

Hydrogen Fueling Stations

State of California

California Department of Tax and Fee Administration

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Memorandum

To: Ms. Aimee Olhiser
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Date: March 12, 2021

From: Scott Claremon
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Tax and Fee Programs Bureau (MIC:82)

Subject: Request for Legal Opinion – Hydrogen Fueling Station
Assignment No. 20-559

This is in response to your August 27, 2020, request for guidance as to the proper application of the California Sales and Use Tax Law. Specifically, you state:

We are requesting your opinion as to whether certain purchases of tangible personal property by a hydrogen fueling station qualify for the partial exemption for manufacturing machinery and equipment pursuant to Revenue and Taxation Code section 6377.1 and Regulation 1525.4.

In your request you state:

It is our understanding that hydrogen refueling stations are fully automated facilities used in refueling hydrogen fuel cell vehicles. The hydrogen is purchased in gas form from a supplier, but before the hydrogen can be used to refuel a fuel cell vehicle, it must be pressurized from a pressure of approximately 3,000 psi to a pressure of up to 13,500 psi by a compressor and high pressure tubes, in order to have sufficient pressure to flow into the fuel cell vehicle, and it must be processed through a filtration system to remove any contaminants. It is our understanding that only a minute level of impurities must be filtered out. For example, hydrogen is delivered as 99.97 percent pure hydrogen and must consist of at least 99.99 percent pure hydrogen to be used in fueling. Examples of equipment used during this process include medium pressure storage tanks, utility enclosures, which include an air compressor, alarm panel, power distribution component, and high-pressure skids.

Once a vehicle plugs into a fuel pump, the hydrogen must be passed through a cooling system, consisting of heat exchangers, in order to remove heat caused by the pressurization process, and the hydrogen is then cooled to -40 degrees. In addition, check valves and computer processors, located within the fuel dispenser, communicate with the fuel cell vehicle and monitor the ambient temperature and the temperature of the hydrogen, in order to dispense the hydrogen fuel at a specified rate and safe temperature. The fueling is completed in about 3 to 4

minutes. Examples of equipment used during this process include cooling blocks and the hydrogen fuel dispenser itself.

As you know, California imposes sales tax on a retailer's gross receipts from the retail sale of tangible personal property in California unless the sale is specifically exempt or excluded from taxation by statute. (Rev. & Tax. Code, §§ 6012, 6051.) When sales tax does not apply, use tax may be imposed, measured by the sales price of the tangible personal property purchased from a retailer for storage, use, or consumption in California. (Rev. & Tax. Code, §§ 6201, 6401.)

Revenue and Taxation Code Section (section) 6377.1 provides for a partial exemption from sales and use tax for certain sales and purchases of qualified tangible personal property purchased for use in, or related to, manufacturing, research and development, and the generation or production, or storage and distribution of electric power. (Rev. & Tax. Code, § 6377.1, subd. (a); Cal. Code Regs., tit. 18, § (Regulation or Reg.) 1525.4, subd. (a).) As relevant here, section 6377.1, subdivision (a)(1), provides that the partial exemption applies to the sale or purchase of:

Qualified tangible personal property purchased for use by a qualified person to be used primarily in any stage of the manufacturing, processing, refining, fabricating, or recycling of tangible personal property, beginning at the point any raw materials are received by the qualified person and introduced into the process and ending at the point at which the manufacturing, processing, refining, fabricating, or recycling has altered tangible personal property to its completed form, including packaging if required.

For purposes of the partial exemption, "primarily" means 50 percent or more of the time. (Rev. & Tax. Code, § 6377.1, subd. (b)(5).) "Manufacturing" means the activity of converting or conditioning tangible personal property by changing the form, composition, quality, or character of the property for ultimate sale at retail or use in the manufacturing of a product to be ultimately sold at retail. (Rev. & Tax. Code, § 6377.1, subd. (b)(4); Reg. 1525.4, subd. (b)(2).) Manufacturing includes any improvements to tangible personal property that result in a greater service life or greater functionality than that of the original property. (*Ibid.*) Tangible personal property shall be treated as having greater functionality if the property has been improved in such manner that it is more efficient or can be used to perform new or different functions. (Reg. 1525.4, subd. (b)(2).) Qualified tangible personal property includes machinery and equipment, including component parts and contrivances such as belts, shafts, moving parts, and operating structures, and also includes equipment or devices used or required to operate, control, regulate, or maintain the machinery. (Rev. & Tax. Code, § 6377.1, subd. (b)(9)(A); Reg. 1525.4, subd. (b)(9)(A).)

A qualified person includes, as relevant here, a person that is primarily engaged in those lines of business described in Codes 3111 to 3399 of the North American Industry Classification System published by the United States Office of Management and Budget, 2012 edition (NAICS Code). (Rev. & Tax. Code, § 6377.1, subd. (b)(8)(A).) Regulation 1525.4, subdivision (b)(8)(A), further states, in relevant part:

"Qualified person" means a person that is primarily engaged in those lines of business described in Codes 3111 to 3399, inclusive, 541711, or 541712 of the North American Industry Classification System (NAICS) published by the United States Office of Management and Budget (OMB), 2012 edition. With respect to

Codes 3111 to 3399, a person will not be precluded from the definition of a “qualified person” when there is no applicable six digit NAICS code to describe their line of business, provided that their business activities are reasonably described in a qualified four digit industry group. For example, a business in the recycling industry may be regarded as a qualified person when the activities of the establishment are reasonably described in a qualified four digit industry group. For the purpose of this subdivision:

1. A qualified person may be “primarily engaged” either as a legal entity or as an establishment within a legal entity. “Legal entity” means “person” as defined in RTC section 6005.

A person is “primarily engaged” as a legal entity if, in the prior financial year, the legal entity derives 50 percent or more of gross revenue (including inter-company charges) from, or expends 50 percent or more of operating expenses in a line of business described in Codes 3111 to 3399, inclusive, 541711 or 541712 of the NAICS. For example, a legal entity is a qualified person primarily engaged in a qualifying line of business if the legal entity's gross revenue from manufacturing constitutes 50 percent or more of the total revenue for the legal entity. For purposes of research and development activities, revenues could be derived from, but are not limited to, selling research and development services or licensing intellectual property resulting from research and development activities.

[¶] . . . [¶]

For purposes of this test, the gross revenues may be derived from a combination of qualified manufacturing lines of business and from qualified research and development lines of business. For example, if a company derives 40% of its gross revenues from qualified manufacturing activities and 40% from non-qualified manufacturing activities; but, the remaining 20% of its gross revenues are derived from qualified research and development contracts, the company would qualify because overall, 60% of the gross revenues are from qualifying activities.

Similarly, the test for operating expenses from qualifying manufacturing or research and development lines of business cited in the qualifying NAICS codes would be considered in combination.

There may be more than one qualifying establishment within a legal entity.

[¶] . . . [¶]

In cases where the purchaser was not primarily engaged in qualifying manufacturing or research and development activities for the financial year preceding the purchase of the property, the one year period following the date of purchase of the property will be used.

DISCUSSION

At the outset, I note that our analysis is based on certain assumptions. I assume that the hydrogen fueling stations are not engaged in refining of tangible personal property. Rather, I assume that the hydrogen fueling stations purchase hydrogen gas in an identical form to that in which it is sold to customers, other than the differences in temperature, pressure, and purity you describe. I also assume that hydrogen fueling stations generally only make sales to consumers by dispensing it directly into their vehicles. That is, I assume that hydrogen fueling stations do not purchase hydrogen gas; use the tangible personal property at issue to make the changes in temperature, pressure, and purity you describe; and then sell the hydrogen gas at retail in some other way or to other retailers for resale. Finally, I assume that the hydrogen fueling stations do not contain multiple establishments, at least with respect to the facts you describe. Accordingly, our analysis is limited to whether the hydrogen fueling stations are engaged in a qualifying line of business as legal entities. (Reg. 1525.4, subd. (b)(8)(A)1.)

To provide a response to your question, I will focus on the “qualified person” element. As stated above, a qualified person includes a person that is primarily engaged in those lines of business described in Codes 3111 to 3399 of the NAICS Code. (Rev. & Tax. Code, § 6377.1, subd. (b)(8)(A); Reg. 1525.4, subd. (b)(8)(A).) A person is “primarily engaged” in manufacturing if, in the prior financial year, it derives 50 percent or more of gross revenue (including inter-company charges) from, or expends 50 percent or more of operating expenses in a line of business described in NAICS Codes 3111 to 3399. (Reg. 1525.4, subd. (b)(8)(A)1.)

Here, hydrogen fueling stations are in the business of selling hydrogen gas at retail by dispensing the fuel directly into consumers’ vehicles. This line of business appears to be described in NAICS Code 447190 - *Other Gasoline Stations*, which includes gasoline stations that are engaged in retailing automotive fuels, including diesel fuel, gasohol, gasoline, and alternative fuels. It could also fall under the description of NAICS Code 454310 - *Fuel Dealers*, which includes businesses engaged in retailing heating oil, liquified petroleum (LP) gas, and other fuels (including alternative fuels) via direct selling. NAICS Codes 447190 and 454310 are not among the qualifying NAICS Codes listed in section 6377.1, subdivision (b)(8)(A).

It does not appear that the hydrogen fueling stations are engaged in any other line of business. As assumed above, hydrogen fueling stations only perform the described tasks of changing the temperature, pressure, and purity of the hydrogen gas in preparation for and while dispensing the hydrogen gas at retail. Certain of these actions, filtration and lowering of the temperature, take place while the fuel is being dispensed, so it does not appear possible that they could be done outside of this line of business. In addition, given that the gas is transported at a much lower pressure (3,000 psi), it appears unlikely that pressurizing it to 13,500 psi would occur anywhere other than where the gas is dispensed into a vehicle.

Therefore, even if we were to assume that changing the temperature, pressure, and purity of the hydrogen gas as described constitutes “manufacturing,” these actions do not constitute a separate line of business of the hydrogen stations, but rather actions taken pursuant to the line of business of selling the hydrogen gas at retail described in NAICS Code 447190 or 454310.¹ As such, the

¹ In contrast, NAICS Code 325120 – *Industrial Gas Manufacturing* comprises establishments that are primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms, including hydrogen manufacturers. A line of business described in this NAICS Code would include, for example, a facility that produces hydrogen gas from raw materials via steam methane reforming or an alternative process.

gross revenue or operating expense related to these actions is associated with their retailing line of business for the purposes of the primarily engaged test. (Reg. 1525.4, subd. (b)(8)(A)1.) Accordingly, based on the facts provided, hydrogen fueling stations are not primarily engaged in a qualifying line of business, and their purchases of the tangible personal property at issue would not be subject to the partial exemption.

This is not to say that an entity or establishment cannot be engaged in multiple lines of business. This is clearly contemplated in establishing the test for being primarily engaged. In addition, according to the rulemaking documents associated with the promulgation of Regulation 1525.4, the second and third sentences of subdivision (b)(8)(A) were specifically added to address recyclers that were engaged in the line of business of separating and sorting recyclable materials from nonhazardous waste streams (i.e., garbage), described in NAICS Code 562920 - *Material Recovery Facilities*, and the separate line of business of producing recycled raw materials, which some recycling facilities also perform and which is not specifically described in a six-digit NAICS Code.²

Similarly, the Board of Equalization concluded that supermarkets' meat and bakery departments are separate lines of business from their general grocery sales, as relevant to a similar provision of the Manufacturer's Investment Credit (MIC). (Former Rev. & Tax. Code, § 23649; *In the Matter of Save Mart Supermarkets & Subsidiary*, State Board of Equalization Formal Legal Opinion, February 2, 2002 (*Save Mart*), at pp. 5-6.) The decision notes, however, that "this is not to say, of course, that any entity or person purchasing an oven and baking bread qualifies for the MIC." (*Save Mart*, at p. 5.) Significantly, the MIC did not require that a taxpayer be "primarily" engaged in a qualifying line of business. (Former Rev. § Tax. Code, § 23469, subd. (c)(1).) So, in other words, not every person that purchases an oven and bakes (i.e., manufactures) bread is engaged in a manufacturing line of business *at all*. Similarly, here, as stated above, even if we were to assume that their actions constitute "manufacturing," that does not mean that the hydrogen fueling stations are engaged in a manufacturing line of business.

Please let me know if you have any further questions.

SAC:yg

cc: Mr. Greg Buehrer (MIC: 44)
Ms. Jamie Mason (MIC: 44)
Mr. Brad Miller (MIC: 92)
Ms. Shannon Robinson (MIC: 44)
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² The fact that the word "activities" is used in place of "line of business" in one instance in that provision (and certain examples set forth in subdivision (b)(8)(A)1.) does not mean that the primarily engaged test can be applied to every individual task or action a person performs. (Reg. 1525.4, subd. (b)(8)(A).) Additionally, we note that this provision is inapplicable to the facts at issue because it relates to circumstances in which "there is no applicable six digit NAICS code to describe [a person's] line of business." (*Ibid.*) Here, the hydrogen fueling stations are engaged in a line of business described in NAICS Code 447190 or 454310.