Cite as Det. No. 99-310, 19 WTD 377 (2000)

BEFORE THE APPEALS DIVISION
DEPARTMENT OF REVENUE
STATE OF WASHINGTON

In the Matter of the Petition For Interpretation of	)	D E T E R M I N A T I O N
	)	No. 99-310
. . .	)	Registration No. . . .
	)	Interpretation

[1] RULE 13601; RCW 82.08.02565: SALES TAX -- MANUFACTURING MACHINERY AND EQUIPMENT (M&E) EXEMPTION -- SEWAGE SLUDGE -- COMPOST --MANUFACTURING OPERATION. A municipality that produces compost, for sale, from sewage sludge at its wastewater treatment plant, has a manufacturing operation. For purposes of the manufacturing machinery and equipment (M&E) exemption, the manufacturing operation begins where the sludge is identified and handled as a raw material of the compost.

[2] RCW 82.08.02565: SALES TAX -- MANUFACTURING MACHINERY AND EQUIPMENT (M&E) EXEMPTION -- MAJORITY USE -- Potentially eligible machinery and equipment qualifies for the manufacturing machinery and equipment (M&E) exemption only if the majority of the use is in the manufacturing operation.

Headnotes are provided as a convenience for the reader and are not in any way a part of the decision or in any way to be used in construing or interpreting this Determination.

NATURE OF ACTION:

A municipality that is modifying its wastewater treatment plant and adding a composting unit to the plant so that it can turn sewage sludge into commercial compost, requests an interpretive ruling on whether new machinery and equipment it is purchasing for the treatment plant and the composting unit are exempt from the retail sales tax under the manufacturing machinery and equipment (M&E) exemption, RCW 82.08.02565.[1]

FACTS:

[1]Identifying details regarding the taxpayer and the assessment have been redacted pursuant to RCW 82.32.410.

Prusia, A.L.J. -- This appeal involves the application of the manufacturing machinery and equipment sales tax exemption (M&E exemption), RCW 82.08.02565.

The taxpayer is a municipal corporation. It has operated a wastewater treatment facility for many years. The wastewater treatment facility separates refuse and biosolids (sewage sludge) from the wastewater, and subjects the separated sludge and liquid to further processing for eventual disposal or use. Historically, the liquid has been discharged into the ocean, and the processed sludge used by the taxpayer as fertilizer on its own properties. The taxpayer charges its residents for the service of removing and treating their wastewater.

By the mid-1990's, the taxpayer's wastewater treatment process no longer met applicable federal and state environmental requirements for ultimate effluent disposal in the ocean and the ability to beneficially use biosolids.[2] The taxpayer had to upgrade its facilities to further cleanse the liquid content before disposal into the ocean, and to further treat the sludge. In deciding what upgrades to undertake, the taxpayer elected an alternative that would allow it to process the sewage sludge into commercial-grade compost at the site. That alternative required that the sludge be processed differently, so that it would meet federal standards for use in commercial-grade compost, and that facilities be added to combine the sludge with other materials to produce commercial compost.

On December 15, 1997, the taxpayer wrote the Department of Revenue (Department), requesting a ruling that all machinery and equipment installed in the upgrade of the taxpayer's wastewater treatment facility, and all labor in respect to that installation, would be exempt from the retail sales tax under RCW 82.08.02565. The request included a description of the components of the upgrade project, provided by the project engineer. The upgrades included new machinery and equipment needed to replace existing machinery and equipment in the wastewater treatment plant, as well as machinery and equipment that would be purchased and installed in the new composting unit.

On January 23, 1998, the Department's Taxpayer Information and Education (TI&E) Section responded to the taxpayer's request for an interpretive ruling. After summarizing the requirements for the M&E exemption, it concluded that the composting facility produces a product for sale using the de-watered sludge left over from the treatment process, and the de-watered sludge is the raw material used in the composting facility. It ruled that machinery and

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[2] Federal requirements are set out in the Clean Water Act, as amended, 33 U.S.C. 1345, and 40 CFR §503. Washington Department of Ecology requirements are set out in chapters 173-221 and 173-208 WAC.

The Department of Ecology defines "sewage sludge" as follows, at WAC 173-308-080: "**'Sewage sludge'** is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge."

The Department of Ecology uses the term "biosolids" to refer to (and distinguish) municipal sewage sludge that has been treated to meet standards so that it is suitable for application to land. Federal rules do not use the term "biosolids," and rely instead on the term "sewage sludge."

equipment, as well as installation charges, used in the composting facility qualify for the M&E exemption, but the other items listed were part of a wastewater treatment facility, not part of a manufacturing facility, and therefore were ineligible.

On February 24, 1998, the taxpayer filed a petition for review of the TI&E ruling. The petition requests that the Department reverse the ruling and grant the taxpayer the M&E exemption as to the new machinery and equipment purchased and installed in the wastewater treatment plant.

In support of its petition, the taxpayer submitted a letter from the project engineer, describing the replacement machinery and equipment installed in the old plant in greater detail. In its teleconference, the taxpayer added even more details with respect to the operation of the facility and the nature of the machinery and equipment for which the exemption is sought.

The following is a description of the taxpayer's facilities and the upgrades:

> Headworks The purpose of the headworks is to remove non-biodegradable material from the influent, so that the liquid and biodegradable material can more easily be processed. The taxpayer added a fine screen and grit removal facility in the upgrade.
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> Oxidation Ditches The oxidation ditches provide the location where the biological stabilization of the organic material in the wastewater takes place. The upgrade of the oxidation ditches consisted of replacing the existing aerators which were beyond their useful life.
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> Secondary Clarifiers The clarifiers are where the biosolids are separated from the liquid component so that each can be separately processed. The clarifiers provide a basin where the stabilized material (sludge) can settle out and be collected for further processing. The new clarifiers were required to meet DOE's criteria and to enhance removal of the sludge.
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> Some of the sludge that settles out in the clarifiers is pumped back into the oxidation ditches as food, and waste sludge is pumped from the clarifiers into the aerobic digesters where it begins its separate processing. A new sludge pumping facility was added in the upgrade.
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> Facilities for Further Processing the Clear Liquid From the clarifiers, the clear liquid moves through a system of weirs, then through screens, then through an ultraviolet process, before being discharged into the ocean as clean water. The taxpayer does not seek the M&E exemption for these facilities.
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> Aerobic Digesters From the clarifiers, the settled-out sludge, which is still in a liquid state, is pumped into the aerobic digesters. Aerobic digestion is a sludge stabilization process in which biological reactions destroy degradable organic components of the

waste sludge. It often is considered an extension of the wastewater treatment process. The basic objective is to stabilize the sludge, reduce the sludge mass and volume, and reduce pathogens and vector attraction as required by federal standards. The taxpayer had to add new digester and decanting facilities to provide the needed detention time for the sludge to meet the federal standards for application to lawns or home gardens.

Dewatering facilities The function of the dewatering facilities is to remove water from the digested sludge to reduce the volume of material to be handled. The composting process requires the sewage sludge to be at a minimum solids concentration of 13% for proper operation. To achieve this concentration, the taxpayer added a belt filter press and associated appurtenances to its existing facilities. From the dewatering facilities, the removed water is routed back to the clarifiers, and the dewatered sludge proceeds to the composting facilities.

Composting facilities These facilities consist of a mixer, composting containers, trommel screen, and associated appurtenances. They produce a bio-solids product that can be utilized by the public on lawns and in gardens. Various amendments, such as wood chips, sawdust, or yard wastes, are added to the dewatered sludge, and the mixture is placed in containers where it is kept for approximately 30 days at the proper temperature. After this period of time the material is removed and screened. The final product is a material that will meet federal and state regulations for beneficial re-use.

The letter from the project engineer expresses the opinion that the digester, dewatering, and composting facilities all would meet the criteria of the M&E exemption, because all are necessary in the preparation of the sludge for final use. The taxpayer contends that, arguably, everything it installed in the upgrade is necessary for manufacturing the compost.

ISSUE:

Are the taxpayer's purchases of new machinery and equipment for its wastewater treatment facility exempt from the retail sales tax under the M&E exemption?

DISCUSSION:

The exemption at issue, RCW 82.08.02565, became effective July 1, 1995. It states, in part:

> (1) The . . . [retail sales tax] . . . shall not apply to sales to a manufacturer or processor for hire of machinery and equipment used directly in a manufacturing operation . . . or to sales of or charges made for labor and services rendered in respect to installing, repairing, cleaning, altering, or improving the machinery and equipment . . . .

This exemption, like all tax exemptions in Washington, is strictly construed in favor of application of the tax and against the person claiming the exemption. Yakima Fruit Growers Ass'n v.

Henneford, 187 Wash. 252, 258, 60 P.2d 62 (1936); All-State Constr. Co. v. Gordon, 70 Wn.2d 657, 425 P.2d 16 (1967). However, the policy of strict construction of exemption provisions does not mean they will be read so narrowly that the legislative purpose and intent in enacting the provisions are undermined. Cherry v. Metro Seattle, 116 Wn.2d 794, 808 P.2d 746 (1991).

In May 1999, the 56th Legislature passed and the governor signed Engrossed Substitute House Bill 1887. The act revised the M&E exemption by more precisely describing terminology and eligibility (the above language was not changed).[3] On May 28, 1999 the Department filed three emergency rules to implement the legislative changes.[4] All three rules assist in clarifying what activities qualify for the tax credits.[5] Other than new sections concerning sales to persons engaged in testing, the 1999 legislation and rules adopted pursuant to it are a clarification of the existing law, and can be applied retroactively.

There are several required elements for the M&E exemption: (1) a sale; (2) to a manufacturer or processor for hire; (3) of machinery and equipment; (4) used directly; (5) in a manufacturing operation.

The first, second and third elements are met. There is a sale, of machinery and equipment. The taxpayer is a manufacturer.[6] It produces compost for sale.[7]

At issue is what machinery and equipment is "used directly" in a "manufacturing operation." Subsection (2)(d) of RCW 82.08.02565 defines "manufacturing operation, " for purposes of the exemption, as follows:

> "Manufacturing operation" means the manufacturing of articles, substances, or commodities for sale as tangible personal property. A manufacturing operation begins at the

[3] The legislation amended RCW 82.04.120, 82.08.02565, and 82.12.02565.

[4] The rules became effective immediately on filling. The Department's Legislation & Policy division has started the rulemaking process to allow for permanent adoption of all three rules.

[5] The emergency rules are WAC 458-20-135 (revised); WAC 458-20-136 (revised); and, WAC 458-20-13601(new).

[6] A manufacturer is one who applies labor or skill to materials to produce a new, different or useful substance or article of tangible personal property for sale or commercial or industrial use. See RCW 82.04.110; WAC 458-20-136 (Rule 136). The term "to manufacture" historically has received an extremely broad interpretation. See Bornstein Seafoods v. State of Washington, 60 Wn.2d 169, 173, 373 P.2d 483 (1962) (filleting, packaging, and freezing fish); Continental Coffee Co. v. State, 66 Wn.2d 194, 384 P.2d 862 (1963) (changing green coffee beans to a roasted and blended coffee); McDonnell & McDonnell v. State, 62 Wn.2d 553, 383 P.2d 905 (1963) (splitting peas); Stokely-Van Camp, Inc. v. State, 50 Wn.2d 492, 312 P.2d 816 (1957) (freezing food); J & J Dunbar & Co. v. State, 40 Wn. 2d 763, 245 P.2d 1164 (1952) (screening and filtering raw whiskey).

[7] Although the treatment plant produced various substances before the taxpayer became a producer and seller of compost, the taxpayer was not an eligible "manufacturer" under the M&E statute, because it produced nothing for sale. Now that the taxpayer sells material it produces, it is an eligible "manufacturer." We also not that the fact the taxpayer's principal purpose and activity at the site is providing the municipal service of ridding the community of sewage waste does not disqualify the operation from the M&E exemption. The taxpayer has elected to provide the municipal service in part by engaging in manufacturing.

> point where the raw materials enter the manufacturing site and ends at the point where the processed material leaves the manufacturing site.

Subsection (2)(c) provides that machinery and equipment is "used directly" in a manufacturing operation if it:

> (i) Acts upon or interacts with an item of tangible personal property;
> (ii) Conveys, transports, handles, or temporarily stores an item of tangible personal property at the manufacturing site;
> (iii) Controls, guides, measures, verifies, aligns, regulates, or tests tangible personal property at the site or away from the site;
> (iv) Provides physical support for or access to tangible personal property;
> (v) Produces power for, or lubricates machinery and equipment;
> (vi) Produces another item of tangible personal property for use in the manufacturing operation or research and development operation;
> (vii) Places tangible personal property in the container, package, or wrapping in which the tangible personal property is normally sold or transported; or
> (viii) Is integral to research and development as defined in RCW 82.63.010.

What are the confines of the taxpayer's manufacturing operation, looking at raw materials and processed materials? There are three possibilities for where the manufacturing operation begins. The first is that the raw wastewater is the raw material in the manufacture of the compost, and the entire wastewater treatment plant is now part of the manufacturing operation. That is, the taxpayer's operation consists of turning raw wastewater into compost. The second possibility is that the separated-out sewage sludge is the raw material in the manufacture of the compost, and the manufacturing operation begins at the digesters. The third possibility is that the de-watered sludge is the raw material in the manufacture of compost, and the manufacturing operation begins after the de-watering process, i.e. where the new compost unit begins.

We believe the second possibility is most compatible with the nature of the taxpayer's operation. The principal raw material of the commercial-grade compost the taxpayer manufactures is sewage sludge. The taxpayer first begins to handle sewage sludge as a raw material at its digesters. At that point, the sludge has been separated from the clear liquid, and begins to be processed separately. We find that the manufacturing operation begins where the sludge is pumped into the digesters.[8]

[8] The fact that digesters and de-watering facilities were previously used in a non-manufacturing operation does not mean that any operation in which such equipment is used is necessarily non-manufacturing. Whether the operation in which the machinery is used is a manufacturing operation depends solely upon whether the operation manufactures something for sale. For example, a wastewater treatment plant that purifies water is not a manufacturing operation if there is no market for the purified water, but the same plant would be a manufacturing operation if it had a buyer for the water. See White River Environmental Partnership v. Dept. of State Revenue, 694 N.E.2d 1248 (Indiana Tax Court 1998), where an Indiana court made the same distinction in interpreting a sales tax exemption. The taxpayer elected to no longer produce products only for disposal. It elected to be a manufacturer with respect to the sludge portion of the waste stream. The issue before us is whether the digesters and de-watering facilities are part of its manufacturing operation. We find that they are.

A difficulty with the first possibility is that the raw wastewater is not treated or viewed as a raw material, but as waste. The purpose of the first three stages in the wastewater treatment process is the separation of the various components of the waste stream, so that each can be appropriately handled. It is only after the sludge is separated out that it is identified and handled as a raw material. The difficulty with the third possibility is that the taxpayer went into manufacturing not to make compost from whatever source, but to process its own sludge into compost. It is a manufacturer of sewage sludge into compost. Drawing the line at the door of the compost unit does not comport with the nature of the taxpayer's operation.

[2] Machinery and equipment used in the three stages prior to the digesters would not qualify for the exemption at any rate, because they would not meet a majority use requirement. The Department considers potentially eligible machinery and equipment to qualify for the exemption only if the majority of the use, as measured by percentage of time, percentage of revenue, volume or products derived, or other reasonable measure, is in the manufacturing operation.[9] Machinery

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We note that the fact the taxpayer required different digesters in order to manufacture commercial-grade compost is not necessarily determinative of whether the digesters are now part of a manufacturing operation. If the taxpayer could have produced commercial-grade compost using the existing digesters and de-watering equipment, those components would have been part of the manufacturing operation. The fact the taxpayer had to install different digesters, however, underscores that the digesters are part of the compost manufacturing operation.

[9] In its 1999 revision of RCW 82.08.02565, the Legislature, as well as the Governor, considered whether a "majority use" test must be met for machinery and equipment to qualify for the exemption. After the legislation was introduced as House Bill 1887, the Department advised the House Finance Committee it applied a majority use test to determine whether dual use machinery and equipment qualified for the exemption. See Audit Practice Document submitted as part of Director Fred Kiga's testimony before the House Finance Committee on March 4, 1999. Aware the Department applied a majority use test, under the existing language in RCW 82.08.02565, the House did not alter the relevant language.

Following passage by the House of Representatives, the sponsors in the Senate discussed the majority use test. See Floor Colloquy between Senators Loveland and Snyder, ESHB 1887, read at 3:01 PM April 16, 1999. One senator inquired regarding the absence in the bill of the dual use standard regarding qualifying and nonqualifying use. Another senator explained:

> It is not necessary. The current administrative practice of DOR is "majority use," which means over 50 percent based on time, value, volume, or other measurement for comparison, is reasonable. It is within the administrative authority of the department to use this standard, both for the past and in the future. It is therefore appropriate for the department to put this standard in rule.

Again, the bill passed without changes to the applicable language. Finally, the Governor expressed his understanding in his veto message:

> ESHB 1887 clarifies the scope of a tax exemption and is very important. Taxpayers who are eligible for the exemption, as well as our state and local governments, need the certainty that this bill will provide. I have assumed, as did the legislature (as indicated by our respective balance sheets), that there is no fiscal impact associated with sections 1 through 4 of the bill. That is based on the continuing application of the "majority use" standard for machinery and equipment that has both qualifying and nonqualifying uses. The majority use

upstream from the digesters processes an enormous volume of liquid for disposal, and the taxpayer derives most of its revenue from that municipal service. The use of the upstream equipment would not meet the majority use test.

The final requirement to consider is the "used directly" requirement. Clearly, the digesters and de-watering facilities are "used directly" in the manufacturing process. The machinery and equipment in those facilities acts upon or handles the separated-out sludge that is the raw material of the compost.

In sum, we find that the digesters and de-watering machinery and equipment, as well as the machinery and equipment used in the composting facility, are used directly in a manufacturing operation, and their purchase qualifies for the M&E exemption. Purchases of machinery and equipment upstream from the digesters do not qualify.

DECISION AND DISPOSITION:

The taxpayer's petition is granted in part. Purchases of machinery and equipment used in the digestion, de-watering, and composting facilities at the taxpayer's wastewater treatment plant qualify for the M&E exemption. As provided in the exemption, charges for labor and services rendered in installing the machinery and equipment also are exempt from the retail sales tax. Purchases of machinery and equipment upstream from the digesters do not qualify for the M&E exemption. The TI&E ruling is revised accordingly.

Dated this 29th day of November, 1999.

standard affords meaningful use of the exemption to taxpayers, is fair, and is a reasonable way to administer the exemption consistent with the law, legislative intent, and promotion of economic development in our state. I strongly support the Department of Revenue's continued use of this standard.