

TENNESSEE DEPARTMENT OF REVENUE
LETTER RULING # 25-05

Letter rulings are binding on the Department only with respect to the individual taxpayer being addressed in the ruling. This ruling is based on the particular facts and circumstances presented and is an interpretation of the law at a specific point in time. The law may have changed since this ruling was issued, possibly rendering it obsolete. The presentation of this ruling in a redacted form is provided solely for informational purposes and is not intended as a statement of Departmental policy. Taxpayers should consult with a tax professional before relying on any aspect of this ruling.

SUBJECT

Applicability of Tennessee sales and use tax industrial machinery exemption to water treatment equipment and supplies.

SCOPE

This letter ruling is an interpretation and application of the tax law as it relates to a specific set of existing facts furnished to the Department by the taxpayer. The rulings herein are binding upon the Department and are applicable only to the individual taxpayer being addressed.

This letter ruling may be revoked or modified by the Commissioner at any time. Such revocation or modification shall be effective retroactively unless the following conditions are met, in which case the revocation shall be prospective only:

- (A) The taxpayer must not have misstated or omitted material facts involved in the transaction;
- (B) Facts that develop later must not be materially different from the facts upon which the ruling was based;
- (C) The applicable law must not have been changed or amended;
- (D) The ruling must have been issued originally with respect to a prospective or proposed transaction; and
- (E) The taxpayer directly involved must have acted in good faith in relying upon the ruling; and a retroactive revocation of the ruling must inure to the taxpayer's detriment.

FACTS

[REDACTED] (the "Taxpayer") is a frozen food products company headquartered in [REDACTED]. The Taxpayer supplies frozen food products to [REDACTED].

The Taxpayer operates [REDACTED] manufacturing facilities in Tennessee at the following locations:

[REDACTED]

The Taxpayer uses pollution control and wastewater treatment equipment and supplies in the process of manufacturing [PRODUCTS].

The Taxpayer's Tennessee manufacturing facilities use a significant amount of water in their manufacturing processes. For example, the [REDACTED] plant produces approximately 200,000 gallons of wastewater per day. Wastewater is ultimately returned to municipalities. Local authorities (municipal utilities) routinely test wastewater. If wastewater is not within specifications, penalties are imposed.

Water treatment includes both treatment of water entering the process and water discharged from the process (i.e., wastewater). Wastewater treatment encompasses treatment of both low-strength waste and high-strength waste. These processes are described in more detail below.

Water Treatment (Water Entering the Manufacturing Process)

The Taxpayer uses steam as a heat source in the manufacturing process. Steam is created by boilers (i.e., steam-generators). When water is heated at high temperatures, steam is produced. This steam is clean, leaving behind any contaminants in the boiler. For the boilers to properly function, buildup of contaminants must be minimized—otherwise, boiler failure may result. Filters, chemicals, and salt pellets are used to extract contaminants from water entering the boilers. Chemicals and salt pellets are used to facilitate ionization, which separates contaminants from water entering the boilers.

Wastewater Treatment (Water Discharged from the Manufacturing Process)—High-strength

High-strength wastewater cannot be discharged to the sewer system unless the high-strength waste is removed. The wastewater treatment plant removes high-strength waste from wastewater. High-strength wastewater treatment enables the Taxpayer's manufacturing process to comply with environmental laws and regulations.

The wastewater treatment plant uses various pumps and tanks in this process. This equipment captures coagulants to be skimmed (high-strength waste). Water then goes to the DAF (dissolved air flotation) process, which is a water treatment process that clarifies wastewater by removing suspended solids (oils, greases, BOD, COD, and metals). Surface coagulants are sent to an outside party along with other high-strength waste from the plant. The waste hauler is [REDACTED]. [REDACTED] treats or contains high-strength waste. Filters and chemicals are also used in the process of removing high-strength waste from wastewater.

Wastewater Treatment (Water Discharged from the Manufacturing Process)—Low-strength

After high-strength waste is removed from wastewater, the resultant wastewater qualifies as low-strength wastewater. Low-strength waste involves a level of contamination lower (from a pollution standpoint) than high-strength waste. Municipalities accept low-strength wastewater back into their systems (i.e., municipal sewer system).

The low-strength wastewater treatment system is comprised of grease traps, screens, floor drains, and piping underground. [REDACTED] solids and other contaminants must be removed from low-strength wastewater before the water can be discharged into the sewer system. The Taxpayer utilizes

grease traps to collect [REDACTED] solids and other contaminants. The resultant wastewater may then be discharged into the municipal sewer systems.

Low-strength wastewater treatment enables the Taxpayer's manufacturing process to comply with environmental laws and regulations.

| Item Descriptions | Usage |
|---|---|
| Water treatment (water entering the process) | |
| <i>Equipment:</i> | |
| Pumps, valves | Equipment used to pump water to boilers, chillers and heat exchangers. |
| <i>Supplies:</i> | |
| Filters | Supplies used to filter water entering the boilers. |
| PH treatment | Supplies used to treat water entering boilers and other equipment. |
| Chemicals [REDACTED] | Supplies used to treat boilers and other equipment to ensure clean use. |
| Salt pellets--for boilers | Supplies used to treat boilers and other equipment to ensure clean use. |
| Wastewater treatment (water discharged from the manufacturing process) | |
| High-strength waste | |
| <i>Equipment:</i> | |
| Equalization tanks | Equipment used to treat water and capture coagulants to be skimmed (high-strength waste). Water then goes to the DAF process. Surface coagulants are sent to an outside party along with other high-strength waste from the plant. ([REDACTED] is the hauler; disposal is performed by [REDACTED].) |
| Pumps, circulators, feed pumps [REDACTED] | Equipment that pumps water throughout wastewater treatment systems. |
| Instrumentation [REDACTED] | Equipment used to monitor and control the wastewater treatment system. |

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| Low-strength waste | |
| <i>Equipment:</i> | |
| Grease traps | Equipment (floor drain screens, etc.) used to strain [REDACTED] and solids from low-strength wastewater. Low-strength wastewater can enter the sewer. |
| <i>Supplies:</i> | |
| Filters [REDACTED] | Filters used to remove high-strength waste from wastewater. |
| Chemicals [REDACTED] | Chemicals used to clean wastewater. Hydrochloric acid lowers PH, to free up particles from liquid. Caustic soda, flocculant (long-chain polymer) and coagulants pull solids out of the solution. |

RULINGS

Are the above-described items exempt from Tennessee sales and use tax?

Ruling: See chart below.

ANALYSIS

| Item Descriptions | Exempt? |
|---|---|
| Water treatment (water entering the process) | |
| <i>Equipment:</i> | |
| Pumps, valves | Yes, as accessories to machines that generate steam under TENN. CODE ANN. § 67-6-102(46)(D)(i). |
| <i>Supplies:</i> | |
| Filters | Not exempt as pollution control facilities under TENN. CODE ANN. § 67-6-102(46). |
| PH treatment | Not exempt as pollution control facilities under TENN. CODE ANN. § 67-6-102(46). |

| | |
|---|---|
| Chemicals [REDACTED] | Not exempt as pollution control facilities under TENN. CODE ANN. § 67-6-102(46). |
| Salt pellets--for boilers | Not exempt as pollution control facilities under TENN. CODE ANN. § 67-6-102(46). |
| Wastewater treatment (water discharged from the manufacturing process) | |
| High-strength waste | |
| <i>Equipment:</i> | |
| Equalization tanks | Yes, as pollution control facilities under TENN. CODE ANN. § 67-6-102(46). |
| Pumps, circulators, feed pumps [REDACTED] | Yes, as pollution control facilities under TENN. CODE ANN. § 67-6-102(46). |
| Instrumentation [REDACTED] | Yes, as pollution control facilities under TENN. CODE ANN. § 67-6-102(46). |
| Low-strength waste | |
| <i>Equipment:</i> | |
| Grease traps | Yes, as pollution control facilities under TENN. CODE ANN. § 67-6-102(46). |
| <i>Supplies:</i> | |
| Filters [REDACTED] | Yes, as supplies used in pollution control facilities under TENN. CODE ANN. § 67-6-329(a)(9). |
| Chemicals [REDACTED] | Yes, as supplies used in pollution control facilities under TENN. CODE ANN. § 67-6-329(a)(9). |

Under the Retailer's Sales Tax Act,¹ the retail sale in Tennessee of tangible personal property and specifically enumerated services is subject to sales and use tax, unless an exemption applies.² Under TENN. CODE ANN. § 67-6-206(a) (2022), "no tax is due with respect to industrial machinery."

¹ Tennessee Retailer's Sales Tax Act (codified at TENN. CODE ANN. §§ 67-6-101 to -907 (2022 and Supp. 2023)).

² TENN. CODE ANN. § 67-6-201 (2022).

Industrial machinery includes “pollution control facilities primarily used for air pollution control or water pollution control, where the use of such . . . facilities is by one who engages in” the fabrication or processing of tangible personal property for resale and consumption off the premises “as one’s principal business.”³ The Taxpayer has asked if certain items of equipment and supplies are exempt from tax as pollution control facilities.

Pollution control facility means

any system, method, improvement, structure, device or appliance appurtenant thereto used or intended for the primary purpose of eliminating, preventing or reducing air or water pollution . . . when such pollutants are created as a result of fabricating or processing by one who engages in fabricating or processing as such person’s principal business activity, which, if released without such treatment, pretreatment, modification or disposal, might be harmful, detrimental or offensive to the public and the public interest.⁴

Manufacturing is a taxpayer’s principal business if more than fifty percent of its revenue at a given location is derived from fabricating or processing tangible personal property for resale.⁵ To qualify as a pollution control facility, a system, method, improvement, structure, device, or appliance must have as its “primary” purpose eliminating, preventing, or reducing air or water pollution.⁶ The term “primarily” has been defined by the Tennessee Supreme Court for purposes of the industrial machinery exemption as “first of all; principally; or fundamentally” and as “first in rank or importance, chief, principal, basic or fundamental.”⁷

Thus, the Taxpayer’s items will be exempt from Tennessee sales and use tax as pollution control facilities (i.e., industrial machinery) if (1) the Taxpayer is a manufacturer at each location and (2) the items are used or intended for the primary purpose of eliminating, preventing, or reducing air or water pollution that is (3) created as a result of the manufacturing process and that (4) if released without treatment, might be harmful to the public and the public interest.

As a preliminary matter, each of the Taxpayer’s locations qualifies as a manufacturer. A manufacturer is an entity that fabricates or processes tangible personal property for resale. Thus, the first requirement is met for all the items discussed below.

Water Treatment for Water Entering the Process

Equipment: Pumps, Valves

The Taxpayer states that water is treated before being used to create steam as a heat source for manufacturing. The Taxpayer identifies pumps and valves, which are used to pump water to boilers, chillers and heat exchangers in the process of generating steam. Furthermore, the Taxpayer uses

³ TENN. CODE ANN. § 67-6-102(46)(A)(i).

⁴ TENN. CODE ANN. § 67-6-102(46)(A)(ii).

⁵ *Tenn. Farmer’s Coop v. State ex rel. Jackson*, 736 S.W. 2d 87, 91-92 (Tenn. 1987); *see also* TENN. CODE ANN. § 67-6-206(b)(2).

⁶ TENN. CODE ANN. § 67-6-102(46)(A)(ii).

⁷ *Woods v. General Oils, Inc.* 558 S.W. 2d 433, 436 (Tenn. 1977) (citing Webster’s Third New International Dictionary (1961)).

filters, chemicals, and salt pellets to extract contaminants from water entering the boilers used to create steam.

The pumps and valves described above are not used or intended for the “*primary* purpose of eliminating, preventing, or reducing . . . water pollution . . . when such pollutants are *created as a result* of fabricating or processing” (emphases added).⁸ The purpose of these components is to pump water through the system to generate steam used as a heat source in the manufacturing process. Build-up of contaminants may affect boiler operation, but the *primary* purpose of these components is not pollution reduction. Their primary purpose is the generation of steam. Furthermore, it is not clear how the waste present in the water before it enters the boiler is “created” by the manufacturing process. For these reasons, the pumps and valves are not pollution control facilities under TENN. CODE ANN. § 67-6-206.

The boilers themselves qualify as exempt industrial machinery because they are “[m]achines used for generating, producing, and distributing . . . steam.” TENN. CODE ANN. § 67-6-102(46)(D)(i). Because the primary purpose of the pumps and valves appears to be to pump water to the boilers for steam generation, they are likewise exempt as accessories to the boilers.

Supplies: Filters, PH Treatment, Chemicals, Salt Pellets

The filters, PH treatments, chemicals, and salt pellets used to extract contaminants from water entering the boilers are likewise not exempt pollution control facilities. These items do not constitute a “system, method, improvement, structure, device or appliance appurtenant thereto.”⁹ Rather, they are chemicals and supplies, which would be exempt under TENN. CODE ANN. § 67-6-329(a)(9) if they were “used in air or water pollution control facilities for pollution control purposes.” However, as discussed above, this portion of the process is not primarily for reduction of pollution created by the manufacturing process, and therefore these chemicals and supplies are not used in a pollution control facility. These chemicals and supplies are thus not exempt from the tax.

Wastewater Treatment for Water Discharged from the Manufacturing Process

High-Strength Waste—Equipment: Equalization Tanks, Pumps, Circulators, Feed Pumps, Instrumentation

The Taxpayer describes these items as being used to remove high-strength waste from water used in its manufacturing process. After the high-strength waste is removed, the wastewater can be discharged into the sewer system. From the Taxpayer’s description, the equalization tanks, pumps, circulators, feed pumps, and instrumentation are used for the primary purpose of eliminating, preventing, or reducing water pollution. The waste is created as a result of the manufacturing process. Furthermore, the removal of high-strength waste before discharge into the municipal sewer system makes the wastewater suitable for release to avoid detriment to the public and the public interest. Therefore, these items are exempt from tax as pollution control facilities.

Low-Strength Waste—Equipment: Grease Traps

⁸ TENN. CODE ANN. § 67-6-102(46)(A)(ii).

⁹ TENN. CODE ANN. § 67-6-102(46)(A)(ii).

The same analysis above with respect to high-strength waste equipment applies to the grease traps that the Taxpayer uses to collect [REDACTED] solids and other contaminants before wastewater is discharged. Therefore, this item is exempt as a pollution control facility.

Low-Strength Waste—Supplies: Filters, Chemicals

The Taxpayer states that these supplies are used to remove [REDACTED] solids and other contaminants that must be removed from low-strength wastewater before the water can be discharged into the sewer system. These supplies are used primarily to eliminate or reduce this waste, which is created as a result of the manufacturing process, and they reduce waste that would be otherwise harmful or offensive to the public interest if released without such pollution controls. Therefore, these items are exempt from tax under TENN. CODE ANN. § 67-6-329(a)(9) as supplies used in water pollution control facilities for pollution control purposes.

APPROVED: David Gerregano
Commissioner of Revenue

DATE: May 20, 2025