regulation section 1.41-4(c)(10), Example 6, describes the modifications a rail car manufacturer made to an existing rail car design, at the request of a customer, to reduce the number of seats in its passenger cars and provide commercially available higher quality seating material and carpet. The regulation concludes that the rail car manufacturer's activities are excluded from the definition of qualified research, because the modified rail car "was not a new business

component, but merely an adaptation of an existing business component that did not require a process of experimentation."

III. Analysis As to Whether Appellants Conducted Qualified Research

The analysis begins by applying the four-part test for qualified research to each of the four projects, focusing on the process of experimentation test.

Chicken Houses and Cages Project

The Study explains that the chicken houses and cages project involved the research, design, and construction of new chicken houses and cages to comply with FDA regulatory requirements and Proposition 2. According to the Study, appellants faced uncertainty concerning "the optimal design of the chicken cages to meet the new standards, as well as maintain, if not improve, the quality and functionality of [their] egg collection processes," and appellants selected a cage design that was based on "the European standard" after a consulting firm provided them with diagrams, models, and reports.

The protest hearing officer found that during phase one of the project, which occurred between 2008 and 2009, appellants evaluated alternative egg collection processes and concluded that they "would need to build new larger chicken houses to accommodate enriched colony systems." The protest hearing officer found that during phase two, which occurred between 2009 and 2014, appellants worked with salespersons and engineers of equipment manufacturers who developed proposals using commercially available options based on the general requirements or specifications appellants provided and they hired a contractor who performed services that were not related to cage designs or egg collection process improvements. At the auditor's October 23, 2014 site visit, appellants stated that they chose to use an enriched colony cage system manufactured by the Italian company, Facco, they did not design any of the equipment installed in the new chicken house, and all the equipment used in the new chicken house was commercially available. It is unclear, however, when appellants purchased and installed the Facco enriched colony cage system.[7]

[7] The protest hearing officer noted that no date is available as to when appellants purchased the enriched colony cage system. Appellants submitted copies of their FDA S.E. Prevention Plans dated August 18, 2011, and October 26, 2012, which describe appellants' lay ranch as consisting of three groups of lay houses that were 10 years old, 20 years old, and 40 years old without any reference to any enriched colony cage system. Appellants have not produced copies of any FDA S.E. Prevention Plans dated later than October 26, 2012.

On appeal, appellants do not dispute the auditor's and protest hearing officer's factual findings. Appellants essentially argue that the activities conducted prior to the purchase and use of the commercially available Facco enriched colony cage system satisfy the process of experimentation test. Appellants contend that if their activities only consisted of replacing their existing chicken house and cages with the commercially available Facco enriched colony cage system, "there would be no dispute that there was no qualified research undertaken with respect to this project." Appellants state, however, that "nothing in [Proposition 2] itself provided the method by which California taxpayers were to comply with its mandates." Appellants also state that "it would be illogical to conclude that implementing changes such as the type required to comply with Proposition 2 could be accomplished by simply purchasing commercially available cage products[.]" Appellants argue that they were "uncertain as to the appropriate design of [the] housing and cages, as well as the method by which to incorporate [the] new designs."

For the 2012 taxable year, appellants have not established that the chicken houses and cages project consisted of a "methodical plan involving a series of trials to test a hypothesis, analyze the data, refine the hypothesis, and retest the hypothesis so that it constitutes experimentation in the scientific sense." (*Siemer Milling Company v. Commissioner*, T.C. Memo. 2019-37; see also *Union Carbide*, *supra*.) After considering commercially available options, appellants purchased and used the Facco enriched colony cage system, which was not a new business component, but merely an adaptation of a commercially available business component, that did not require a process of experimentation. (*United Stationers*, *supra*, 163 F.3d at p. 446.) As the auditor stated, "Enriched colony systems were already available in the market and the manufacturers of these systems had already established the capability and methods of cage designs which eliminates uncertainty." The chicken houses and cages project thus fails the process of experimentation test. Accordingly, there is no need to discuss whether the chicken houses and cages project satisfies each of the remaining three tests under IRC section 41(d).

The Rodent Monitoring Project

The Study states that the rodent monitoring project involved the development of rodent monitoring and pest control processes and there was uncertainty concerning "the optimal method to monitor and control the processes." According to the Study, however, an FDA-imposed mandatory rodent monitoring system has been in effect since July 2010. Similarly, the protest

hearing officer found that the FDA required egg producers to visually inspect for rodents, bait, trap, record their findings based on a rodent index, and maintain rodent and bait consumption monitoring records. The protest hearing officer stated that appellants' rodent control methods, including the submitted rodent monitoring and bait consumption records for 2010, 2011, and 2012, are not experimental, because they are clearly outlined in the FDA requirements. The protest hearing officer found that appellants used commercially available tin cat traps, owl boxes, T-tubes, quail drinkers, rodenticides and motion sensors, and information was available if consumers, such as appellants, elected to construct their own "T-shaped" bait stations with PVC pipe. The protest hearing officer concluded that there was no scientific method to appellants' use of computer-controlled motion sensors and subsequent placement of traps to recover and remove rodents and this project did not satisfy the process of experimentation test.

There is no factual dispute concerning the rodent monitoring project. On appeal, appellants merely state that the rodent monitoring project satisfies the process of experimentation test, because "the placing of bait stations and controlled motion sensors in various locations to trap and eliminate rodents is decidedly scientific," and they faced uncertainty "in developing a T-tube design bait station built out of PVC pipe." Appellants do not deny that since 2010, they have been subject to an FDA-imposed mandatory rodent monitoring system, that they used commercially available tin cat traps, owl boxes, T-tubes, quail drinkers, rodenticides and motion sensors, and information concerning the construction of "T-shaped" bait stations using PVC pipe is available to consumers. Appellants reiterate that they ultimately "elected to focus primarily on the quail drinkers," and they "drafted a detailed report discussing the process undertaken by [appellants] to meet the FDA Prevention Plans."[8]

For the 2012 taxable year, appellants have not established that the claimed research activities related to the rodent monitoring project involved the development of a hypothesis "as to how a new alternative might be used to develop a business component, test that hypothesis in a scientific manner, analyze the results of the test, and then either refine the hypothesis or discard it and develop a new hypothesis and repeat the previous steps." (*Union Carbide*, *supra*.) As discussed with respect to the chicken houses and cages project, appellants' use of commercially available products, such as bait stations, is an adaptation of existing business components that

[8] It is unclear when appellants implemented new rodent monitoring processes. Appellants' SE FDA prevention plans dated August 18, 2011, and October 26, 2012, both state that appellants' rodent monitoring methodologies in 2011 and 2012 consisted of baiting, trapping, and using owl boxes around the facility.

does not require a process of experimentation. (*United Stationers*, *supra*, 163 F.3d 440.) Furthermore, appellants have not shown the existence of any technical uncertainty with regard to their compliance with FDA Prevention Plans. The rodent monitoring project thus fails the process of experimentation test. Accordingly, there is no need to discuss whether the rodent monitoring project satisfies each of the remaining three tests under IRC section 41(d).

Bird Nutrition Project

The Study explains that the bird nutrition project involved the development of feed formula improvements and appellants "developed numerous formulations, with approximately ten to twelve different formulas being utilized and assessed by [appellants]." The Study, however, does not identify any uncertainty with respect to this project. During the auditor's site visit, appellant-husband stated that appellants purchased feed directly from a cooperative, which provides a feed price sheet to its members, the cooperative "employs nutritional scientists who formulate and test the feed offered to its members for purchase," and he "does not work directly with any of the scientists to develop the feed formulae offered to its members for purchase." To substantiate that this project consists of qualified research, appellants submitted feed logs, which are small pocket notebooks with handwritten notes. After requesting but not receiving a detailed explanation of the feed logs, including a description of each item recorded, calculations, and ratios computed, the auditor concluded that the feed logs were not reliable because the information presented was not identifiable. In addition, the auditor found no evidence that substantiated appellants' claim, as stated in the Study, that they developed 10 to 12 new or improved feed formulas "as a result of a process of experimentation during taxable years 2008 through 2012."[9] The auditor concluded that this project consisted of routine inspection and tweaking of appellants' feed formulas, which are excluded from qualified research as quality assurance.

With respect to the bird nutrition project, the protest hearing officer found that both the feed and the additives, such as limestone, oyster shells, and vitamin D, used by appellants are commercially available products for purchase and appellants' feed logs merely reflect "a tracking of bird feed consumption for the purpose of purchasing additional feed." The protest hearing

[9] On appeal, appellants do not contend that they developed 10 to 12 new or improved formulas under the bird nutrition project. This panel, therefore, concludes that appellants have conceded this contention.

officer stated that appellants are "simply combining different feeds to achieve better egg quality results."

On appeal, appellants do not dispute that they adjusted the feed, including the use of additives such as limestone, oyster shells, and vitamin D, to achieve optimal nutrition for the hens, the additives are commercially available products for purchase, and they purchased their feed directly from a cooperative. Appellants explain that they recorded data concerning feed inventories, egg production, and flock information at the hen level.[10] Appellants assert that they used the feed commodity to calculate the most cost-effective rations for their hens and they "purchased feed through nutritional scientists, who formulate and test the feed offered to its members for purchase."

For the 2012 taxable year, appellants have not established that the bird nutrition project consisted of a "methodical plan involving a series of trials to test a hypothesis, analyze the data, refine the hypothesis, and retest the hypothesis so that it constitutes experimentation in the scientific sense." (*Siemer Milling Company v. Commissioner*, T.C. Memo. 2019-37; see also *Union Carbide*, *supra*.) As discussed with respect to the chicken houses and cages project, appellants' use of commercially available products, such as feed and additives, is an adaptation of existing business components that does not require a process of experimentation. (*United Stationers*, *supra*, 163 F.3d at p. 446.) The bird nutrition project thus fails the process of experimentation test. Accordingly, there is no need to discuss whether the bird nutrition project satisfies each of the remaining three tests under IRC section 41(d).

Cleaning Processes Project

The Study states that the cleaning processes project involved the development and improvement of cleaning procedures due to the stringent federal and state requirements concerning salmonella and other harmful bacteria. The Study does not state, however, what uncertainty appellants faced with respect to this project. According to the auditor, appellants claimed that this project consisted of three subparts: 1) the design and testing of a new fogger

[10] Appellants refer to Exhibit C of their supplemental brief, which they claim contains a Feed Log (Bate Stamp KJD 0268) that purportedly shows a snapshot of their data monitoring efforts, and a Feed Change document (Bate Stamps KJD 0250-KJD 0263) that purportedly shows their alterations to the original feed formulation. This panel notes, however, that Bate Stamps KJD 0250-KJD 0263 consist of a one-page report for various formula of Vitagold brand products and a 12-page report for various formula of Vitagold brand products, both dated March 2, 2012. The only other document attached to Exhibit C is a one-page document (without a Bate Stamp) that appears to be a handwritten feed consumption log for five days from February 18, 2012, through February 22, 2012.

system; 2) vaccination tests; and 3) the installation of washing stations for equipment and personnel. At the auditor's site visit, appellant-husband stated that appellants purchased and installed a commercially available fogger. Appellants informed the auditor that they previously paid a pest control company to disinfect the chicken house with formaldehyde but determined that it was more effective to use the fogging procedure. The auditor asserted that appellants did not submit requested documentation that shows they designed and tested a new fogger system.

As indicated in appellants' FDA prevention plans dated August 18, 2011, and October 26, 2012, appellants' cleaning and disinfection programs in 2011 and 2012 were essentially identical, including the use of a 25 percent concentration of formaldehyde with water to fumigate the environmental house and the naturally ventilated houses. It is thus unclear when appellants switched from fumigating with only formaldehyde to a combination of formaldehyde and BioPhene, as stated in the Study.

The auditor found that appellants tested their hens for salmonella and vaccinated them against salmonella with commercially available live vaccinations, as required by FDA regulations, and a commercially available killed, i.e., inactivated, vaccination, which is currently required by California's Department of Food and Agriculture. At the auditor's site visit, appellant-husband stated that appellants buy their chicks from a hatchery that provides its customers with a comprehensive vaccination program. The auditor asserted that appellants did not submit requested documentation that shows that they "conducted vaccination tests that were not routine and required under FDA regulations."

At the site visit, the auditor visually inspected the washing station for equipment and the washing stations for personnel. According to the auditor, the commercially available washing station for equipment was located inside the facility's security gates and equipment was sprayed with high pressured disinfectant before proceeding onto the farm, and the washing stations for personnel was located in front of the facility's main entrance and the hen houses and consisted of a commercially available sink for hand washing and commercially available boot dipping stations that were filled with a wet or dry disinfecting agent. The auditor stated that appellants "implemented bio-security procedures in accordance with FDA regulations using commercially available products." The auditor asserted that appellants did not submit requested documentation

that shows that the washing station for equipment or the washing stations for personnel were the result of a process of experimentation.

On appeal, appellants do not dispute the auditor's factual findings regarding this project. Appellants state that "the FDA Egg Rule required egg producers to follow biosecurity measures, such as cleaning and disinfection of personnel and equipment." Appellants describe the fogger they assembled, their washing stations for equipment and personnel, and their use of formaldehyde, a widely used disinfectant, and BioPhene, a disinfectant utilized in custom made foggers.

For the 2012 taxable year, appellants have not established that the cleaning processes project consisted of a "methodical plan involving a series of trials to test a hypothesis, analyze the data, refine the hypothesis, and retest the hypothesis so that it constitutes experimentation in the scientific sense." (*Siemer Milling Company v. Commissioner*, T.C. Memo. 2019-37; see also *Union Carbide, supra*.) As discussed with respect to the chicken houses and cages project, appellants' use of commercially available products, including foggers, vaccines, salmonella tests, washing stations, formaldehyde, and BioPhene, is an adaptation of existing business components that does not require a process of experimentation. (*United Stationers, supra*, 163 F.3d at p. 446.) Furthermore, appellants have not shown the existence of any technical uncertainty regarding their compliance with stringent state and federal requirements concerning salmonella and other harmful bacteria. The cleaning processes project thus fails the process of experimentation test. Accordingly, there is no need to discuss whether the cleaning processes project satisfies each of the remaining three tests under IRC section 41(d).

To the extent that any of the four projects involved activities conducted in 2012 that constituted elements of a process of experimentation for a qualified purpose, appellants have not substantiated that 80 percent or more of such activities constituted elements of a process of experimentation. (IRC, § 41(d)(1)(C); Treas. Regs. § 1.41-4(a)(6).) Because none of the four projects satisfies the process of experimentation test, none of these projects constitute "qualified research" under R&TC section 41.[11]

[11] Because we conclude that none of the four projects qualifies for the R&D credit for the 2012 taxable year: 1) there is no need to discuss whether the claimed research activities conducted under any of these four projects are expressly excluded from the definition of qualified research under IRC section 41(d)(4)(B), to the extent they are related to the adaptation of commercially available products (see Treas. Reg. § 1.41-4(c)(10), Ex.6.); and 2) none of the expenses incurred in any of these projects can be QREs under IRC section 41(b).

HOLDING

Appellants have not established that during 2012, they conducted qualified research for purposes of the California R&D credit.

DISPOSITION

Respondent's action disallowing appellants' claimed R&D credit for the 2012 taxable year is sustained.

DocuSigned by:
Tommy Leung
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Tommy Leung
Administrative Law Judge

We concur:

DocuSigned by:
Asaf Kletter
D17AEDDCAAB045B...
Asaf Kletter
Administrative Law Judge

DocuSigned by:
Kenneth Gast
3AF5C32BB93B456...
Kenneth Gast
Administrative Law Judge

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