

Industrial Processing

Section 4t of the Sales Tax Act (MCL 205.54t) and Section 4o of the Use Tax Act (MCL 205.94o) provide the statutory support or authorization for the granting of an industrial processing exemption. The exemption has been in the law for a large number of years and historically has been a very key element in the Michigan sales tax structure and Michigan use tax structure. Michigan traditionally has been a manufacturing state and the influence of the manufacturing business environment has allowed the exemption to be included in the statute. Michigan, by nature of its manufacturing history, has been granted a very liberal and broad industrial processing exemption. Over the years interpretations of the court have allowed the statute to be very broadly interpreted.

Industrial Processor

MCL 205.54t and MCL 205.94o defines:

“ ‘Industrial processor’ means a person who performs the activity of converting or conditioning tangible personal property for ultimate sale at retail or use in the manufacturing of a product to be ultimately sold at retail.”

(MCL 205.54t(7)(a)(b))

“ ‘Industrial processing’ means the activity of converting or conditioning tangible personal property by changing the form, composition, quality, combination, or character of the property for ultimate sale at retail or for use in the manufacturing of a product to be ultimately sold at retail.”

(MCL 205.54t(7)(a))

There are three elements to the definitions all of which are necessary for the exemption to be sustained.

First, there must be a “converting or conditioning...by changing the form, composition, quality, combination, or character of the property”.

Second, only the sale of or use of “tangible personal property” can qualify for the exemption.

Third, the exemption applies to the “manufacturing of a product to be ultimately sold at retail”.

The statute defines “product” to “include but is not limited to a prototype, pilot model, process, formula, invention, technique, patent, or similar property, whether intended to be used in a trade or business or to be sold, transferred, leased, or licensed.” (MCL 205.54t(7)(a)(c))

Computer equipment used in connection with the computer assisted production, storage, and transmission of data is exempt from tax if the equipment would have been exempt had the data transfer been made using tapes, disks, CD-ROMS, or similar media by a company whose business includes publishing doctoral dissertations and information archiving, and that sells the majority of the company's products to nonprofit organizations.

Software Development and Industrial Processing

Prewritten computer software is considered tangible personal property and subject to the Sales Tax. Therefore, the manufacture of prewritten computer software qualifies as an industrial process and consequently, the exemption includes "equipment used in the production of prewritten computer software that is offered for general sale to the public or software modified or adapted to the user's needs or equipment by the seller, only if the software is available for sale from a seller of software on an as-is basis or as an end product without modification or adaptation".

This exception will allow the creators of canned software packages (i.e. Microsoft Word, Excel, etc.) an industrial processing exemption. Previously, a gray area existed as to what extent the software industry qualified for industrial processing. It was difficult to identify how the industry changed the form, composition, or character of tangible personal property and whether there was an ultimate sale at retail.

Industrial Processing Begins

Industrial processing begins with the movement of raw materials from storage to the first processing activity. Tangible personal property used or consumed in delivering raw materials, the receiving of these raw materials, and storage of raw materials are all taxable activities. Therefore, all tangible personal property used or consumed in receiving and storage of raw materials would be subject to tax. These items of tangible personal property could include material handling equipment such as hi-lows and lift trucks; it could include storage racks and storage bins. All of these items of tangible personal property would be taxable when purchased by an industrial processor.

The exemption for industrial processing begins with the first movement of raw materials from raw material storage to the first processing activity. The first processing activity is that activity which first changes the form, composition, or character of tangible personal property for ultimate sale at retail. Therefore, a hi-low, a lift truck, or a conveyor system, which moves raw material to that first stage of industrial processing activity, would be exempt from the sales or use tax.

A gray area in the determination of when industrial-processing starts, involves certain types of activities that prepare raw material for industrial processing. It may be determined by the Department of Treasury that the preparation of raw material for processing is not the first step in industrial processing, therefore, tangible personal property use or consumed in this activity would be taxable. However, to the extent that the preparation of raw material for industrial processing involves a change in the form, composition, or character of the property, it would qualify for industrial processing.

In the food processing industry, it is necessary for raw food products to be prepared before they can be put in the processing. Some of this preparation may include cleaning, peeling or other types of activities. These activities change the form, composition or character of the food products, the raw materials; therefore, the industrial processing exemption would apply.

In the milk processing industry, the milk is stored in silos before it is put into processing. While it is stored into silos, an otherwise taxable activity, the milk is constantly agitated to prevent coagulation. Also, while the milk is in the storage silos, the fat content is adjusted so that it can be used in 2% milk or skim milk, etc. Though the Department of Treasury may challenge the exemption on the storage of raw milk prior to processing, a very good argument could be claimed that the first step in industrial processing has taken place because the form, composition or character of the milk is undergoing a change. Also, this change is necessary for the industrial process.

In the soybean processing industry, the soybeans come from the fields in a green form. Before the soybeans can be placed into processing, they must be dried to extract the moisture before processing can take place. Therefore, this process of drying the soybeans could be considered the first step in industrial processing.

It is very important for an industrial processor to clearly identify where the first step in industrial processing occurs and to develop an accounting system and a sales and use tax compliance system to accurately identify tangible personal property used or consumed in this first step in industrial processing and to clearly draw the line as to tangible personal property used or consumed prior to the industrial processing as opposed to that used in industrial processing. Usually, it is the account number that certain purchases are charged to which can determine the taxability or the applicability of the exemption.

Industrial Processing Ends

Industrial processing ends when the finished product first comes to rest in finished goods inventory storage. This allows an exemption for any packaging functions related to the product provided it occurs prior the product coming to rest in finished goods inventory storage. The hi-lows, lift trucks, conveyor systems, and all other tangible personal property which move product from a processing area to storage and were previously taxable are now exempt. Any tangible personal property used or consumed for the preservation or maintenance of a finished good once it first comes to rest in finished goods inventory storage would then be taxable. For example, a freezer which keeps ice cream in a frozen state would be considered taxable. As always, any returnable shipping containers or materials would also be considered taxable.

In order to make an accurate determination of taxability it is very important to understand the process and the flow of goods. The industrial processing exemption ends when the tangible personal property comes to rest in finished goods storage. All activities which occur after the goods come to rest in finished goods storage are taxable. Such activities may include packaging or other activities which may preserve or maintain the marketability of the product.

However, if these activities occurred after the tangible personal property leaves the processing area, but before it comes to rest in finished goods storage, the intervening activities would be exempt. Therefore, the purchase of tangible personal property for such activities would be exempt.

Multiple Use Assets

Multiple use assets are assets which are used in both a taxable manner as well as an exempt manner. A fork truck used to move and unload raw material from a semi truck 50% of the time and move product within the process 50% of the time would be 50% taxable.

Section 4t(2) provides statutory language which requires apportionment of the tax base of mixed-use property. The law specified, "The exemption is limited to the percentage of exempt use to total use determined by a reasonable formula or method approved by the department." (MCL 205.54t(2))

It is important for taxpayers to fully utilize the apportionment provisions for mixed-use assets. However, the exemption will not be allowed unless the taxpayer devises a reasonable formula for determining the amount of exemption. The computation of the formula is subject to audit. The taxpayer has a second alternative which is to submit to the Department of Treasury a request for advanced approval of a formula.

Telecommunications Equipment

Section 4v of the Sales Tax Act (MCL 205.54v) provides for a special exemption for the telecommunications industry. The industrial processing exemption does not apply to the purchase of machinery and equipment for use or consumption in the rendition of any combination of services when such services are subject to tax under the use tax act. The exemption is limited to the tangible personal property located on the premises of the subscriber and to central office equipment or wireless equipment, directly used or consumed in transmitting, receiving, or switching, or in the monitoring of switching of a 2-way interactive communication. Central office equipment or wireless equipment does not include distribution equipment including cable or wire facilities.

Beginning April 1, 1999, telecommunication property is exempt only to the extent that the property is used for the exempt purposes stated above. The statute provides an irrebuttable presumption that 90% of total use is for exempt purposes. This presumption is in effect until April 1, 2006, at which time the presumption shall be reviewed and redetermined by the Department of Treasury using nonexempt and exempt user information the previous 12-month period.

That redetermined irrebuttable presumption shall be in effect for the following 7 years. The irrebuttable presumption shall be reviewed and redetermined every 7 years after April 1, 2006 and applied for to the following 7 years.

Servicer and Outside Contractor

The sale of tangible personal property qualifies for the industrial processing exemption if made to a person, whether or not the person is an industrial processor:

1. "...if the tangible personal property is intended for ultimate use in and is used in industrial processing by an industrial processor."
2. "...if the tangible personal property is used by that person to perform an industrial processing activity for or on behalf of an industrial processor."
3. And, for assets acquired after 1987, "...if the tangible personal property is 1 of the following:
 - a. A computer used in operating industrial processing equipment.
 - b. Equipment used in a computer assisted manufacturing system.
 - c. Equipment used in a computer assisted design or engineering system integral to an industrial process.
 - d. A subunit or electrical assembly comprising a component in a computer integrated industrial processing system."

Remanufacturing

Remanufacturing qualifies for industrial processing and is defined in the statute as follows: " 'Remanufacturing' means the activity of overhauling, retrofitting, fabricating, or repairing a product or its component parts for ultimate sale at retail". There are two very important distinctions to be made for remanufacturing to qualify for the industrial processing exemption. First, the remanufacturer must own the tangible personal property being remanufactured, and second, the tangible personal must be intended for ultimate sale at retail. (MCL 205.54t(7)(d))

A servicer who is working on the property of others is not an industrial processor as a remanufacturer. However, they may qualify for the exemption if they are performing an industrial processing activity.

Industrial Processing Property Does Not Include

The following is a list and discussion of tangible personal property which would not qualify for the industrial processing exemption. It is important to note, the consumption or the use of tangible personal property, rather than the kind or character of the property, determines whether the industrial processing exemption exists.

- a. Tangible personal property, permanently affixed and becoming a structural part of real estate, does not qualify for the industrial processing exemption. The industrial processing exemption only applies to the purchase of tangible personal property used or consumed in industrial processing. It often times becomes very difficult to identify whether a purchase is indeed a purchase of tangible personal property as opposed to realty. The exemption would not apply if the purchase were a purchase of realty. "Tangible personal property permanently affixed and becoming a structural part of real estate including building utility systems such as

heating, air conditioning, ventilating, plumbing, lighting, and electrical distribution, to the point of the last transformer, switch, valve, or other device at which point usable power, water, gas, steam, or air is diverted from distribution circuits for use in industrial processing.” (MCL 205.54t(5)(a))

- b. The industrial processing exemption does not apply to the purchase of general office equipment. The exemption does not apply, unless the office equipment is used for an industrial processing purpose. As a general rule, all office equipment would be taxable unless the office equipment is of a nature that is unique to the industrial processing activity. The industrial processing exemption does not apply to the purchase of data processing equipment used for nonindustrial processing purposes. Example: computer equipment used to for inventory control and purchasing of raw materials. However, data processing equipment, including software, purchased for use in industrial processing may be exempt. If the data processing equipment is used in both industrial processing activities as well as non-industrial processing activities, the exemption applies only if a reasonable apportionment formula is devised. (MCL 205.54t(5)(b))
- c. The industrial processing exemption does not apply to the purchase of office furniture and office supplies. These purchases of office supplies will almost always be taxable even if used for an industrial processing purpose. However, the industrial processing exemption would apply to certain types of office furniture if the furniture were very unique in use and that unique use aids in the industrial processing function. Example: a drafting table which is specifically designed to allow an individual to design machinery. (MCL 205.54t(5)(c))
- d. Industrial processing does not include items removed from manufacturing or finished goods for use or consumption by the industrial processor. These items would include “An industrial processor’s own product or finished good that it uses or consumes for purposes other than industrial processing.” The tax base for such items removed for use is the material cost. (MCL 205.54t(5)(d))
- e. Industrial processing does not include the purchase of “Tangible personal property used for receiving and storage of materials, supplies, parts, or components purchased by the user or consumer.” All tangible personal property used or consumed in receiving and raw material storage is taxable. Taxable items include material handling equipment, storage racks, and other supplies. (MCL 205.54t(5)(e))
- f. “Tangible personal property used for receiving and storage of natural resources extracted by the user or consumer” does not qualify for industrial processing. (MCL 205.54t(5)(f))
- g. The industrial processing exemption does not apply to vehicles licensed and title for use on public highways. These include “Vehicles, including special bodies or attachments, required to display a vehicle permit or license plate to operate on public highways.”. An exception includes “a vehicle bearing a manufacturer’s plate or a specially designed vehicle, together with parts, used to mix and agitate materials at a plant or job site in the concrete manufacturing process”. (MCL 205.54t(5)(g))

- h. Industrial processing does not include the preparation of food and beverages by a retailer for retail sale through its own locations. This provision is very often misunderstood. There is no question, the preparation of food and beverage by a retailer for retail sale does involve the transformation, alteration or modification of tangible personal property. However, by specific statutory exception, the industrial processing exemption does not apply to the preparation of food or beverages by a retailer for retail sale. Industrial processing does apply to all food processors and beverage processors as long as they do not prepare the food for immediate consumption. (MCL 205.54t(5)(h))
- i. Industrial processing does not include "Tangible personal property used or consumed for the preservation or maintenance of a finished good once it first comes to rest in finished goods storage." This activity is commonly referred to as finished goods storage. The exemption is not extended to finished goods storage. Therefore, all tangible personal property used or consumed in the storage of finished goods would be taxable. (MCL 205.54t(5)(i))
- j. Returnable shipping containers or materials do not qualify for the industrial processing exemption. There are two notable exceptions. First, to the extent that returnable shipping containers are not returned they would qualify for the exemption. Second, returnable shipping containers and materials would be exempt to the extent they are used "within a plant site or between plant sites operated by the same person for movement of tangible personal property in the process of production". (MCL 205.54t(5)(j))
- k. Industrial processing does not include "Tangible personal property used in the production of computer software originally designed for the exclusive use and special needs of the purchaser." Custom developed software is not subject to sales tax, therefore, it stands to reason that the equipment used to development would be taxable. (MCL 205.54t(5)(k))

Industrial Processing Activity Does Not Include

- a. Industrial processing does not include the "Purchasing, receiving, or storage of raw materials." Therefore, all tangible personal property used in the purchase of, receiving, and storage of raw materials would be taxable. (MCL 205.54t(6)(a))
- b. Industrial processing does not include "Sales, distribution, warehousing, shipping, or advertising activities." Therefore, all tangible personal property used or consumed in the performance of these activities would be taxable. (MCL 205.54t(5)(b))
- c. Industrial processing does not extend to tangible personal property used or consumed in providing "Administrative, accounting, or personnel services." (MCL 205.54t(5)(c))
- d. The "Design, engineering, construction, or maintenance of real property and non processing equipment." does not qualify for industrial processing. It is very important, and often difficult, to make a distinction between realty and tangible personal property. The industrial processing exemption applies to only the purchase of tangible personal property. (MCL 205.54t(5)(d))

- e. Property acquired for use in “Plant security, fire prevention, or medical or hospital services” do not qualify for the industrial processing exemption. (MCL 205.54t(5)(e))

Industrial Processing Property Includes

- a. Industrial processing includes tangible personal “Property that becomes an ingredient or component part of a finished product to be sold ultimately at retail. This exemption is a basic exemption which most states allow. It is very important that purchases of property that are exempt for this purpose are specifically identified and a compliance system be established which allows these purchases to be made tax-free. (MCL 205.54t(4)(a))
- b. The industrial processing exemption includes all industrial processing “Machinery, equipment, tools, dies, patterns, foundations for machinery and equipment, or other processing equipment used in an industrial processing activity and in their repair and maintenance.” (MCL 205.54t(4)(b))

Many states limit the exemption to only that material which becomes part of the product. However, Michigan also exempts the machinery and equipment used in processing. The exemption also is extended to include all tangible personal property used or consumed in the maintenance and repair of industrial processing machinery and equipment. This is a very broad exemption which is liberally interpreted in the state of Michigan and an exemption which may not be allowable in other states.

In use tax compliance systems, it is very important to identify specifically which items of machinery and equipment would qualify as tangible personal property and therefore be allowed to claim the exemption for industrial processing. If the purchase constitutes realty, it would not be exempt under industrial processing. The line is often very fuzzy and gray and a lot of study and analysis needs to be done to specifically identify those items of tangible personal property which are exempt under industrial processing.

The exemption for machinery and equipment is not limited to only that property which produces a product. It also includes “other processing equipment used in an industrial processing activity”. For example, equipment used in research and development or quality control would qualify for the exemption.

In *Miller Plating Company v Department of Treasury*, the court ruled that air make-up units placed on the roof of a building and used to replace fume-laden air in the plating process are exempt as use in industrial processing. This case is very notable, as a general rule of thumb, an air make-up unit placed on the roof of building may be construed to be realty. However, the courts have very liberally interpreted the industrial processing statute to include as tangible personal property those items which would otherwise be considered realty, if the items are used as an integral part in industrial processing.

Another instance of the industrial processing exemption being expanded to include a item which would otherwise be considered to be realty, would include the cement base that large pieces of machinery or equipment may be placed

upon. The cement pads or bases ordinarily would be considered realty. However, if it was used as an integral part of industrial processing and a necessary part of the machinery and equipment, it would enjoy the industrial processing exemption in the same way as the machinery and equipment would.

- c. Industrial processing includes "Property that is consumed or destroyed or that loses its identity in an industrial processing activity." The manufacturing process is exempt for industrial processing and all property consumed but not becoming a part of the product is also exempt. These would include items of tangible personal property that do not become part of the finished product, or at least cannot be specifically identified as part of the finished product, but nonetheless are used or consumed in the process. These items can be purchased tax-exempt. (MCL 205.54t(4)(c))
- d. "Tangible personal property ... that becomes a part of, or is used and consumed in installation and maintenance of, systems used for an industrial processing activity" is exempt. This language in the statute significantly expands the exemption beyond the machinery and equipment. It also includes property that is part of a processing system. Such systems may involve material handling systems or product unitizing systems. (MCL 205.54t(4)(d))

Exempt processing systems are not just limited to processing but can also include any industrial processing activity. For example, material used or consumed in a quality control system would be exempt from tax.

- e. The industrial processing exemption includes "Fuel or energy used or consumed for an industrial processing activity." This exemption would include the electric power used to power industrial processing machinery and equipment. It would also include natural gas used in industrial processing and other fuels used to heat the industrial processing area as well as other fuels actually used in the industrial processing. The exemption for fuel or energy applies to any and all industrial processing activities. (MCL 205.54t(4)(e))

A difficulty arises in claiming this exemption because often times the electrical energy, natural gas or other type of fuel energy is used in a taxable manner as well as in an exempt manner. Therefore, it is very important that some type of quantitative and objective study be conducted to specifically identify that portion of the purchase of fuel energy that is actually used in industrial processing. Normally, these studies can be done by engineers that are on the staff of the industrial processor or outside consulting engineers who will perform such studies. Once a determination has been made as to what portion of the fuel energy used or consumed would qualify for industrial processing exemption, the industrial processor can make a claim for exemption to the supplier of such fuel energy.

- f. "Machinery, equipment, or materials used within a plant site or between plant sites operated by the same person for movement of tangible personal property in the process of production" would also be exempt. This significant expansion of the exemption would include all material handling equipment as well as cartons or containers. (MCL 205.54t(4)(f))

- g. Office equipment, including data processing equipment, used for an industrial processing activity. (MCL 205.54t(4)(g))

Industrial Processing Includes The Following Activities

- a. The industrial processing exemption includes all tangible personal property used or consumes in "Production or assembly" activities. It is very important for the industrial processor to specify, usually by account numbers, the purchases of tangible personal property that are used or consumed in the production or assembly of tangible personal property for ultimate sale at retail. (MCL 205.54t(3)(a))

- b. Industrial processing included "Research or experimental activities". Both Public Act 116 and 117 include the following definition: (MCL 205.54t(4)(b))

"Research and experimental activity" means activity incident to the development, discovery, or modification of a product or a product related process. Research or experimental activity also includes activity necessary for a product to satisfy a government standard or to receive government approval. Research or experimental activity does not include the following:

Ordinary testing or inspection of materials or products for quality control purposes.

Efficiency surveys.

Management surveys.

Market or consumer surveys.

Advertising or promotions.

Research in connection with literacy, historical, or similar projects.

- c. The industrial processing exemption includes all "Engineering related to industrial processing". All tangible personal property used or consumed in the engineering activity would be exempt. Engineering could include product related activities, processing equipment, or elements of quality control. Any engineering activity related to the realty would be taxable. (MCL 205.54t(4)(c))

- d. Industrial processing includes all quality control activities including inspection and testing. Specifically, the statute provides an exemption for "Inspection, quality control, or testing to determine whether particular units of materials or products or processes conform to specified parameters at any time before materials or products first come to rest in finished goods inventory storage." The exemption applies only during the processing activity. Once the product is completed and placed in finished goods storage, the exemption is not available. (MCL 205.54t(4)(d))

- e. The industrial processing exemption includes all tangible personal property used in the activity of "Planning, scheduling, supervision, or control of production or other exempt machinery, equipment, and tooling." This exemption is quite broad but often missed because of the inability of the compliance system to track purchases for these activities. (MCL 205.54t(4)(e))

- f. The industrial processing exemption includes tangible personal property used or consumed in the activity of "Design, construction or maintenance of production or other exempt machinery, equipment and tooling." The exemption is not limited to only the production equipment. It broadly includes all activities that are exempt. (MCL 205.54t(4)(f))
- g. Public Act 116 and 117 added "Remanufacturing" to the list of exempt activities. The statute specific: (MCL 205.54t(4)(g))
 " 'Remanufacturing' means the activity of overhauling, retrofitting, fabricating, or repairing a product or its component parts for ultimate sale at retail."
- h. The industrial processing exemption includes all tangible personal property used or consumed by the industrial processor for the "Processing of production scrap and waste up to the point it is stored for removal from the plant of origin." Prior to March 31, 1999, this exemption is available only to an industrial processor. After March 30, 1999 if an outside contractor were to perform the same services, the outside contractor would be able to purchase the tangible personal property used or consumed in providing this service in an exempt manner. (MCL 205.54t(4)(h))
- i. Industrial processing includes the "Recycling of used materials for ultimate sale at retail or reuse." (MCL 205.54t(4)(i))
- j. All tangible personal property used or consumed in "Production material handling" is exempt. The exemption is limited to production. However, production begins when material is first removed from raw material storage and continues until the final product comes to rest in finished goods storage. Production includes the transfers between processes within a plant site or between plant sites of the same person. Production includes all industrial-processing activities including quality control and packaging if done before the goods come to rest in finished goods storage. (MCL 205.54t(4)(j))
- k. Industrial processing includes property used or consumed in the "Storage of in-process materials." Raw material storage and finished goods storage are taxable activities, however, everything in between is exempt. (MCL 205.54t(4)(k))

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