

## PRIVATE TAXPAYER RULING LR01-001

January 5, 2001

The following private taxpayer ruling is provided in response to your letter dated March 22, 2000, concerning whether the Arizona transaction privilege and use tax applies to the purchase, by ..., of certain chemicals used in the ... water treatment process.

The following is a restatement of the facts as presented in your request for a private taxpayer ruling on behalf of ....

Statement of Facts:

The ... filed two requests for refunds of use tax paid in error to the State of Arizona. These refund requests were based on the fact that chemicals purchased for use in the wastewater treatment plants operated by ... were exempt pursuant to Arizona Revised Statutes (A.R.S.) § 42-5159(A)(35). The Arizona Department of Revenue (Department) issued refunds to ... as a result of these refund requests.

In addition to the chemicals represented by the aforementioned refund requests ... purchases other chemicals that are used in the wastewater treatment process at various wastewater treatment locations. These chemicals and their specific uses include the following:

**SULFUR DIOXIDE**

Used to remove toxic chlorine compounds from reclaimed water before it is reused. This is an EPA requirement.

**DECHLORINATION CHEMICAL**

(EITHER SODIUM BISULFATE OR SODIUM THIOSULFATE)

Used to remove toxic chlorine compounds from reclaimed water before it is reused. This is an EPA requirement.

**BIOXIDE/BIOXIDE AQ**

Odor control – sewers.

BIOCOPE

Odor control – sewers.

POLYMER

Wastewater solids treatment used to "bridge" between the spaces of sludge to form larger "flocs" of wasted activated sludge. This is a necessary part of the process that thickens sludge. It remains with the sludge throughout all remaining processes and is ultimately used in agricultural fields.

PERCOL 7936 POLYMER

Wastewater solids treatment.

CHLORINE, BULK TRAILER

Treatment of potable water and effluent waste to maintain compliance with permit requirements of the State Department of Water Quality.

CHLORINE, BULK RAILCAR

Treatment of effluent waste to maintain compliance with permit requirements of the State Department of Water Quality.

LIQUID CHLORINE

Treatment of potable water to maintain compliance with permit requirements of the State Department of Water Quality.

HACH CO. VARIOUS WATER TESTING PRODUCTS AND CHEMICALS

These chemicals are used for testing and verifying quality control of drinking water.

SODIUM BICARBONATE – 50# BAG

Used to control PH in water.

## LIQUID CHLORINE – 150# CYLINDER

Water purification.

WATER TREATMENT CHEMICALS: QUICKLIME, ACTIVATED CARBON, COPPER SULFATE, MURIATIC ACID, FERRIC CHLORIDE, SODIUM HYDROXIDE

Water treatment of potable water; water purification; water PH.

## FERRIC CHLORIDE (BULK)

Chemical analysis of water; used by wastewater treatment plants to alter the physical state of dissolved and suspended solids and to ease the removal of solids in the sedimentation tanks. The ferric chloride remains with the solids which settle to the bottom of the sedimentation tanks (referred to as primary sludge) which, after other treatment, is sold to be used on agricultural land.

## SULFURIC ACID

Used in odor scrubbing equipment, lowers PH; also used for cleaning lines in equipment.

The ... activity consists of the operation of wastewater treatment plants that use these chemicals in the production of sludge resold for agricultural purposes and reclaimed water that is resold for use in electric power plants and also for agricultural purposes.

The sludge from the ... and the ... plants are used in agricultural fields. The reclaimed water from the ... plant is sold to the ... and the .... At the ... plant, there is a three-way exchange between ..., ... and ... (which uses the water for agricultural purposes).

### Your Position:

It is the position of ... that wastewater treatment plants are involved in manufacturing and/or processing. ... is taking raw materials and making these raw materials into products suitable for use. This position is supported by the fact that ... effluent, except for a small percentage, is all for resale. The description of the chemicals above establishes that the chemicals are used or consumed as part of an integrated system of chemicals involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a

chemical or physical change to occur in the materials as part of the production process. The chemicals used in the wastewater treatment process, as specified above, are exempt from the state's transaction privilege and use tax.

### Applicable Statutory Provisions and Legal References:

Arizona Revised Statutes (A.R.S.) § 42-5061 imposes the transaction privilege tax on the business of selling tangible personal property at retail.

A.R.S. § 42-5061(A)(40) exempts from the retail classification the sales of liquid, solid or gaseous chemicals used in processing if using or consuming the chemicals, alone or as part of an integrated system of chemicals, involves direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

A.R.S. § 42-5155(A) imposes a use tax on the storage, use or consumption in this state of tangible personal property purchased from a retailer.

A.R.S. § 42-5159(A)(35) exempts from the use tax the sales of liquid, solid or gaseous chemicals used in processing if using or consuming the chemicals, alone or as part of an integrated system of chemicals, involves direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

Arizona Administrative Code (A.A.C.) R15-5-120 defines "manufacturing".

Unless the Legislature clearly expresses an intent to give a term a special meaning, words used in statutes are to be given their plain and ordinary meaning. See State v. Korzep, 165 Ariz. 490, 493, 799 P.2d 831, 834 (1990).

In determining the ordinary meaning of a word, courts may refer to an established and widely used dictionary. State v. Mahaney, 975 P.2d 156, 158, ¶12 (Ariz. Ct. App. 1999) (citing State v. Wise, 137 Ariz. 468, 470 n.3, 671 P.2d 909, 911 n.3 (1983)).

Moore v. Farmers Mut. Mfg. & Ginning Co., 51 Ariz. 378, 77 P.2d 209 (1938) defines processing.

### Discussion:

Arizona imposes a transaction privilege tax on the privilege of conducting business in the State of Arizona. This tax is levied on the seller, not the purchaser. The seller may pass the burden of the tax on to the purchaser. However, the vendor is the taxpayer and is ultimately liable to Arizona for the tax.

The transaction privilege tax is imposed on the business of selling tangible personal property at retail. The tax base for the retail classification is the gross proceeds of sales or gross income derived from the business. All retail sales are subject to tax unless specifically exempted by statute.

The use tax is a complementary tax to the transaction privilege tax. Arizona imposes use tax on purchases of tangible personal property from retailers, which is used, stored, or consumed in Arizona.

Laws 1994, chapter 41, Senate Bill 1120, in pertinent part, provided that beginning from and after June 30, 1995, sales of liquid, solid or gaseous chemicals used in processing are exempt from transaction privilege and use tax if using or consuming the chemicals, alone or as part of an integrated system of chemicals, involves direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process. The deduction does not include chemicals that are used or consumed in activities such as packaging, storage or transportation. [A.R.S. §§ 42-5061(A)(40), 42-5159(A)(35)]

Webster's New World Dictionary of the American Language 864 (David B. Guralnik ed., Second College ed., Simon and Schuster 1984) (hereinafter "Webster's") defines manufacturing as follows: "to make by hand or, esp., by machinery, often on a large scale and with division of labor ... to work (wood, steel, etc.) into usable form...." Processing means "to prepare by or subject to a special process or method..." "a particular method of doing something, generally involving a number of steps or operations." Webster's at 1133. "Product" is defined as, "something produced by nature or made by human industry or art." Webster's at 1134.

The department's administrative rule defines manufacturing as "an integrated series of operations which place tangible personal property in a form, composition, or character different from that in which it was acquired and transforms it into a different product with a distinctive name, character, or use." A.A.C. R15-5-120(A).

The Arizona Supreme Court, in *Moore v. Farmers Mut. Mfg. & Ginning Co.*, 51 Ariz. 378, 77 P.2d 209 (1938), provided the following definition of process:

[T]o subject (especially raw material) to a process of manufacturing,

development, preparation for market, etc.; to convert into a marketable form, as livestock by slaughtering, grain by milling, cotton by spinning, milk by pasteurizing, fruits and vegetables by sorting and repacking.

Wastewater treatment entails a number of steps and operations. As detailed in your request, ... transports wastewater to its treatment centers where first certain solids are removed by the use of *ferric chloride* which produces a "primary sludge". *Polymers* are added to thicken the sludge to ease removal of water from the solids. Dewatered sludge is air dried prior to application to agricultural fields. *Chlorine* is used to disinfect reclaimed water before its reuse. Chlorine compounds are formed which disinfect the water. The toxic chlorine compounds are transformed to nontoxic hydrogen sulfite, hydrogen ions, ammonium ions, sulfate ions and chlorine ions by either adding *sulfur dioxide* or *sodium bisulfate*.

According to the information provided by ..., state and federal regulations require the above wastewater treatment process. The above chemicals are similarly required by federal and state mandate to keep the wastewater treatment process operating.

In order to qualify for the exemption, the chemicals must be used in manufacturing, processing, fabricating, mining, refining, metallurgical operations, research and development and printing as those terms are commonly understood within their ordinary meaning. The terms manufacturing [and] processing refer to and include those operations commonly understood within their ordinary meaning."

In general, chemicals used directly in manufacturing or processing may be exempt from transaction privilege tax. However, it is the specific use of the chemical(s) in a given situation that will determine taxability or exemption in each case. The use of the chemical(s) must involve direct contact with the materials from which a product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

The chemicals purchased for wastewater treatment are used in processing to eliminate various compounds and pollutants from the waste and sludge. The wastewater treatment cycle is a process involving a number of operations, in a particular method, according to state and federal mandates, to treat and purify water. This process results in marketable sludge and marketable reclaimed water.

### Conclusion:

The following rulings are given based on the facts presented in your request.

## SULFUR DIOXIDE

Used to remove toxic chlorine compounds from reclaimed water before it is reused as an EPA requirement qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159 (A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

## DECHLORINATION CHEMICAL

(EITHER SODIUM BISULFATE OR SODIUM THIOSULFATE)

Used to remove toxic chlorine compounds from reclaimed water before it is reused as an EPA requirement qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159 (A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

## BIOXIDE/BIOXIDE AQ

If used for odor control of sewers and sewer treatment and are not in direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process, then the chemicals used in these instances do not qualify for the exemption. However, if these chemicals are injected directly into the wastewater to cause a chemical reaction to remove odor producing gases, then these chemicals qualify for the exemption under A.R.S. §§ 42-5061 (A)(40) and A.R.S. 42-5159(A)(35).

## BIOCOPE

If used for odor control of sewers and sewer areas and is not in direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process, then the chemical used in these instances does not qualify for the exemption. However, if the chemical is injected directly into the wastewater to cause a chemical reaction to remove odor producing gases then, the chemical qualifies for the exemption under A.R.S. §§ 42-5061(A) (40) and A.R.S. 42-5159(A)(35).

## POLYMER

Used as a wastewater solids treatment to "bridge" between the spaces of sludge to form larger "flocs" of wasted activated sludge qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### PERCOL 7936 POLYMER

Used as a wastewater solids treatment qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### CHLORINE, BULK TRAILER

Used as a treatment of potable water and effluent waste to maintain compliance with permit requirements of the State Department of Water Quality qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### CHLORINE, BULK RAILCAR

Used as a treatment of effluent waste to maintain compliance with permit requirements of the State Department of Water Quality qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### LIQUID CHLORINE

Used as a treatment of potable water to maintain compliance with permit requirements of the State Department of Water Quality qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### HACH CO. VARIOUS WATER TESTING PRODUCTS AND CHEMICALS

Chemicals used for testing and verifying quality control of drinking water are not in direct



contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process. Chemicals used in these instances do not qualify for the exemption.

#### SODIUM BICARBONATE – 50# BAG

Used to control PH in water qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### LIQUID CHLORINE – 150# CYLINDER

Used in water purification qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### WATER TREATMENT CHEMICALS: QUICKLIME, ACTIVATED CARBON, COPPER SULFATE, MURIATIC ACID, FERRIC CHLORIDE, SODIUM HYDROXIDE

Used in water treatment of potable water, water purification, and water PH qualify for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### FERRIC CHLORIDE (BULK)

Used by wastewater treatment plants to alter the physical state of dissolved and suspended solids and to ease the removal of solids in the sedimentation tanks which after other treatment is sold to be used on agricultural land qualifies for the exemption under A.R.S. §§ 42-5061(A)(40) and A.R.S. 42-5159(A)(35) as a chemical used in processing involving direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process.

#### SULFURIC ACID

The chemical used in odor scrubbing equipment for lowering the PH or used for cleaning lines in equipment is not in direct contact with the materials from which the product is produced for the purpose of causing or permitting a chemical or physical change to occur in the materials as part of the production process. The chemical used in these instances does not qualify for the

exemption.

The conclusions in this private taxpayer ruling do not extend beyond the facts as presented in the request for a private taxpayer ruling dated June 11, 1999.

This response is a private taxpayer ruling and the determinations herein are based solely on the facts provided in your request. The determinations in this taxpayer ruling are the present position of the department. The determinations are subject to change should the facts prove to be different on audit. If it is determined that undisclosed facts were substantial or material to the department's making of an accurate determination, this taxpayer ruling shall be null and void. Further, the determination is subject to future change depending on changes in statutes, administrative rules, case law or notification of a different department position.

Enclosures: A.R.S. § 42-5061

A.R.S. § 42-5159

A.A.C. R15-5-120

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