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BOARD OF EQUALIZATION

STATE OF CALIFORNIA

In the Matter of the Appeals of:

HANK FEENSTRA AND

CATHERINE FEENSTRA[1]

HEARING SUMMARY[2]

PERSONAL INCOME TAX APPEAL

Case No. 464316

Years	Claims For Refund
2001	$ 14,041
2002	$ 22,838
2003	$ 14,842[3]
2004	$ 29,463[4]

Representing the Parties:

For Appellants: Michael A. Thompson, Representative

For Franchise Tax Board: Jason Riley, Tax Counsel

[1] Appellants reside in Sacramento County, California.

[2] A prior hearing summary was prepared for this appeal but the matter was deferred for further briefing.

[3] Staff notes that the amounts listed in the Appeal Letter and on the first page of Respondent's Opening Brief for 2001-2003 are smaller than the credit amounts claimed on line 41 of each of appellants' Forms 3523 in the amended returns (Resp. Open. Br., exhibits D, E & F), as follows:
2001: amended return $14,202, Appeal Letter $14,041.
2002: amended return $25,179, Appeal Letter $22,838.
2003: amended return $31,425, Appeal Letter $14,842.

[4] On appeal, appellants request a refund of $29,463 for taxable year 2004 but, as discussed herein, the parties dispute whether the Board has jurisdiction to hear and decide the refund claim for this year.

QUESTIONS: (1) Whether the Board has jurisdiction to hear and decide appellants' appeal of respondent's disallowance of research and development (R&D) tax credits claimed for tax year 2004.

(2) Whether appellants have met their burden of proof to substantiate their fixed-base percentage calculation for purposes of determining the allowable amount of R&D credit.

(3) Whether appellants have presented evidence sufficient to demonstrate that the claimed activities constituted "qualified research" and to prove the amount of qualified research expenditures (QREs) pursuant to Internal Revenue Code (IRC) section 41.

HEARING SUMMARY

Background

Appellant-husband Hank Feenstra is the sole owner of a subchapter S corporation known as California Cascade-Woodland, Inc. (CCW). At the Sacramento facility, CCW manufactures and distributes treated wood products, using alkaline copper quarternary (ACQ) wood treatment chemicals under license from Osmose, Inc. (Osmose), a corporation operating out of Buffalo, New York, and Griffin, Georgia, that is not owned, controlled, or otherwise affiliated with CCW. On its original California S Corporation income tax return (Form 100S) for each of tax years 2001, 2002, 2003 and 2004, appellants did not claim the R&D credit under R&TC section 23609. In March 2006, CCW filed amended returns (Form 100X) for the taxable years 2001, 2002 and 2003 to include claims for R&D credit and claims for refund. (Resp. Open. Br., p. 2.)

Respondent audited the Forms 100X and requested documentation to substantiate that CCW was engaged in qualified research. On January 8, 2007, sent appellants Information Documents Request (IDR) number 1, which requested that appellants substantiate that their operations constituted "qualified research" under IRC section 41 and R&TC section 23609, and that appellants substantiate their base period and other amounts related to the credit claimed on Form 3523 attached to the amended returns. In response, appellants submitted a R&D credit study (study) prepared by alliantgroup, inc. (alliantgroup) in 2007, to support their claims for 2001, 2002 and 2003. (Resp. Open. Br., p. 2-3;

exhibits K & L.)

According to the study, the claim for R&D tax credits is based on the following three projects:

- Borate Pressure Treating
- ACQ Pressure Treating
- Sunwood Stain Pressure Treating

Respondent conducted a field visit and tour of the CCW manufacturing facility in April 2007, and interviewed seven employees and appellant-husband. In June 2007, respondent submitted a second IDR to appellants requesting such items as a sample of appellants' log of research findings and test results and "any journals, emails, logs kept detailing results for the failed test charges, etc." Respondent also requested information and documentation alliantgroup used to prepare the study. In June 2007, appellants directed respondent to documents that they previously provided, several documents to support their base period calculations and a sample of a requested log book. (Resp. Open. Br., p. 3.)

In July 2007, respondent made a verbal request for information regarding appellants' calculations of the percentage of employees' time spent engaged in "qualified research." In response, appellants' representative restated her notes from the April 2007 field visit by respondent. On October 4, 2007, respondent issued an Audit Issue Presentation Sheet, disallowing all of appellants' claimed R&D tax credit because they lacked adequate substantiation and the claimed activities failed to meet the threshold for "qualified research" under IRC section 41. Respondent also issued a Notice of Proposed Adjusted Carryover Amount on February 4, 2008, and denial letters for claims for refund for taxable years 2001, 2002 and 2003 on May 20, 2008. Appellants filed an appeal on August 15, 2008, in which they claimed a R&D credit amount for each of the years 2001, 2002, 2003 and 2004. (Resp. Open. Br., p. 4.)

The Appeals Division staff prepared a prior hearing summary for this appeal but the matter was deferred for further briefing on specific questions raised by the staff in a letter dated October 28, 2009.

Issue 1: Whether the Board has jurisdiction to hear and decide appellants' appeal of respondent's disallowance of research and development (R&D) tax credits claimed for tax year 2004.

Contentions

Appellants' Contentions

In the appeal letter, appellants contend that they are entitled to the R&D tax credit amount claimed for taxable year 2004, as well as taxable years 2001, 2002 and 2003. (Appeal Ltr., p. 2.) Subsequently, in response to the Appeals Division's request for additional briefing, appellants filed a supplemental brief in which they contend that the documentation provided in response to the second IDR is evidence of respondent's decision to disallow R&D tax credits for the 2004 tax year. Appellants also state that they appealed the disallowance of the R&D tax credits claimed for the 2004 tax year because respondent issued "a Notice of Overassessment, Credit or Refund for Tax Year 2004 and a Notice of Proposed Assessment for disallowed credits previously carried forward to Tax Year 2005." Appellants further state that assuming, arguendo, that the foregoing does not constitute a final action by respondent for tax year 2004, appellants believe that respondent's "refusal to act on the claim made for the 2004 Tax Year [with]in the time required by" R&TC section 19385 constitutes a final action over which the Board may exercise its jurisdiction. (App. Supp. Br., p. 2.)

Respondent's Contentions

In its reply brief, respondent contends that appellants improperly included a claim of $29,463 for the 2004 tax year, which the Board does not have jurisdiction to consider because respondent has not taken final action with respect to those issues. Respondent states that the Board staff properly noted in an acknowledgment letter dated October 15, 2008, that "appeal rights were not given for the Notice of Overassessment, Credit or Refund for the year 2004 and we are unable to process this request." Respondent contends that the appeal of tax year 2004 is not subject to the Board's jurisdiction and explains the circumstances as follows:

- Respondent identified several adjustments to appellants' 2001 – 2003 returns, which adjustments were included in its letters denying appellants' claims for refund.
- Appellants filed an amended return for 2004 to report R&D credit flow through from CCW and on that return appellant reported adjustments that increased their 2004 taxable income and an additional tax liability of $2,708 which appellants paid. The amended return did not claim a refund.

- Respondent's audit of CCW resulted in a complete disallowance of R&D tax credits claimed for tax years 2001 – 2004. Thus, the claimed R&D tax credit for 2004 that passed-through to appellants was disallowed and the income adjustments reported on the 2004 amended return were reversed and the additional tax amount was refunded.
- Appellants filed a second amended 2004 return based on an IRS audit determination reporting additional income of $25,939 and additional tax of $2,412, which appellants paid. This second amended return does not give rise to a right of appeal for 2004 because no claim for refund was denied.
- Even though respondent has not taken final action with respect to tax year 2004, respondent states that once the Board has determined the appropriate amount of tax for years 2001, 2002 and 2003, respondent will make any necessary adjustments for 2004. (Resp. Reply Br., pp. 4-5.)

<u>Applicable Law</u>

The Board's authority to hear and decide appeals from respondent's actions is set forth in the Board's Rules for Tax Appeals (Cal. Code Regs., tit. 18, § 5000 et seq.) section 5412, which specifies when the Board has jurisdiction. Of relevance to this discussion, the Board has jurisdiction over appeals from a Notice of Action on a proposed carryover adjustment, a Notice of Action denying a claim for refund or when respondent fails to act on a claim for refund within six months after such claim is perfected. (Cal. Code Regs., tit. 18, § 5412, subd. (a)(2-4).) Pursuant to R&TC section 19043.5, subdivision (a)(1), respondent may mail to a taxpayer a notice of a proposed adjusted carryover amount if respondent determines that the amount of a carryover reported by the taxpayer is "more than the amount of the carryover disclosed by its own examination." R&TC section 19043.5 further provides that, with specified exceptions, the statutory provisions governing proposed assessments are applicable, "including protest and appeal rights as if that proposed adjusted carryover amount were a proposed deficiency assessment." (Rev. & Tax. Code, § 19043.5, subd. (b).) Thus, pursuant to R&TC section 19042, if a taxpayer does not file a protest of a notice of a proposed adjusted carryover amount, that proposed amount becomes final upon the expiration of the 60-day period provided in R&TC section 19041.

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STAFF COMMENTS

On its first amended 2004 return, CCW claimed a R&D tax credit in the amount of $29,463 which was reported as a credit carryover to 2005 on the California Schedule C (100S) and on appellant-husband's California Schedule K-1 was reported as an "other credit" on line 13, column (d). In a letter dated December 21, 2007, respondent notified appellant-husband that due to the disallowance of the R&D tax credit the reversal of the income adjustment reported for tax year 2004 resulted in a refund of $2,740. Respondent also sent a Notice of Proposed Adjusted Carryover Amount (Notice) dated February 4, 2008, to CCW, which stated a proposed reduction of $28,689 for taxable years 2001 – 2004 to the amount of R&D tax credit subject to carryover in future years. There is no indication from the record that appellants filed a timely protest of the Notice. Thus, the proposed adjusted carryover amount became final 60 days after it was issued and appellants have no right of appeal from that action. Furthermore, appellants did not file a claim for refund of tax paid for 2004, so that is not a basis upon which the Board may assert its jurisdiction to decide the R&D tax credit determination for that year. Notwithstanding the possibility that the Board lacks jurisdictional authority to hear and decide the issue for tax year 2004, respondent has acknowledged that it will make any necessary adjustments for 2004 once the Board has determined the appropriate amount of tax for years 2001, 2002 and 2003.

Issue 2: Whether appellants have met their burden of proof to substantiate their fixed-base percentage calculation for purposes of determining the allowable amount of R&D credit.

Contentions

Appellants' Contentions

Appellants contend that respondent in its opening brief raised two additional reasons for disallowing appellants' R&D credit claims: (1) appellants' failure to substantiate the fixed-base percentage and (2) the activities claimed as qualified research are not business components of CCW. With respect to substantiating the fixed-base percentage calculation, appellants contend that respondent's position is inconsistent with Congress' intention of eliminating "a strict or specific substantiation requirement for the research credit." Moreover, appellants argue that they are being "punished for failure to keep documentation reflecting research in the 1980's despite the fact the definition of what qualifies as research has since changed." Appellants further argue that they are not claiming the wood treatment chemicals as a business component of CCW but rather the process and formula for treating wood products to “decrease turnaround time.” (App. Reply Br., pp. 6-7.)

In their supplemental brief responding to the Appeals Division staff request for further briefing on this issue, appellants provide a chart showing a calculated base amount and a minimum base amount for each year and a statement that these two base amounts were subtracted from the credit year QREs and the lesser was multiplied by 15 percent. Appellants also state that CCW does not track Qualified Research Wage Expenditures by project, or “business component” in the normal course of business so CCW was required to estimate employee time spent performing qualified research activities as permitted by Treas. Reg. 1.41-2(d)(1). In addition to this estimate, appellants state that employee interview information was checked against available information to verify that individuals were engaged in the claimed research activities. Appellants add that the “overhaul” of CCW’s wood treatment processes to implement ACQ required 11 individuals for whom the qualified research wage allocations were made and who were almost exclusively involved in the projects during the years in issue. Appellants contend that respondent accepted this methodology for Scott Mace. (App. Supp. Br., pp. 3-4.)

Appellants state that the fixed-base amounts for 2001 – 2004 were calculated for all years in the same manner as follows:

- CCW calculated the total QREs for all employees for tax years 2001 through 2005.
- CCW took the percentage breakdown for each of these years for Officer-related QREs and Labor-related QREs in relation to total wages paid and averaged the two separately.
- For Officers, the percentage of research-related activity for 2001 through 2005 was 1.5 percent of total wages and for Labor it was 25 percent.
- The available evidence indicates that CCW’s officers performed vastly more research in the 1980s than they currently do, so the 1.5 percent was increased to 10 percent and multiplied by total officer wages for years 1985 – 1988 to compute total Base Year Officer-Related QREs.
- The available evidence also shows that Labor accounted for half as much of the research-related activities performed by CCW in the 1980s so the average percentage of wages for 2001 through 2005 was reduced by 50 percent and multiplied by the wages for these employees for years 1985 – 1988 to compute total Base Year Labor-Related QREs.

(App. Supp. Br., pp. 5-6.)

Appellants contend that the "estimates" used by CCW to calculate its fixed-base percentage were "fair and reasonable" based on the information available at the time the calculation was made. Appellants also state that that IRC section 41(c)(2) provides a "ceiling" amount against which tax credits may be claimed in that a taxpayer may never multiply the 15 percent allowable under R&TC section 23609 against an amount exceeding 50 percent of the QREs claimed in a given year. More importantly, this minimum base amount is not a default position which eliminates the need for substantiation of the taxpayer's fixed-base percentage. (App. Supp. Br., p. 7.)

Respondent's Contentions

Respondent contends that appellants have not substantiated their fixed based percentage which must be determined in order to calculate the amount of R&D tax credit to which they are entitled. Respondent states that IRC section 41, subdivisions (a) and (c) provide that the R&D tax credit is available only to the extent that qualified research expenditures exceed the "base amount" and the base amount can only be determined by reference to the fixed-base percentage. Thus, without establishing the accuracy of the fixed-base percentage, it is impossible to determine whether appellants are entitled to the claimed R&D tax credit. (Resp. Open. Br., pp. 5-6.)

Appellants submitted a California Form 3523 for 2001 and 2002, which includes appellants' fixed-base percentage calculation. In response to respondent's request for the workpapers and schedules used to complete the California Form 3523 for 2001 and 2002, respondent states that appellants submitted documents that provide no reasonable evidence for computing a fixed base percentage and that the documents are "simply alliantgroup spreadsheets generated for the prepackage credit study" that have no probative value. Respondent also contends that there is no historical basis for the fixed base percentage of 1.6788 percent (which appellants state is based on "audited financial statements from the 1986 through 1988 base period years") because CCW's tax returns for the 1980's were not available. In the absence of source documentation, respondent contends that alliantgroup prepared an after-the-fact report that purported to constitute contemporaneous documentation. Respondent further contends that the documentation does not show that any QREs were incurred in the base years. Thus, respondent concludes that the base period calculation is an estimated extrapolation and is not based on any provable QREs from a contemporary period. (Resp. Open. Br., pp. 6-7.)

Respondent asserts that appellants bear the burden of proving entitlement to the R&D credit and, thus, the credit may not be allowed if appellants do not establish the amount of the base period QREs. Despite appellants' claim that their tax returns and audited financial statements "tie directly" to their R&D credit calculations, respondent contends that there is no connection between appellants' figures and any QREs during the base period. Respondent also contends that appellants failed to explain the methodology for determining the fixed-base percentage and there is no reasonable basis to substantiate their calculation without a valid methodology. Respondent explains that the R&D tax credit is calculated based upon the amount that the qualified research expenses for the year at issue exceed the base amount and the base amount is calculated by multiplying the fixed-base percentage by appellants' average annual gross receipts for the four preceding years. Thus, if the fixed-base percentage cannot be properly calculated, respondent asserts that the credit cannot be properly calculated. (Resp. Open. Br., pp. 7-8.)

For taxpayers that are unable to substantiate their fixed-base percentage, respondent notes that IRC section 41(c)(4) provides for the election of an alternative incremental credit which allows a taxpayer to calculate the research credit based on the taxpayer's average annual gross receipts for the four taxable years preceding the taxable year for which the credit is determined. However, respondent also notes that Treas. Reg. section 1.41-8(b)(2) requires that the election be made on a timely-filed original return and not an amended return. Hence, this alternative method is not available to appellants because they did not so elect on their original returns. Respondent concludes that appellants' evidence does not indicate that CCW engaged in any qualified research activities during the base years as required by IRC section 41, and thus appellants' have no fixed-based percentage which is necessary to support their claim for R&D credit. (Resp. Reply Br., p. 6.)

In its supplemental brief responding to the Appeals Division staff request for further briefing on this issue, respondent presents a table with claimed base amounts for 2001, 2002 and 2003. However, respondent contends that appellants are not entitled to R&D credit because they have failed to show the amount of QREs, the base amount of the QREs and the amount by which the QREs exceeded the average for the base period years' QREs. Respondent states that QREs reported were for employee wages but those wages were not separated by project as required by IRC section 41 and the employees who worked on each project were not identified. Respondent states that appellants reported that all the employees worked at least 80 percent of their time on the Naturewood and Sunwood Projects and the only substantiation are employee wage allocation questionnaires attached as exhibit Y to respondent's opening brief. (Resp. Supp. Br., p. 3.)

Respondent agrees with appellants that IRC section 41(c)(2) does not provide for a "guaranteed minimum base amount" as an alternative method of calculating the credit (as the Appeals Division staff indicated in the prior hearing summary); rather, the minimum base amount is a limitation on the allowable credit calculation. Thus, appellants' substantiation of the base period and the fixed-base percentage are material issues to this appeal. Respondent further explains that the base amount is the amount a taxpayer's QREs must exceed in order to earn the R&D credit and that IRC section 41(c)(1) provides the method for computing the base amount, which is the product of the fixed-base percentage multiplied by the average annual gross receipts for the preceding four years. IRC section 41(c)(2) places a limitation so that no more than 50 percent of QREs can be eligible for the credit. (Resp. Supp. Br., pp. 10-13.)

Respondent contends that appellants failed to provide evidence of their method for calculating the fixed-base percentage of 1.68 percent even though they repeatedly reference "the available evidence" they used to calculate the fixed-base percentage. Nonetheless, respondent contends that appellants are not eligible for the R&D credit because they are not engaged in qualified research. (Resp. Supp. Br., pp. 14-15.)

Applicable Law

Generally, the research credit pursuant to R&TC section 23609 (which conforms to IRC section 41 with specified exceptions) is an incremental credit that equals 15 percent of a taxpayer's QREs (if any) for the taxable year over the base amount for taxable years beginning on and after January 1, 2000. (Rev. & Tax. Code, § 23609, subd. (b)(3)(A).) In general, for tax years beginning after December 31, 1989, the base amount is computed by multiplying the taxpayer's fixed-base percentage by its average annual gross receipts for the preceding four years. (Int.Rev. Code, § 41(c)(1).) California gross receipts include receipts minus returns and allowances from the sale of real, tangible, or intangible property held for sale to customers in the ordinary course of the taxpayer's trade or business delivered or shipped to a purchaser within California, regardless of free on board shipping point or other condition of sale. (Rev. & Tax. Code, § 23609, subd. (h)(3).) This California definition of gross receipts applies to both the average annual gross receipts for the prior four years and the base years, described below.

A taxpayer's fixed-base percentage is the percentage determined by taking aggregate QREs of the taxpayer for taxable years beginning after December 31, 1983, and before January 1, 1989 over aggregate gross receipts of the taxpayer for the same such taxable years. (Int. Rev. Code, § 41(c)(3)(A).) The maximum fixed-base percentage is 16 percent. (Int. Rev Code, § 41(c)(3)(C).) In no event may the base amount be less than 50 percent of the QREs for the credit year. (Int. Rev. Code, § 41(c)(2).) The credit year's QREs and the base years' QREs are determined based upon application of the law in effect for the current year under examination and consistency between the credit year's and the base years' QREs is required. (Int. Rev. Code, § 41(c)(6).)

In *Research, Inc. v. United States* (D.Minn. 1995) 76 AFTR 2d 95-5688, the court held that with respect to IRC section 30, the federal research credit predecessor statute to IRC section 41, the taxpayer was required to provide evidence of the amount of its QREs for the credit year as well as its QREs for the base period years, and the amount by which the credit year's QREs exceeded the average for the base period years' QREs. The court concluded that "[i]f the taxpayer cannot make those showings, the taxpayer does not qualify for the credit." (*Id*. at p. 11.)

<u>STAFF COMMENTS</u>

According to respondent, the "available evidence" referenced by appellants used in the calculation of the base years' QREs appears to be balance sheets of Western Wood Treating, Inc. as of March 31, 1987 and 1986, and as of December 31, 1988 and 1987, and "related statements of income and retained earnings, changes in financial position and supplemental information for the years then ended" and tables of employees' gross salaries and QREs for the years 2001 through 2004. (Resp. Open. Br., exhibit N.) It appears from appellants' explanation of their methodology that the determination of the fixed-base percentage and of the base years' QREs were based on estimates of qualified research activities as a percentage of total wages which appellants extrapolated from the period from 2001 to 2005. However, it is not clear what evidence appellants used to determine the amount of qualified research activities as a percentage of wages for the base period years. At the hearing, appellants should be prepared to present evidence that supports their determination of the base period years' QREs and fixed-base percentages.

Issue 3: Whether appellants have presented evidence sufficient to demonstrate that the claimed activities constituted "qualified research" and to prove the amount of qualified research expenditures (QREs) pursuant to Internal Revenue Code (IRC) section 41.

Contentions

Appellants' Contentions

Recordkeeping Requirements

Appellants contend that respondent's erroneous disallowance of the R&D tax credits claimed for tax years 2001, 2002, 2003, and 2004 was based on a misinterpretation and misapplication of the law and a disregard of factual data. Appellants assert that during the tax years in issue, CCW conducted qualified research activities as evidenced by contemporaneous documentation that appellants provided during the audit. Appellants dispute the two reasons for which respondent disallowed the R&D tax credits: (1) the failure to provide adequate documentation of the research and development activities, and (2) the ACQ Treatment Formulation Project failed to meet all elements of the test for "qualified research." (Appeal Ltr., p. 2.)

With respect to the first reason, appellants argue that there is no strict documentation requirement and that they provided sufficient substantiation. In support of their position, appellants state that in December 1998, the Treasury Department issued proposed Treas. Reg. sec. 1.41-4(a)(5) which, in pertinent part, required that the results of experimentation be recorded. Appellants contend that in 1999 when the R&D tax credit was extended, Congress made clear in a conference report that eligibility for the credit "should not impose unreasonable recordkeeping requirements." Despite the expressed intention of Congress, appellants argue the Treasury Department imposed an "onerous recordkeeping requirement in TD 8930 (issued on January 3, 2001)." Appellants further explain that upon adoption, Treas. Reg. sec. 1.41-4(d) included a provision that in order to allow the credit under section 41 "with regard to an expenditure relating to a research project" the taxpayer was required to "prepare[] documentation before or during the early stages of the research project." (Appeal Ltr., p. 3.)

Appellants assert that the "documentation requirement" of TD 8930 was eliminated by TD 9104, which stated that "in response to industry criticism and a Congressional directive, the Treasury and the IRS decided against a specific research credit documentation requirement" and that the legislative history is clear that "the credit should not impose unreasonable recordkeeping requirement burdens." Additionally, appellants state that TD 9104 clarified that the 2001 proposed regulations did not include a specific recordkeeping requirement, which would not be changed in the final regulations, beyond the requirements set out in IRC section 6001 and the regulations thereunder. (Appeal Ltr., pp. 3-4.)

Appellants assert that IRC section 6001 is the only recordkeeping requirement for purposes of eligibility for the R&D tax credit which requires every taxpayer to maintain accounting records to enable him or her to file a correct return of taxable income for each year. Appellants further assert that courts have interpreted the general substantiation standards under IRC section 6001. In this regard, appellants cite *Cohan v. Comm'r* (2d Cir. 1930) 39 F.2d 540, in which, appellants assert, the court reasoned that absolute certainty in determining the correct amount of deductible entertainment and travel business expenses was not possible. Thus, the court held that the lower court could not entirely disallow the deduction if there was some basis for estimation and should make as close an approximation as possible if it was not satisfied with the taxpayers' estimate. (Appeal Ltr., pp. 5-6.) According to appellants, under the *Cohan* rule any form of admissible evidence, including self-serving statements, is allowable although subsequent courts held that the rule was inapplicable if the taxpayer failed to provide sufficient evidence that he or she incurred any deductible expenses. Moreover, appellants state that *Cohan v. Comm'r* was legislatively overruled, in part, in 1962 by the enactment of IRC section 274(d) which imposed a strict documentation requirement for specific expenses listed in that section which provides that the taxpayer must substantiate the amount of such expense "by adequate records or by sufficient evidence corroborating the taxpayer's own statement." Appellants also note that IRC section 170(f)(8) provides that a taxpayer must substantiate a deduction for charitable contributions of more than $250 by contemporaneous written acknowledgement by the donee. Thus, appellants conclude, when Congress intends stringent documentation requirements it enacts them in legislation. (Appeal Ltr., pp. 6-7.)

Because IRC sections 41 and 174 do not impose strict substantiation requirements, appellants argue, a taxpayer may comply with IRC section 6001 by estimating R&D tax credit expenses under the *Cohan* rule. Specifically, appellants contend that "taxpayers are not required to substantiate by adequate records or by sufficient evidence corroborating the taxpayers' own statement of the **amount** of such expenses" (underline and bold in the original). Appellants further argue that courts have allowed a taxpayer to prove the existence and amount of expenses through documentary evidence, third-party testimony and the taxpayer's own testimony, even though the testimony "was unconvincing and unsatisfactory." (Appeal Ltr., p. 8.)

Appellants call attention to *Fudim v. Commissioner*, T.C. Memo 1994-235, in which, appellants assert, the tax court applied the *Cohan* "two-step" analysis as follows: (1) determine whether the taxpayer engaged in research and development activity for which the credit under IRC section 41 is allowed and (2) determine whether there is a basis upon which to estimate qualified expenses. Appellants highlight the court's statement that "we must rely on [the taxpayer's] testimony and other evidence in the record." Appellants assert that "the court focused its analysis on the creditability of all evidence submitted" and conclude that, in this appeal, all available testimonial and documentary evidence must be examined. (Appeal Ltr., p. 9.)

Finally, appellants take issue with respondent's reliance on *Eustace v. Comm'r* (7th Cir. 2002) 312 F.3d 905, for the proposition that a taxpayer's reconstruction of qualifying expenses is "unreliable, inaccurate, incomplete and wholly insufficient" as support for respondent's position that the *Cohan* rule does not apply to pro forma submissions. Appellants contend that the issue in *Eustace* was not whether a taxpayer may use a "pro forma" submission for substantiation but whether the taxpayer performed qualifying research activities. Appellants state that the court in *Eustace* found that the taxpayer did not perform qualifying activities based on the taxpayer's own witness testimony and not on "whether the evidence submitted to substantiate the estimates was reasonable." Appellants assert that the court noted in its dicta that the taxpayer's reconstruction of qualifying expenses was "unreliable, inaccurate, incomplete and wholly insufficient." Appellants conclude that each case was decided on its specific facts and the particular evidence presented at trial. (Appeal Ltr., p. 10.)

Appellants describe CCW as "an innovative leader in the chemical treatment of wood" which "strives to identify and develop state-of-the-art processes and techniques in chemically treating wood against depletion and degradation related to insects, fungus, and mold." Appellants state that CCW provided documents in response to the three IDRs made by respondent and provided a tour of its facilities and made its employees available for interviews. Appellants contend that respondent failed to consider the foregoing information in making its determination. (Appeal Ltr., p. 11.)

Appellants contend that respondent should apply the *Cohan* "two-step analysis" and provides an excerpt from the Audit Issue Presentation Sheet (AIPS) in which respondent found that CCW's *Sunwood* project was a qualified activity and that Scott Mace and some of CCW's treatment employees engaged in qualified activities. Appellants also cite *Fudim, supra* for the proposition that respondent must rely on the taxpayer's "testimony and other evidence in the record." Appellants contend that they presented documentation that "detailed the qualified activity by and through the conduct of test results and wage interview notes," in addition to testimony given to respondent's agent that detailed the type, amount and specific activities CCW's employees engaged in during the years under examination. Appellants contend that the foregoing constitutes "more than sufficient credible evidence" serving as a reasonable basis for respondent to determine the appropriate amount of time spent on the qualified activity. Appellants further contend that respondent erroneously determined that appellants only provided sufficient documentation that Scott Mace engaged in qualified research. (Appeal Ltr., pp. 12-13.)

<u>Qualified Research</u>

Contrary to respondent's determination, appellants contend that the ACQ Treatment Formulation Project is a qualifying activity. Specifically, appellants assert that the audit incorrectly concluded that this project involved no uncertainty because other companies had previously used that treatment formula and process and that there was information available to CCW describing the necessary steps to complete the process without experimentation. Appellants contend that there existed numerous uncertainties "in developing the appropriate formula and implementing the ACQ wood treatment process." Appellants describe the formulation phase as involving "varying concentrations" the following "solution ingredients": ACQ-based solution, Quaternary compounds, moldicides and water. Appellants state that during the development of the ACQ-based treatment solution CCW faced numerous technical uncertainties including:

- Assurance of effective wood treatment with regard to all variances of wood
- Assurance of an effective and safe method of solution application; and
- Assurance of effective solution absorption.

(Appeal Ltr., pp. 13-14.)

To eliminate the uncertainties, appellants state, CCW used a research and assessment phase in which multiple processes were developed to treat all variances of wood considering application methodology and time so as to accommodate for the "numerous anomalies faced when treating wood, including size, type, grain, hardness; and moisture content. This iterative process consisted of numerous formulation modifications in order to achieve the required output." Appellants further state that numerous assessments consisting of detailed x-ray tests to measure penetration, absorption and retention, were conducted on various samples of treated wood with different formulations. These assessments led to "numerous iterative formulation modifications." In addition, CCW designed numerous modifications to the solution facilitation and application solutions to ensure effective and safe application. Appellants characterize the foregoing steps as an extensive process of experimentation to eliminate technical uncertainties. (Appeal Ltr., p. 14.)

<u>Respondent's Contentions</u>

<u>Recordkeeping Requirements</u>

Respondent contends that appellants' "prepackage credit study" which "was compiled by a tax credit consultant years after the alleged research occurred" does not fulfill the recordkeeping requirement of Treas. Reg. sec. 1.41-4(d). Respondent asserts that the IRS has viewed prepackage credit studies as a "major problem for years" and has litigated the issue and issued guidance to its auditors in that regard. The problem, according to the IRS, is that such studies reconstruct alleged qualified research expenses years after the activities occurred because the taxpayers did not maintain sufficient project accounting records. In addition, such studies make vague generalizations regarding the activity that are not sufficient to support the R&D credit claim and fail to prove a link between expenses and the qualified research activity. (Resp. Open. Br., pp. 8-9.)

Respondent contends that appellants' study had a flawed methodology and insufficient content because it fails to substantiate the fixed base percentage, fails to substantiate the claimed qualified research expenses and the fails to substantiate that CCW engaged in "qualified research". In support of its position, respondent cites *Eustace, supra* in which the court held that a taxpayer's reconstruction of qualified expenses was "unreliable, inaccurate, incomplete and wholly insufficient." Respondent contends that the methodology fails to demonstrate a nexus between expenses and activities and that applicable regulations require that appellants' records must be at least sufficient to detail what proportion of an employee's hours were "actually spent" on research as compared to all hours the employee actually worked. Respondent contends that the court in *McFerrin v. U.S*, 2008 U.S. Dist. LEXIS 64327, found that the methodology used in the "prepackage credit study" at issue in that case lacked meaningful foundation and was unreliable because it was based on inadequate investigation and limited information.[5] According to respondent, the court also held that the "hybrid approach" of the study is disfavored because the estimates are generally based on the opinions of company managers years after the fact and there are generally no contemporaneous records to support those opinions. (Resp. Open. Br., pp. 11-12.)

Respondent contends that appellants' study uses the same hybrid approach rejected by the court in *McFerrin, supra*. In support of that contention, respondent argues that appellants' documentation was produced in 2007, 4 to 6 years after the alleged activities. For that reason, respondent contends that the documentation is not relevant for the 2001, 2002 and 2003 years in issue. Moreover, respondent asserts that appellants' study has no probative value because it predates many of the documents appellants provided in support of the claimed R&D credit. In addition, respondent notes that the documents recording the wage allocation interviews referenced by appellants were all signed by CCW's employees between April 9 and April 10, 2007. Respondent also states that it appears that alliantgroup never met with the appellants in person and those interviews include no information other than a raw percentage of time allegedly estimated to have been spent on research. Finally, respondent states that the wage allocation questionnaires contain only vague information that does not provide a nexus between an allegedly qualifying project and any allegedly qualifying wages. (Resp. Open. Br.,

[5] As discussed below, this District Court opinion was subsequently vacated and remanded for further proceedings. (*U.S. v. McFerrin* (2009) 570 F.3d 672.)

pp. 12-13.)

Respondent also contends that appellants may not rely on the *Cohan* rule to support their positions that there is no documentation requirement for an R&D credit claim and that appellants' alleged qualified research expenses may be estimated. Specifically, respondent contends that appellants have not provided a rational basis to allow an estimation of the claimed credit because they have not substantiated that their activities rise to the level of "qualified research" under IRC section 41(d). Respondent acknowledges that appellants correctly state that Congress did not intend overly burdensome recordkeeping requirements for the R&D credit, but respondent contends that intent does not completely eliminate the recordkeeping requirement. Respondent points out that the court in *Eustace, supra*, declined to apply the *Cohan* rule because the taxpayers in *Eustace*, like appellants, "fell woefully short of presenting sufficient evidence" to establish that their activities constituted qualified research. Respondent also distinguishes the case of *Fudim v. Comm'r, supra*, from this appeal on the basis that in *Fudim* the taxpayer had documentary evidence, which included U.S. Patents and peer-reviewed scientific articles, proving that qualified research occurred. (Resp. Open. Br., pp. 14-15.)

Respondent cites *McFerrin, supra*, for the proposition that pursuant to IRC section 6001 and its regulations a court may estimate allowable credit only when it is clear that qualifying expenses were incurred in the relevant tax year. Here, according to respondent, appellants have not met their burden of proving that qualified research occurred and the amount of qualifying expenses incurred in the years in issue. Respondent also rejects the implication of appellants' argument that TD 9104 clarified that the 2001 proposed Treasury Regulations did not include a specific recordkeeping requirement other than that set forth in IRC section 6001 and its regulations. Respondent contends that appellants' argument fails to recognize that Treas. Reg. 1.6001-1(a) and case law require taxpayers to maintain adequate records to establish entitlement to the R&D credit. Moreover, respondent contends that substantiating "qualified research" activities is a prerequisite to determining the amount of qualifying expenses. (Resp. Open. Br., pp. 16-18.)

Respondent asserts that the examination found that the activities of only one of CCW's employees may have constituted qualified research but that appellants do not have contemporaneous documentation to support those activities. Respondent states that appellants claimed that Mr. Mace orally briefed the appropriate individual of his findings but that notes of the findings are not routinely retained. Respondent contends that the failure to retain such records does not comply with IRC section 6001 and Treas. Reg. sections 1.41-4(d) and 1.6001 and requires the entire disallowance of appellants' credit claim. Finally, respondent rejects appellants' reliance on the 2003 edition of a secondary legal authority (Michael D. Rashkin, *Practical Guide to Research and Development Tax Incentives* (2003)) and notes that the authority was updated in the 2007 edition to reflect the recordkeeping mandate of the final regulations, i.e., Treas. Reg. sec. 1.41-4(d), to state that IRC section 6001 and the final regulations "provide that a taxpayer claiming a research credit must retain records in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit."[6] Resp. Open. Br., pp. 18-19.)

Qualified Research

Respondent contends that the study does not sufficiently identify the business activity components or that those identified are business components of CCW and fails to prove that CCW is engaged in activities other than routine manufacturing or quality control inspections. Respondent asserts that the evidence shows that CCW purchases wood treatment chemicals produced by independently owned and operated companies and that CCW uses them for their intended purpose of pressurized wood treatment. Because Osmose grants end-users of its products a lifetime limited warranty, respondent surmises that CCW uses the products in accordance with Osmose's production guidelines. Hence, respondent disputes appellants' contention that CCW's development of an "innovative formulation" is eligible for the R&D credit because eligible development must involve a business component of CCW, and the wood treatment chemicals are business components of Osmose. (Resp. Open. Br., pp. 19-23.) Respondent also contends that appellants' ACQ project appears to involve routine quality control which is specifically excluded as "qualified research" under IRC section 41(d)(4)(D)(v). Respondent cites appellants' statement that "numerous assessments were conducted on various samples of treated wood with the different formulations to effectively address absorption. More specifically, detailed x-ray tests were conducted to measure penetration, absorption, and retention. These assessments led to numerous

[6] Michael D. Rashkin, *Practical Guide to Research and Development Tax Incentives* (2007), 915.

iterative formulation modifications." Respondent states that appellants supported that representation with numerous documents from tax year 2003 listing manufacturing statistics for its Naturewood, and presumably Naturewood and Sunwood treated lumber products. However, respondent states, appellant did not provide corresponding contemporaneous analysis to substantiate that these documents are used for any purpose other than routine manufacturing and inspection for quality control. For that reason, respondent concludes that CCW was conducting inspection for quality control by ensuring that the treated wood products met the Osmose production standards so that CCW was able to market them under Osmose's registered trademarks. Finally, respondent contends that appellants have not recorded an analysis of the alleged research so respondent must presume that appellants' activities were limited to manufacturing treated lumber products according to Osmose's guidelines. (Resp. Open. Br., pp. 23-24.) In response to appellants' contention in their reply brief, respondent contends that it is simply requiring appellants to comply with the IRC documentation requirements to substantiate their fixed-base percentage calculation. Respondent cites case law for its position that a failure to prove the fixed-base percentage results in complete disallowance of the R&D credit claim. Respondent notes that appellants admit that their documentation is inadequate, and thus the claimed fixed-base percentage is an estimate. Respondent also notes that taxpayers that cannot substantiate their fixed-based percentage may elect the alternative incremental research credit (AIRC) under IRC section 41©(4) for taxpayers. Respondent explains that the AIRC is based on the taxpayer's average annual gross receipts for the preceding 4 taxable years. (Resp. Reply Br., pp. 5-6.)

Appellants' Reply Brief

In their reply brief, appellants first object to respondent's opening brief because they contend that respondent asserted "new reasons" for disallowing the R&D tax credit claims in violation of R&TC section 19323, subdivision (a), which leaves appellants with only 30 days to address those reasons, rather than the 90-day period if respondent had complied with the law. (App. Reply Br., p. 2.) Appellants contend that respondent mischaracterizes their arguments by stating that appellants believe they are not required to provide any documentation. Appellants maintain that, correctly stated, their position is that there is "no strict" or "specific" type of documentation required of a taxpayer for the R&D tax credit. Appellants also take issue with respondent's contention that appellants provided only a "prepackaged tax credit study" as evidence of qualifying research and appellants dispute respondent's reliance on *Eustace, supra*, to discredit the study for the reasons cited in the Appeal Letter. Instead, appellants argue that respondent should focus on *Cohan, supra*, and following cases and the legislative history and Treasury Directive cited by appellants in the Appeal Letter. Appellants repeat their contentions that:

- IRC section 6001 and its regulations are the controlling statutory authority for required recordkeeping and provide very little guidance as to the proper standard of documentation.
- The *Cohan* rule is applicable here as well as other cited cases in which the courts allowed evidence of expenditures through the taxpayer's own testimony in the absence of detailed records.
- As in *Fudim, supra*, respondent should have examined all evidence, documentation and testimony, in the record. Respondent was provided both documentation and the opportunity to interview the CCW employees.

Appellants also take issue with respondent's reliance on *McFerrin, supra*, because the court used the incorrect test for determining whether the taxpayer's activities were qualified research and the court used the same improper substantiation standard advanced by respondent. (App. Reply Br., pp. 3-6.)

<u>Supplemental Briefing</u>

As a result of questions raised by Board Members after the prior hearing summary was issued, the Appeals Division staff requested further briefing on the following issues summarized below which are followed by the parties' responses.

1. Provide a separate chart for each tax year in issue and a supplemental analysis for:

- Claimed base amount from the original or amended return
- Total Claimed QREs
- Claimed Employees and Wages for the Naturewood project, Sunwood Project, or other Project
- Respondent's Audit findings: Accepted QREs and Employees for each Project and Denied QREs and Employees for each Project.

Appellants' response: See Appellants' Contentions under Issue 2.

Respondent's Response: See Respondent's Contentions under Issue 2.

With respect to accepted QREs, respondent states that Scott Mace was the only accepted employee and his entire wages for 2003 and 2004 were the only accepted QREs. However, respondent explains that Mr. Mace's wages were erroneously allowed as QREs because appellants withheld information material to the audit which indicated that CCW's use "of Osmose products required following specific processes laid out, step-by-step, in Osmose Plant Operations Manuals, Quality Control Manuals, Treatment Manuals and the Standards contained therein." Respondent also lists the other 12 employees and QREs that were denied because, according to respondent, they were not engaged in "qualified research" as defined in IRC section 41. (Resp. Supp. Br., p. 6.)

2. Parties' explanations of whether the claimed activities qualify under IRC section 41

Appellants' Response: Appellants contend that the activities related to the implementation of ACQ as a replacement for Chromated Copper Arsenate (CCA) met the four-part test for qualified research set forth in IRC section 41 in that (1) the claimed wages were expenses eligible for treatment under IRC section 174, (2) the research was technological in nature, (3) the formulas eventually developed and processes designed to treat the wood were business components and (4) the systematic trial and error used to determine the proper chemical compound and treatment processes involved a process of experimentation.

Respondent's Response: Respondent contends that the Osmose documentation described above which was not provided at audit demonstrates that the claimed business components are owned by Osmose and CCW is only a licensee. In addition, appellants fail the process of experimentation requirement because CCW treats wood according to Osmose's detailed specifications. To engage in the process of experimentation, respondent contends, CCW must develop a hypothesis as to whether an alternative might be used to improve a business component, test the hypothesis scientifically, analyze the results of the test, and then either refine the hypothesis or discard it and develop a new hypothesis and repeat the foregoing steps. Instead, Osmose gave appellants specific procedures which Osmose required under the terms of the license agreements and warranties. Respondent further asserts that a trial and error methodology may constitute the process of experimentation, but that such a methodology must be "systematic," meaning that it involves a methodical series of trials which appellants have not shown. (Resp. Supp. Br., pp. 6-8.)

3. Respondent's reasons for allowing R&D credit.

As stated in response to question 1, respondent allowed the R&D credit for Scott Mace because material information from Osmose was not made available at audit. (Resp. Supp. Br., p. 8.)

4. Explanation of Fixed-Base Amount Calculations and IRC Section 41(c)(2) Minimum Base Amount.

Appellants' Response: See Appellants' Contentions under Issue 2.

Respondent's Response: See Respondent's Contentions under Issue 2.

5. Whether appellants claimed the federal R&D credit for each of the tax years, 2001 – 2004.

Appellants' Response: Appellants state that they filed amended federal returns for all years claiming the federal R&D credit and that the IRS allowed the credit for all years. (App. Supp. Br., p. 8.)

Respondent's Response: Respondents states that it conducted an independent audit based on California law and found that appellants are not entitled to the R&D credit. Respondent contends that neither it nor this Board is required to follow a federal determination when it believes that a determination is erroneous. (Resp. Supp. Br., p. 15.)

6. Respondent's basis for its contention the alliantgroup credit study was prepared in 2007.

Respondent's Response: Respondent states that the study carries a federal copyright symbol followed by 2007 as the year of publication and the name of the copyright owner (alliantgroup), which under federal copyright law places all others on notice that the document is the intellectual property of alliantgroup and protected as of the year it was fixed in a tangible medium and published in 2007. Respondent further states that a proper copyright notice carries great evidentiary weight and so it is to alliantgroup's benefit to have the correct year of copyright to warn others against potential infringement. Moreover, respondent asserts that alliantgroup would not place a false copyright year on the study because it is criminal offense to place a false notice of copyright with fraudulent intent. (Resp. Supp. Br., pp. 15-17.)

Respondent also points to the likely internet source material for the study as evidence that it was created in 2007. Specifically, respondent asserts that the study appears to quote from the version of an entry made on March 28, 2007, in a Wikipedia.com article on "wood preservation" which is almost identical to a passage in the Company Overview section of the study. Based on an examination of the previous version of that entry, respondent states that "the existing entry had been altered to mirror language" in the study. Respondent also notes that another Wikipedia entry for ACQ Pressure Treating made on January 15, 2006, is identical to another passage from the study. (Resp. Supp. Br., pp. 17-18.)

Appellants' Response: Appellants state that they engaged alliantgroup in October of 2005 and that "the work on the calculation and build out of the study would have commenced in late 2005." (App. Supp. Br., p. 8.)

7. Parties' analyses of the substantiation requirements of IRC section 6001, Treas. Reg. 1.6001-1 and Treas. Reg. 1.41. In addition, respondent should discuss whether the records disclosed at audit demonstrated a sufficient nexus between the claimed QRE wages and the claimed qualifying activity.

Appellants' Response: Appellants state that they do not dispute the legal analysis of the substantiation requirements set forth in the October 6, 2009, Hearing Summary, but they address the following points:

- Respondent's apparent misapplication of the substantiation standards in its analysis of the Sunwood project.
- The Appeals Division staff's apparent reliance on the IRS Audit Technique Guides.
- The Appeals Division staff's reference to a required showing of "nexus."

With respect to the Sunwood project, appellants state that the analysis of the AIPS finds that the documentation provided shows that Scott Mace was engaged in research and with management and treatment staff worked the results into process and formulation changes. However, respondent claims that CCW failed to provide a reasonable basis for estimating the QREs attributable to those other employees involved in the qualified research with Scott Mace. Appellants contend that respondent's position that it will not accept wage estimates without contemporaneous documentation regardless of other available evidence to support the conduct of research or time spent by an employee is contrary to law. Appellants contend that the fact that there was adequate evidence to substantiate that Scott Mace engaged in qualified research and to determine the amount of time he spent on that research, is sufficient to determine whether the estimates of time for direct supervision and direct support were reasonable. (App. Supp. Br., pp. 8-9.)

Appellants also contend that the Audit Technique Guides referenced by respondent and the Appeals Division staff present only opinions of law and have no legal effect or precedential value. Therefore, they should be afforded appropriate weight by the Board. Furthermore, appellants surmise that the Appeals Division staff, in reliance on the Audit Technique Guides or at respondent's request, has indicated that appellants demonstrate a "nexus" between the research project work and the wages paid for work on these projects. However, appellants point out that IRC section 446(c) which prescribes the legal standard for maintaining books and records is intentionally broad so as to allow for differences in accounting methods of various industries. Thus, according to appellants, contrary to the implication of the Appeals Division's question, IRC sections 41 and 174 do not require that a taxpayer record the costs of research using any particular approach and they describe "three generally methodologies" as follows: project based approach, cost center based approach and the hybrid approach. (App. Supp. Br., pp. 10-11.)

Appellants state that the word "nexus" is not found in IRC section 41 or its regulations and describe it as an "additional hurdle to entitlement" that disregards the fact that the only stated method for calculating QREs, which is set forth in Treas. Reg. § 1.41-2(d)(1), was utilized in this case. Appellants assert that neither the IRC nor the Treasury Regulations require that an individual's research time be tracked by project or by business component. Appellants further contend that respondent's dismissal of CCW's hybrid method ignores a briefing paper drafted by Hugh Whitledge, an IRS Research Credit Technical Advisor, and his statements made in a deposition, that the hybrid method is acceptable. Appellants further state that IRC section 446 and Treas. Reg. § 1.446-1(a)(1) "allow the taxpayer – and not the government – to determine which methodology is best suited for its needs" and that "the taxpayer's methodology should be used unless it does not clearly reflect the taxpayer's income." Appellants contend that they have presented sufficient evidence that CCW was engaged in qualified research and respondent should have looked at all the substantiation to determine whether the estimated allocation percentages were fair and reasonable. Finally, appellants request that the Appeals Division ask respondent for the type of documentation that appellants should provide. (App. Supp. Br., pp. 11-12.)

In response to the request that appellants further discuss substantiation provided at audit, appellants contend that there is no requirement for contemporaneous documentation and cite *Fudim*, *supra*, in which the court focused on the credibility of all evidence, including noncontemporaneous written records, presented at trial. Appellants also note that in *Union Carbide, supra*, Union Carbide was unable to provide documentary evidence of certain wages included in the base calculation, documentary proof of several technical tests and R&D budgets for all but one of the base years. Appellants assert that the court, under the reasoning in *Cohan*, *supra*, allowed Union Carbide to make estimates based on, in part, interviews with individuals present during the 1980s and other available, unrelated documentary information as a close approximation of the qualified research activities that occurred during the base period. (App. Supp. Br., pp. 12-13.)

Respondent's Response: Respondent maintains that appellants have the burden of substantiating the claim of "qualified research" pursuant to IRC section 41, which is consistent with the requirement that every taxpayer maintain accounting records enabling him or her to file a correct tax return and permit verification of a reported tax liability or credit. Respondent acknowledges that Treas. Reg. § 1.41-4(d) does not require any particular types of documents but it does require a taxpayer "to retain records in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit." (Resp. Supp. Br., pp. 18-19.)

In response to the question about a nexus between claimed QRE wages and alleged qualifying activity, respondent states that it discovered information relating to Osmose's instructions to its licensees showing that Osmose provides detailed instructions for the manufacture of treated lumber under its trademarks. Respondent contends that this information was requested from appellants but never provided and demonstrates that Scott Mace's wages were not QREs and the Sunwood project was not qualified research because Mr. Mace's activities were routine quality control on a business component not owned by CCW specifically excluded by IRC section 41, (d)(4)(D) and (d)(1)(B)(2). Respondent further contends that appellants refer to respondent's analysis of the Sunwood project as their only proof that any qualified research occurred but they fail to mention that required documentation was not provided at audit, which would have shown that CCW was simply following Osmose's recipe. Respondent asserts that appellants withheld information that was material to making a proper audit determination and R&D credit claims would have been denied if appellants had done so. Respondent also argues that appellants have not established any nexus between Mr. Mace's alleged research and any QREs as IRC section 41(b)(2)(A)(1) requires. (Resp. Supp. Br., pp. 19-21.) Respondent also distinguishes *Fudim, supra*, by pointing out that the taxpayer in that case presented ample contemporaneous documentation proving "qualified research activities" which is a prerequisite to allowing oral testimony in combination with other evidence to estimate QREs. Moreover, respondent contends, the *Fudim* court provided specific examples of "other evidence" as some form of contemporaneous documentation. Respondent also argues that *Cohan, supra*, allows estimates only when it is clear the taxpayer incurred QREs but first proving qualified research activities. (Resp. Supp. Br., p. 21.)

Respondent further argues that *Union Carbide, supra*, is inapposite because in that case the court held that the taxpayer was engaged in "qualified research" based on "voluminous contemporaneous documentation" and identification of over 800 projects constituting qualified research activities during the base period by Union Carbide's experts. Moreover, those experts provided project-by-project analyses of the contemporaneous documentation provided by Union Carbide to substantiate the R&D credit claim. By contrast, respondent argues that appellants submitted "an after-the-fact prepackage credit study" that failed to address specific research activities, failed to apply the criteria of IRC section 41(d) separately to each project, failed to mention that CCW followed the licensor's manufacturing guidelines and failed to demonstrate the nexus between qualified research and the QREs. Respondent also contends that in *McFerrin, supra*, the court held that no weight should be given to a prepackaged credit study. (Resp. Supp. Br., pp. 22-24.)

Respondent states that although appellants claim that CCW undertook "substantial reformulation of Osmose's ACQ product" they have not produced any contemporaneous documentation confirming that occurred. With respect to appellants' statement regarding the types of documentation respondent wishes them to submit, respondent lists a litany of documents, including various types of written evidence to substantiate CCW's "alleged 'substantial chemical reformulation' and 'completely different chemical formula' of Osmose's patented and/or trademarked wood treatment chemicals." (Resp. Supp. Br., pp. 23-25.)

8. Parties are asked to discuss whether Osmose provided instructions or requirements regarding the application of ACQ.

NOT TO BE CITED AS PRECEDENT - Document prepared for Board review. It does not represent the Board's decision or opinion.

Appellants' Response: Appellants state that Osmose is the licensor of Naturewood the ACQ product used by CCW in its wood treatment process between 2001 and 2005. Prior to purchasing the product, Osmose assured CCW that it had developed Naturewood to the point that it could be "dropped in" to CCW's existing treatment processes to replace CCA. Appellants state that Osmose's representations were incorrect and that the ACQ had spotty adherence and caused mold buildup on processed lumber. To remedy these problems, CCW "undertook substantial chemical reformulation of Osmose's ACQ product and changes in the treatment process." Appellants add that CCW's reformulation was adopted by Osmose into its product line. Appellants explain that "no one had developed ACQ in a formulation that would work for hard wood varietals of lumber generated in the Western United States (i.e., Douglas Fir and Him Fir); or developed a process for implementation of the chemical for the same." (App. Supp. Br., pp. 13-14.)

Respondent's Response: Respondent contends that appellants' supplemental briefing of this issue was non-responsive to the question. Respondent states that it has provided evidence that Osmose provided instructions and requirements regarding the application of ACQ to CCW's products and evidence that the treated lumber industry is highly regulated. Respondent quotes an excerpt from National Evaluation Service, Inc. National Evaluation Report No. NER-628, which states that "NatureWood (NW) brand wood preservatives are used . . . to pressure treat wood products in accordance with NatureWood Quality Standards and Procedures." Additionally, respondent states that appellants failed to provide CCW's Plant Operations Manuals for the alleged projects at issue, so that respondent must presume that these manuals would be unfavorable to appellants' position. Thus, respondent concludes that appellants have not met their burden of proof. (Resp. Supp. Br., p. 26.)

Respondent further contends that appellants state that CCW had no research contracts even though Osmose licensed its products to CCW. In addition, respondent states that Osmose requires Plant Operations Manuals for the manufacture of treated wood under its registered trademarks. Presumably, appellants state, CCW must have followed stringent production guidelines set forth in those manuals which would preclude CCW from engaging in a "process of experimentation." Respondent cites independent information indicating the existence of quality control manuals, plant operations manuals and third-party testing of treated wood products. Thus, respondent contends that the R&D

credit cannot be allowed for purchasing Osmose's products and using those products for their intended purpose according to Osmose's instructions. (Resp. Supp. Br., pp. 27-29.)

9. Parties are asked to discuss whether ACQ is a business component of CCW.

Appellants' Response: Appellants state that the efforts of CCW to reformulate the ACQ product into a "completely different chemical formula and development of new processes for implementation of this formulation" constitute "new and/or improved formulas, processes, products or techniques." (App. Supp. Br., p. 14.)

Respondent's Response: Respondent contends that CCW's use of ACQ is not a business component of CCW within the meaning of IRC section 41(d)(1)(B)(ii) because that product belongs to Osmose and was only licensed to CCW for use in accordance with Osmose's standards and requirements. (Resp. Supp. Br., pp. 30-31.)

10. Parties are asked to discuss whether CCW's testing of ACQ, quarternary compounds, moldicides and water for the NatureWood project constitutes qualified research.

Appellants' Response: Appellants state that the regulatory ban on CCA led CCW to explore alternative methods for wood treatment, including ACQ, Borates and Copper Azole. Appellants further state that during the process of reformulating the ACQ, CCW tested different quantities of quat, mold treatment chemicals and other compounds. Appellants state that the formulation developed by CCW included seven times as much quat as NatureWood and required the addition of various moldicides. In addition, appellants state that CCW had to improve its treatment process for the scoring of wood to achieve absorption of ACQ at the rate necessary for stability. Finally, appellants state that for some treatment processes (i.e., Sunwood) CCW was never able to reformulate the ACQ to work or to develop a process so that it could be applied with effectiveness. (App. Supp. Br., pp. 14-15.)

Respondent's Response: Respondent contends that CCW's testing of ACQ and the other substances is not qualified research because all the information necessary to treat wood properly was provided by Osmose. Thus, the required element of "uncertainty" did not exist because the information available to CCW established the capability or method of developing or improving CCW's business component. By following those instructions, respondent contends that CCW conducted no process of experimentation. In addition, respondent contends that CCW must comply not only with environmental regulations and

Osmose's standard, but also the requirements of the ICC Evaluation Service and the American Wood Protection Association. Respondent further contends that if CCW had deviated from Osmose's standards, such an action would require registration of the "alleged 'substantial chemical reformulation' and corresponding procedures with the numerous governmental and wood treatment agencies." Furthermore, respondent asserts that CCW's treated wood products were tested by an independent third-party agency and the scoring of wood mentioned by appellants was mentioned in NER-628 and probably in Osmose's procedures, quality control and standards manuals. (Resp. Supp. Br., pp. 32-33.)

<u>Appellants' Additional Brief</u>

Appellants contend that it is not true, as respondent argues, that appellants withheld information during audit. Appellants assert that the IDRs did not request "materials provided by suppliers for parts or supplies utilized in the re-engineering of its processes." Additionally, respondent's contention that appellants failed to provide information regarding the treatment processes of other companies "is a roundabout way to press the defunct Discovery Test." To comply with such a standard, appellants contend, would have required a set of tasks that CCW did not have the resources or ability to undertake. With respect to respondent's suggestion that appellants are required to show "a direct nexus between a specific qualified activity and a specific project, or suffer a disallowance of that portion of wages not tied to a specific project," appellants argue that respondent must reconcile that interpretation with the "substantially all" rule for wages set forth in Treas. Reg. §1.41-2(d)(2). Appellants conclude that respondent's nexus analysis would eliminate all wages not specifically tied to a project in which research activities were conducted contrary to that regulatory provision which permits, in certain instances, an employee to apply up to 20 percent of his or her otherwise nonqualifying wages as QREs. (App. Add'l Br., pp. 1-3.)

Appellants state that they wish to amend their responses to questions 8, 9 and 10 in light their representative's "follow-up discussions with individuals" at CCW which disclosed that neither CCW nor Osmose made any chemical changes to any product purchased from Osmose and integrated into CCW's wood treatment process. Nonetheless, appellants contend that CCW's "new process development" qualifies as research under IRC section 41. Appellants repeat the problems encountered by CCW in its initial use of ACQ and state that CCW undertook a substantial engineering redesign of its treatment process in which it was assisted by Osmose. Appellants also contend that CCW's "efforts to re-engineer its process" for the application of ACQ "would constitute new and/or improved processes, products or techniques." Finally, appellants contend that CCW's process redesign required CCW to test "the effects of adding the Naturewood as purchased at different process intervals to maximize its effectiveness, while developing a robust and repeatable process that sustained the quality and durability the company was known for in the industry." (App. Add'l Br., pp. 4-6.)

Applicable Law

R&TC section 23609 provides a tax credit for "qualified research expenses" determined in accordance with IRC section 41. Generally, the credit is determined based on the amount by which the taxpayer's QREs exceed a "base amount." Insofar as is relevant to this appeal, R&TC section 23609 substantially conforms to IRC section 41.

Recordkeeping Requirements

Treasury Regulation 1.41-4(d), expressly effective for 2003 and 2004 and stated by the IRS to govern the tax years in issue as well,[7] sets forth the following substantiation requirement for IRC section 41 credit claims:

> (d) Recordkeeping for the research credit. A taxpayer claiming a credit under section 41 must retain records in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit. For the rules governing record retention, see Sec. 1.6001-1. To facilitate compliance and administration, the IRS and taxpayers may agree to guidelines for the keeping of specific records for purposes of substantiating research credits.

Treasury Regulation 1.6001-1(a) provides that:

> (a) In general. Except as provided in paragraph (b) of this section, any person subject to tax under subtitle A of the Code . . . or any person required to file a return of information with respect to income, shall keep such permanent books of account or records, including inventories, as are sufficient to establish the amount of gross income, deductions, credits, or other matters required to be shown by such person in any return of such tax or information.

Other than Treasury Regulation 1.41-4(d) and its cross-reference to these general recordkeeping requirements, there is no specific recordkeeping requirement under IRC section 41. In

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[7] 66 Federal Register 66,367 (2001 proposed regulation); T.D. 9104, 69 Federal Register 22, 26 (in final regulation issued in 2003, IRS states: "[f]or taxable years ending before December 31, 2003, the IRS will not challenge return positions that are consistent with these final regulations.").

enacting the federal Tax Relief Extension Act of 1999 that renewed the IRC section 41 credit, Congress in a conference report expressly rejected the IRS proposed regulation that included a specific recordkeeping requirement.[8] Hence, the Treasury Department in 2001 stated that "the 2001 proposed regulations do not contain a specific recordkeeping requirement beyond the requirements set out in [IRC] section 6001 and the regulations thereunder." (Treasury Decision (T.D.) 9104, 2004-1 Cumulative Bulletin (C.B.) 406.) Thus, when the IRS issued the current regulation as a proposed regulation in 2001, it stated:

> Taxpayers must be provided reasonable flexibility in the manner in which they substantiate their research credits. Accordingly… the failure to keep records in a particular manner (so long as such records are in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit) cannot serve as a basis for denying the credit.[9]

In *Cohan v. Commissioner supra*, 39 F.2d 540, 543-544, the court held that the former Board of Tax Appeals (which was the equivalent of the current United States Tax Court) could not completely disallow travel and entertainment expenses in view of the fact that the Board found the taxpayer incurred such expenses and such expenses were allowable for deduction. While the court recognized the taxpayer had not kept expense records, the court nonetheless held that "[a]bsolute certainty in such matters is usually impossible and is not necessary; the Board should make as close an approximation as it can, bearing heavily if it chooses upon the taxpayer whose inexactitude is of his own making."

Congress in 1962 amended the IRC to require substantiation of any claimed travel and entertainment expense,[10] but did not overrule the application of *Cohan* to other areas. Thus, in *Fudim v. Commissioner, supra*, the tax court held that a taxpayer could claim the R&D credit even without

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[8] In 1998, the IRS issued proposed regulations containing a requirement that the credit be allowed only where the taxpayer recorded the results of the claimed credit qualifying experiments. See REG-105170-97, at 63 Federal Register 66,503, Document 98-34970 (also available at 1998 Tax Notes Today (TNT) 234-84). However, when Congress renewed the IRC section 41 credit in 1999, it included conference report language that rejected the proposed experiment-specific substantiation requirement: "The conferees … are concerned about unnecessary and costly recordkeeping burdens and reaffirm that eligibility for the credit is not intended to be contingent on meeting unreasonable record keeping requirements." H.R. Rep. No. 106-478, page 132 (1999), Document 1999-36730 (also available at 1999 TNT 223-7).

[9] Treasury Proposed Regulation REG-112991-01, 66 Federal Register at 66,366.

[10] IRC section 274(d).

substantiation of specific amounts claimed if the evidence shows the taxpayer engaged in qualified research as defined in IRC section 41 and where there was some basis for estimating the amount of such research. Because the taxpayer had two income sources – consulting and the patented research described above – the tax court "estimated the time spent on R & D under the principles set forth in *Cohan v. Commissioner*"[11] and determined that 80 percent of the taxpayer's income came from research that qualified for the credit.

However, in *Eustace v. Commissioner, supra*, the tax court sustained the IRS denial of amended return claims of the R&D credit where the credit was not claimed on the 1990, 1991, and 1992 federal returns for the subchapter S corporation in which the taxpayers were shareholders. On December 30, 1993, the S corporation hired a new tax manager, who determined that the S corporation should claim research credits for the 1990, 1991, and 1992 tax years. The tax manager interviewed employees and delineated the employees and activities he believed qualified for the research credit. The tax court held the taxpayers' reconstruction of qualifying expenses was "unreliable, inaccurate, incomplete, and wholly insufficient to establish what various workers did and whether such expenses qualify for the research credit." While the court also held the taxpayers had not presented sufficient evidence to establish the claimed activities met the requirements for qualified research, the court suggested the research credit might be applicable to the subcomponents of those activities. The taxpayers acknowledged that they did not have the substantiation necessary to tie salaries to activities at the subcomponent level, but argued under *Cohan* the court would be required to make a reasonable allocation of salaries to functionality. However, the court disagreed and held that *Cohan* did not require it to make such an allocation.

In short, the taxpayer must demonstrate some rational basis on which an estimate can be made[12] that goes beyond mere speculation, unsupported allegations, or mere inference.[13] Such a rational basis does not require project-specific documentation. In *Union Carbide Corporation v.*

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[11] *Fudim, supra*, page 12.

[12] *Vanicek v. Commissioner* (1985) 85 T.C. 731, 742-43.

[13] *Appeal of Albert Hakim*, 90-SBE-005, Aug. 1, 1990.

Commissioner, T.C. Memo 2009-50, the tax court found that two of the taxpayer's five claimed projects involving conversion of raw hydrocarbon feedstocks into olefins were substantiated based on estimated base period wages, forecasts of material costs, and estimated project costs where no accounting records were available, and employee testimony regarding claimed wage expenses. Specifically, the court stated that:

> the documents that petitioner produced were sufficient to substantiate its claim that the MATRIC team identified all of the scientific research projects that occurred during the base period and were sufficiently detailed to allow the MATRIC team to make reasonable determinations as to the duration and production quantities of its intended runs.

On that basis, the court held that the taxpayer complied with the substantiation standard of Treas. Reg. sec. 1.41-4(d), which requires that the taxpayer "retain records in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit."

In 2005 and 2008, the IRS issued public website[14] audit manuals for auditing IRC section 41 claims, including claims predicated on prepackaged credit studies. Since R&TC section 23609 expressly incorporates IRC section 41 except for the express modifications not relevant to this appeal, the analysis of IRC section 41 in these IRS audit manuals is relevant to interpreting the California R&D credits claimed by appellants. The 2008 IRS Audit Techniques Guide to IRC section 41 states as follows:

> It is strongly recommended that examiners resist relying *exclusively* on these prepackaged submissions. Instead, the examiner should *independently determine the documents and other information necessary*, *including testimony*, to substantiate the taxpayer's claim for the research credit….Determine whether the activities constitute qualified research under section 41(d)…determine whether the taxpayer conducted interviews of current (and former) employees and contractors in order to formulate their determination. Advise the taxpayer that this information may need to be corroborated through supporting documentation, and additional interview procedures may be implemented for the examination. A tour of all relevant company operations, including research facilities, should also be considered and arranged. (Emphasis added).

With respect to estimates, the 2005 IRS audit manual states as follows:

> Estimation methods are permitted only in cases where the sole issue is the exact amount paid or incurred in the qualified research activity. Accordingly, taxpayers must have factual support for every assumption underlying their estimates to meet their burden of proof. (Footnote omitted).

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[14] The manuals are available at www.irs.gov.

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Tax credits are a matter of legislative grace, meaning that taxpayers must show that they clearly meet all of the statutory requirements for any credit. (See *Appeal of James C. and Monablanche A. Walshe*, 75-SBE-073, Oct. 20, 1975; *INDOPCO Inc. v. Commisioner* (1992) 503 U.S. 79, 84; *New Colonial Ice Co. v. Helvering* (1934) 292 U.S. 435; *Tax & Accounting Software Corp. v. United States* (10th Cir. 2002) 301 F.3d 1254, 1261; *MedChem Inc. v. Commissioner* (1st Cir. 2002) 295 F.3d 118, 123.) In addition, it is equally well-established that taxpayers claiming deductions and credits must keep sufficient records to substantiate the claimed deduction or credit. (*Sparkman v. Commissioner* (9th Cir. 2007) 509 F.3d 1149, 1159.) Finally, it is well-established that a taxpayer's failure to introduce evidence that is within his control gives rise to the presumption that the evidence, if provided, would be unfavorable to his position. (*Appeal of Don A. Cookston*, 83-SBE-048, Jan. 3, 1983.)

Qualified Research

IRC section 41(b)(2)(A) defines, in relevant part, "in-house research expenses" as "any wages paid or incurred to an employee for qualified service performed by such employee." IRC section 41(b)(2)(B) defines "qualified services" as "services consisting of (i) engaging in qualifying research or (ii) engaging in the direct supervision or direct support of research activities which constitute qualified research."

Under IRC section 41(d)(1), the term "qualified research" is defined as "research":

> (A) with respect to which expenditures may be treated as expenses under section 174,
> (B) which is undertaken for the purpose of discovering information –
> (i) which is technological in nature, and
> (ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer, and
> (C) substantially all of the activities of which constitute elements of a process of experimentation for a purpose described in paragraph (3) [which lists qualified purposes as "(i) a new or improved function, (ii) performance, or (iii) reliability or quality"]."

Treasury Regulation 1.41-4(a)(3) provides in pertinent part that:

> (i) Research is undertaken for the purpose of discovering 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 taxpayer does not establish the capability or method for developing or improving the business component, or the appropriate design of the business component.
>
> (ii) Application of the discovering information requirement. A determination that research is undertaken for the purpose of discovering information that is technological in

> nature does not require the taxpayer be seeking 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 taxpayer is performing the research. In addition, a determination that research is undertaken for the purpose of discovering information that is technological in nature does not require that the taxpayer succeed in developing a new or improved business component.[15]

Treas. Reg. sec. 1.41-4(a)(5)(i) defines the "process of experimentation" in relevant part as "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." The U.S. Court of Appeals has described the "process of experimentation" as involving three steps:

> (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).
> (*U.S. v. McFerrin* (2009) 570 F.3d 672, 677.)

In addition, Treasury Regulation 1.41-4(a)(5)(ii) describes a "qualified purpose" of a process of experimentation as relating to "a new or improved function, performance, reliability or quality of the business component. Research will not be treated as conducted for a qualified purpose if it relates to style, taste, cosmetic, or seasonal design factors."

IRC section 41(d)(2) provides that the test for qualified research shall be applied separately with respect to each "business component" of the taxpayer, and defines "business component" as "any product, process, technique, formula, or invention which is to be held for sale, lease or license, or used by the taxpayer in a trade or business of the taxpayer."

IRC section 41(d)(4) excludes the following activities (among others) from the definition of "qualified research" (and thus provides that such activities will not be eligible for the credit):

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[15] Although the current regulation provides that it is applicable to tax years after December 31, 2003, the regulation was adopted, in relevant part, as a proposed regulation on December 26, 2001, and the IRS then stated that it would not challenge return positions that were consistent with the proposed regulation. (66 Fed. Reg. 247, p. 66367 (Dec. 26, 2001).) The regulation discarded the IRS's prior formulation of the applicable rule, which required the taxpayer undertake to obtain knowledge that exceeds or refines the knowledge of skilled professionals in the field of science or engineering. Staff notes that *United Stationers, Inc. v. U.S.* (7th Cir. 1998) 163 F.3d 440, appeared to adopt a more stringent form of the "discovery" requirement than set forth in the current regulation by requiring that qualifying research "go beyond the current state of knowledge in [the] field [or] expand or refine its principles." (*United Stationers* v. U.S., *supra* at p.445.)

(D) Surveys, studies, etc.
Any -
(i) efficiency survey,
(ii) activity relating to management function or technique,
(iii) market research, testing, or development (including advertising or promotions),
(iv) routine data collection, or
(v) routine or ordinary testing or inspection for quality control. . . . "

* * *

(H) Funded research. Any research to the extent funded by any grant, contract, or otherwise by another person (or governmental entity).

For purposes of determining the extent to which an activity is considered "funded research", Treasury Regulation 1.41-4A(d) is applicable and provides in part that:

(1) All agreements (not only research contracts) entered into between the taxpayer performing the research and other persons shall be considered in determining the extent to which the research is funded.

(2) Research in which taxpayer retains no rights. If a taxpayer performing research for another person retains no substantial rights in research under the agreement providing for the research, the research is treated as fully funded for purposes of [IRC] section 41(d)(4)(H), and no expenses paid or incurred by the taxpayer in performing the research are qualified research expenses.

Incidental benefits to the taxpayer from performance of the research (for example, increased experience in a field of research) do not constitute substantial rights in the research. If a taxpayer performing research for another person retains no substantial rights in the research and if the payments to the researcher are contingent upon the success of the research, neither the performer nor the person paying for the research is entitled to treat any portion of the expenditures as qualified research expenditures.

IRC section 41(d)(1)(A) provides that, in addition to meeting the requirements set forth in IRC section 41 itself, a taxpayer seeking the research credit must also comply with the requirements of IRC section 174, which provides a deduction for "research or experimental expenditures." Treas. Reg. sec. 1.174-2(a)(1) provides that, to fall within the definition of "research or experimental expenditures," expenses must represent "research and development costs in the experimental or laboratory sense." Treas. Reg. sec. 1.174-2(a)(1) further explains as follows:

Expenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product. Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product or the appropriate design of the product. Whether expenditures qualify as research or experimental expenditures depends on the nature of the activity to which the expenditures relate, not the nature of the product or improvement being developed or the level of technological advancement the product or improvement represents.

One scholarly commentator has noted that, for purposes of IRC section 174:

> The term "uncertainty" must be limited to technological or scientific uncertainty in that a taxpayer must be uncertain as to whether it will be able to develop or improve its product in the scientific or laboratory sense. Put differently, the taxpayer must be uncertain as to whether it will be able to achieve its product development objective through its research activities. Conversely, uncertainty attributable to business or market concerns is not determinative of the existence of research and experimentation for purposes of section 174.[16]

In this process, the taxpayer is required to "identify the uncertainty", "identify one or more alternatives" and "identity and conduct a process of evaluating the alternatives." The IRS audit manual explains as follows:

> The key difference regarding 'uncertainty' in sections 41 and 174 is that, under section 41, uncertainty must relate to a qualified purpose, and must be resolved through a 3-element process of experimentation, fundamentally relying on the principles of the hard sciences, engineering, or computer science. The regulations clarify that merely demonstrating that uncertainty has been eliminated is insufficient…Focus on developing facts necessary to determine whether the taxpayer's activities meet these requirements and the core elements.

Treasury Regulation section 1.174-2(a)(3) further provides that the term "research or experimental expenditures" does not include expenditures for, among other things, quality control testing, surveys or advertising.

In *U.S. v. McFerrin,* 2008 U.S. Dist. LEXIS 64327, the taxpayers contracted with alliantgroup to conduct a R&D study and the results of this study were the basis of the claim for R&D credit by the taxpayers and their companies. The federal district court found that the IRS "proved convincingly that alliantgroup's work and resulting report were fundamentally flawed and unreliable" and "entitled to no weight." The court described alliantgroup's methods as "staff conducting superficial on-site meetings with personnel from [taxpayers' companies], and reviewing various records of the companies." The court noted that there was no evidence that alliantgroup had "anyone with meaningful scientific experience or training on staff, or that skilled or knowledgeable individuals conducted the study, did any investigation, or rendered conclusions." Finally, the court noted that alliantgroup did not define "research" for purposes of the R&D credit in its interviews with the employees so that each employee's answers reflected that employee's own interpretation of what

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[16] Cameron, *Research Tax Credit: Statutory Construction, Regulatory Interpretation and Policy Incoherence* (2004) 9 Comp. L. Rev. & Tech. J. 63.

qualified as "research."

The district court bifurcated the test for determining whether the activities constituted "qualified research" as meeting both the discovering information requirement and the process of experimentation requirement. The district court articulated the standard for "discovering information technological in nature [as] research undertaken to discover information that goes beyond the current state of knowledge in the field" and the court held that appellants failed to meet that standard.

On appeal, the court of appeal held that the district court applied the wrong standard for discovering information. The court noted that even though the 2003 Treasury Regulations were not in effect when the amended returns were filed, the taxpayers had clearly been relying on the proposed regulations which defined the discovering information standard as "eliminating uncertainty," and which was similar to the definition that was ultimately adopted. Additionally, the court noted that the IRS conceded the taxpayers could rely on the definitions from the 2003 regulations. Therefore, the court of appeal held that the district court erred by not reviewing the evidence under the definitions set forth in the 2003 Treasury Regulations. (*U.S. v. McFerrin, supra,* 570 F.3d 672, 678.)

<u>STAFF COMMENTS</u>

<u>Recordkeeping Requirements</u>

Respondent contends that the alliantgroup study is insufficient because it is a prepackage credit study that was compiled years after the alleged research occurred and that the IRS has viewed such studies as a problem for years. In addition, respondent maintains that the study predates many of the documents presented as substantiating evidence and that it appears that the wage allocation questionnaires provide only vague information that does not show a nexus between the alleged qualifying project and the qualifying wages. Appellants believe that they have provided sufficient substantiation because there are no strict documentation requirements.

Staff notes the schedule titled "California Cascade Wages" lists employee gross salaries for each of the tax years in issue and assigns a percentage for each year for certain employees as qualified research expenses. (Resp. Open. Br., exhibit N, pp. 24-27.) Respondent argues that the evidence relied upon by appellants does not substantiate the wages claimed are QREs because the activities did not constitute qualified research. At the hearing, respondent should be prepared to explain whether the evidence submitted by appellants is sufficient at least as a rational basis for estimating qualified research expenses if the development of a wood treatment process is found to be a qualified research activity. Respondent also argues the study fails to show any nexus between the wage amounts claimed and the activities that are claimed as qualified research. At the hearing, respondent should be prepared to explain and give examples of a sufficient nexus to justify the wages amounts as qualified research expenses.

The study does not provide any support for its methodology of determining the amount of time that each employee spent on the qualifying activities. The study simply states that employees were interviewed and “the employees’ roles, responsibilities and R&D activities” were confirmed. From that information, each employee’s “total wages were multiplied by [the] qualified R&D percentage to come up with a total qualified wage expense.” (Resp. Open. Br., exhibit L, p. 16.) At the hearing, appellants should be prepared to provide any supporting documentation, including notes of those employee interviews, and discuss the manner in which the qualified R&D percentage was determined.

At the hearing, appellants should also be prepared to demonstrate nexus between the alleged qualifying activities and wages paid to any employee. Appellants may wish to address the reason underlying respondent’s conclusion that the 80 percent wage allocation of the treatment staff to qualified activities had not been established; i.e., respondent’s auditor notes in the AIPS that the treatment staff handled all of the treatments that the company produced (both production and research-related treatments) and that the resulting claim that only 20 percent of these workers’ time was allocated to production needs was not plausible in the absence of documentation showing how the “treaters’” wage allocations were calculated. If appellants are not able to demonstrate that the treatment staff spent 80 percent of its time on qualified activities, then appellants must substantiate some other wage percentage, and the credit applies only to the resulting wage amounts that exceed the guaranteed minimum base amount for the year in question.

<u>Qualified Research</u>

The alliantgroup study describes the projects as “ACQ Treatment Formulation” and “Sunwood Stain/ACQ Formulations” and the goal of the projects was “to design and develop an innovative formulation designed to effectively implement the active chemical ACQ into the company’s wood treatment solutions" and "to design and develop an innovative formulation designed to effectively implement the a Sunwood staining agent into the ACQ based chemical treatment solution." The study also states that "in order to effectively develop the ACQ based treatment solution, [CCW] employed an exhaustive formulation phase, which consisted of the development and assessment of numerous formulations" (Resp. Open. Br., exhibit L, p. 20) and "in order to effectively develop the staining/treatment solution, [CCW] employed an exhaustive formulation phase, which consisted of the development and assessment of numerous formulations." (*Id*. exhibit L, p. 26.) In their supplemental brief, appellants state that "it was during this reformulation that [CCW] tested different quantities of quat, mold treatment chemicals and other compounds." The above description and appellants' briefing (except the final additional brief) indicates that there were two components or activities involved in the claimed qualified research: the development of innovative chemical reformulations and the development of innovative treatment and staining processes.

However, in their additional brief, appellants clarify that their claimed activities did not involve any chemical changes to any Osmose product. In the view of the Appeals Division staff, this clarification would seem to modify the scope of and, thus, the employee time devoted to, the claimed qualifying activities. At the hearing, appellants should be prepared to explain and present evidence of the exact activities for which they are claiming the R&D credit.

Respondent states that it would not have found any of CCW's activities were "qualified research" if appellants had provided the Osmose plant operations and quality control manuals and other documents that respondent states were requested during the audit. Because those manuals and the strict regulations governing the use of wood treatment chemicals dictate that CCW adhere to Osmose's quality standards and procedures, respondent contends that CCW did not engage in a process of experimentation but rather just followed instructions in the application of those chemicals. However, appellants describe an application process involving numerous tests to determine the most effective method of treating the wood used by CCW. At the hearing, appellants should explain whether Osmose prescribed specific wood treatment production guidelines and, if so, whether the methods CCW used varied from those guidelines.

If the Osmose ACQ wood treatment activity constitutes "routine manufacturing and inspection for quality control," then it is expressly made ineligible for the credit by IRC section 41(d)(4)(D)(v). As respondent notes, appellants argue that they engaged in "x-ray tests to measure penetration, absorption and retention," but did not introduce evidence that such work was for anything other than routine testing to maintain quality control so they could market their treated lumber under Osmose's registered trademark. At the hearing, appellants should be prepared to demonstrate such testing was an activity other than "routine testing to maintain quality control."

If appellants' Osmose adaptation work for NatureWood is something other than routine quality control, appellants must demonstrate at the oral hearing that: (1) the process of using another entity's trademarked product is a "business component" of CCW; (2) that substantially all of that process involves elements of a process of experimentation designed to eliminate uncertainty; and (3) that it relates to a new or improved function or performance of the business component other than style, taste, cosmetic or seasonal design.

In addition, appellants need to demonstrate that the Naturewood project attempted to eliminate uncertainty not resolved in the EPA and industry "drop in" methods for easily substituting ACQ for the phased out CCA in the manner required by Treasury Reg. 1.41-4(a)(5) which describes the identification of uncertainty concerning the development or improvement of a business component.

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