

COMMONWEALTH OF MASSACHUSETTS

APPELLATE TAX BOARD

BOARD OF ASSESSORS OF THE  
CITY OF BOSTON

v.

COMMISSIONER OF REVENUE

and

VEOLIA ENERGY BOSTON, INC.<sup>1</sup>

Docket No. C331142

Promulgated:  
May 30, 2019

This is an appeal heard under the formal procedure pursuant to G.L. c. 58A, § 6 and G.L. c. 58, § 2, brought by the Board of Assessors of the City of Boston ("city" or "assessors") to challenge the Commissioner of Revenue's ("appellee" or "Commissioner") classification of Veolia Energy Boston, Inc. ("intervenor" or "Veolia") as a manufacturing corporation as of January 1, 2016 ("tax year at issue").

Chairman Hammond heard this appeal. Commissioners Scharaffa, Rose, Good, and Elliott joined him in the decision for the appellee.

These findings of fact and report are made pursuant to a request by the appellee under G.L. c. 58A, § 13 and 831 CMR 1.32.

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<sup>1</sup> The appellee and intervenor, respectively, as defined below in the findings of fact and report.

Anthony M. Ambriano, Esq. for the assessors.

Celine E. de la Foscade-Condon, Esq. and Brett M. Goldberg, Esq. for the appellee.

Kathleen Saunders Gregor, Esq., Elizabeth J. Smith, Esq., and Cassandra A. LaRussa, Esq. for the intervenor.

## FINDINGS OF FACT AND REPORT

This appeal concerns the city's claim that it is aggrieved by the Commissioner's classification of Veolia as a manufacturing corporation for the tax year at issue. The city presented the testimony of Steven Weafer, vice president and controller of Veolia, and Donald W. Silvia, director of systems operations of Veolia North America. The intervenor presented the testimony and expert report of David J. Walls, managing director of Navigant Consulting. On the basis of the record in its entirety, including testimony and exhibits offered into evidence at the hearing of this appeal, the Appellate Tax Board ("Board") made the following findings of fact.<sup>2</sup>

### I. Introduction

Veolia is a privately held corporation organized under the laws of Delaware. The intervenor as it is currently known — Veolia Energy Boston, Inc. — is the result of several name changes through the years. In December 1986, Boston Thermal

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<sup>2</sup> The parties stipulated that all testimony in the matter of *Veolia Energy Boston, Inc. v. Assessors of Boston*, Mass. ATB Findings of Fact and Reports 2018-198, appeal pending at SJC-12634, would be treated as testimony in this matter, with all rights preserved.

Corporation acquired certain assets from Boston Edison Company. In February 1987, Boston Thermal Corporation changed its name to Boston Thermal Energy Corporation. In March 1994, Boston Thermal Energy Corporation changed its name to Trigen-Boston Energy Corporation. In November 2010, Trigen-Boston Energy Corporation changed its name to Veolia Energy Boston, Inc.

While it was known as Boston Thermal Energy Corporation, the intervenor submitted a Form 355Q: Statement Relating to Manufacturing Activities to the Department of Revenue in October 1989. Boston Thermal Energy Corporation was notified in December 1989 that it would be classified as a manufacturing corporation as of January 1, 1990.

## **II. Procedural History**

On February 23, 2016, pursuant to its obligations under Directive 12-5: Procedure for Inclusion in Annual List of Corporations for Property Tax and Other Purposes, Veolia filed its Annual Certification of Entity Tax Status. The Commissioner released his annual list of Corporations Subject to Tax in Massachusetts on June 8, 2016. Veolia was included on the list, as it had previously been, as a manufacturing corporation.

The assessors filed a Petition Under Formal Procedure on June 30, 2016, in accordance with G.L. c. 58, § 2, claiming that the assessors were aggrieved by the Commissioner's erroneous classification of Veolia as a manufacturing corporation and the

City of Boston's consequent loss of tax revenue because G.L. c. 59, § 5, Sixteenth provides an exemption for all property owned by manufacturing corporations "other than real estate, poles and underground conduits, wires and pipes."<sup>3</sup> Based upon this information, the Board found and ruled that it had jurisdiction to hear and decide this appeal.

The Commissioner notified Veolia of the assessors' challenge on July 21, 2016, and Veolia subsequently filed a Motion to Intervene on August 3, 2016, which was allowed by the Board on August 10, 2016.

### **III. Veolia's Assets and Operations**

#### ***A. The District Energy Networks***

Veolia owns and operates a district energy network in Boston ("Boston network"). It also participates in the operation of a district energy network in Cambridge ("Cambridge network") (collectively "networks") that includes a co-generation facility. This co-generation facility and other Cambridge assets are owned by affiliates of Veolia, including Kendall Green Energy Holdings LLC ("Kendall Green"), an entity that is not classified as a manufacturing corporation. The Boston network produces steam and the Cambridge network produces steam and

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<sup>3</sup> In *Veolia Energy Boston, Inc. v. Assessors of Boston*, Mass. ATB Findings of Fact and Reports 2018-198, *appeal pending* at SJC-12634, the Board determined that certain property was exempt from taxation as manufacturing machinery pursuant to G.L. c. 59, § 5, Sixteenth, but the issue of whether the Commissioner properly classified Veolia as a manufacturing corporation was not before the Board.

electricity. Mr. Silvia testified that the networks are operated collectively as "one whole system" without regard to geographic distinction between Boston and Cambridge, and without regard to ownership. He explained that in his role he has "oversight of the basic operations of the entire system. The power plants, the distribution system, everything up through delivery to the customer."

According to Mr. Silvia, the Boston network is "in place to sell usable thermal energy to end users in multiple markets in the City of Boston and Cambridge." The Boston network serves approximately 250 customers in the commercial, health, government, institutional, and hospitality industries. Customers include "[p]retty much every major hospital" in downtown Boston according to Mr. Silvia. These customers use the steam<sup>4</sup> for myriad purposes, including power generation, process needs, and heating and cooling. "[T]hey use this commodity for their end use," testified Mr. Silvia, "whether it be sterilization in hospitals and operations or generation of hot water in the hotels in the city." Veolia employees and employees of Veolia affiliates also provide various operations and maintenance services for some of these customers.

The networks are connected by two sets of pipes and equipment, not all of which are owned by Veolia: one set follows

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<sup>4</sup> In at least one instance, the Boston network also provides hot water.

the Charles River Dam Road near the Museum of Science and the other set crosses the Charles River attached to the Longfellow Bridge. As explained by Mr. Silvia, "because it's a network system, it's a series of loops upon loops. Depending on where the generation is taking place, it can be heading in one direction or the other, and then depending upon if we have sections out for maintenance, it can alter the direction for the flow to get to the customer."

***B. Steam Generation, Delivery, and Return***

Steam is initially generated at three facilities ("Generation Facilities"): the Kneeland Facility, located on Kneeland Street in Boston; the Scotia Facility, located on Scotia Street in Boston; and the Kendall Station, located in Cambridge. Veolia does not own the Kendall Station, but it does provide operations and maintenance services to the Kendall Station as set out in an Operations and Maintenance Services Agreement dated January 31, 2014 between Veolia and Kendall Green. As testified to by Mr. Silvia, "[i]t's kind of a full-service agreement. It's the operation and maintenance and repair of the Kendall station and the generating equipment," the same services that Veolia provides for the Kneeland Facility and the Scotia Facility.

Mr. Silvia testified that the main constituents used to generate steam are "water, chemicals, [and] fuel." Activities

occurring at the Generation Facilities include water treatment, fuel storage and treatment, and steam generation. Mr. Silvia explained these processes in detail.

Raw water is water that has not been subjected to any process. Mr. Silvia stated that during the relevant time period, the raw water source for the Kneeland Facility and the Scotia Facility was the Boston Water and Sewer Commission, while the source for the Kendall Station was the Cambridge Water Department or the Massachusetts Water Resources Authority. Water arriving at the Generation Facilities can go through slightly different processes on the path to steam generation based upon the facility, but essentially all processes involve the addition of chemicals.

Water arriving at the Kneeland Facility and the Scotia Facility typically goes through a cation ion exchange, according to Mr. Silvia, after which it is conditioned by the addition of phosphates and polymers to adjust PH levels. He explained that "the ions are charge particles. It's a chemical process" that results in the removal of calcium, magnesium and iron.<sup>5</sup> He added that the water is then subjected to a "deaeration stage where we

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<sup>5</sup> Documents in the record lend further detail. For instance, a Zeolite softening system removes "scale-forming ions of calcium and magnesium, replacing these ions with an equivalent amount of sodium ions." Through this removal/replacement process "city water is made suitable for use as boiler feed water." A chemical control system adds chemicals to boiler feed water "to prevent scaling and corrosion in the boiler and plant components."

remove the oxygen and the noxious gases through a mechanical process where we add sulfites. From there it goes to the boilers." The Kendall Station is a higher pressure facility and needs water that is even more purified in order to operate, testified Mr. Silvia. These various processes remove hardness from water, prevent scale from forming, and prevent pitting in boilers. Untreated water can negatively impact the steam's quality, according to Mr. Silvia, which in turn can prevent Veolia from meeting customer specifications concerning steam.

Steam generation equipment burns either fuel oil or natural gas. Each of the Generation Facilities stores fuel oil and is supplied with natural gas. Steam is generated at boilers at the Generation Facilities, with equipment varying between the Generation Facilities. At the Kneeland Facility and the Scotia Facility, boilers have a burner used for combustion. Air used in combustion is pumped into the system by a forced-draft fan, with the exhaust gas pulled out by induced-draft fans. Exhaust gases exit by means of an exhaust stack, while the water is heated and becomes steam in the boiler. At the Kendall Station, steam is generated both in boilers and by using a heat recovery steam generator. This heat recovery steam generator creates steam using heat from the exhaust gases of a combustion turbine.

Any of the Generation Facilities can be used to generate steam and maintain a steady supply since the steam can move in



either direction through the networks. Steam pressure varies throughout the networks due to frictional pressure losses, condensation, and leakage. Steam generation varies through the year based upon seasonal trends and weather, according to Mr. Silvia.

The networks deliver steam from the Generation Facilities to end customers. The networks operate by balancing the steam generated at each of the Generation Facilities with the total customer load across the networks to ensure that steam is being produced and consumed at approximately equivalent rates. "We carry adequate capacity to ensure that should we lose [the] single largest generating unit that there is adequate capacity to serve the customers," testified Mr. Silvia. He noted that Veolia had to make sure that at any given time it had more than adequate generation to take care of immediate and anticipated customer needs.

Mr. Silvia explained that the networks serve numerous purposes. They have a volumetric impact that helps match load to demand and maintain pressure throughout the networks, as well as quality. Quality is generally maintained by removal of water as it condenses through the system and insulation to retain heat that would otherwise be lost. The networks are designed to maintain the steam's quality because "customers purchase a usable thermal content," according to Mr. Silvia, "so it's

important to us to make sure that we retain that quality from the time that it's generated [to] the time it's delivered."

Steam valves help restrict the flow of steam throughout the networks. Steam pressure is reduced to a customer's desired level by use of pressure reduction valves at customer sites. Mr. Silvia testified that steam reaches the form that a customer can use "[t]ypically prior to the introduction into the customer's equipment." Similarly, Mr. Walls opined that "it's not a finished product until it actually gets to the customer and is delivered to them for their uses." He noted in his expert report that

the product that Veolia sells to its customers is usable thermal energy primarily in the form of steam of a customized pressure. . . . [S]team has substantially different physical properties, such as appearance, density, pressure, temperature and energy content [] than the raw materials (natural gas or fuel oil, and untreated water) used to produce it. Steam, a highly customizable, usable form of thermal energy has a new nature (as well as a new name) as compared to its raw materials: natural gas/fuel oil, and untreated feed water.

. . . .

A typical Veolia customer could **not** use the raw materials (fuel and water) to serve its end uses without significantly modifying its own equipment and systems, using additional physical space, incurring significant expenses, and employing operations and maintenance personnel.

The pressure of the delivered steam is regulated by the valves. Reasons for pressure reduction include safety assurance,

regulatory requirements, and customer equipment compatibility. Expansion joints allow for thermal expansion and contraction as pipe temperatures fluctuate. They allow pipes to grow and contract in a controlled manner without incurring cyclic fatigue failures, such as cracks, buckles, and/or leaks. Expansion joints are held in place by fixed anchors, which allow the joints to expand and contract. Guides control the movement of pipes so that they can only move in a predetermined direction. Steam traps remove condensate<sup>6</sup> that accumulates in the networks. Sump pumps remove water that accumulates in the manholes and vaults as a result of condensate or groundwater seepage. Removal of accumulated water is important because the presence of water in manholes and vaults inhibits maintenance activities and may compromise electronic devices present in those components.

Part of the condensate is returned to the Generation Facilities through condensate return lines. The condensate returned to the Generation Facilities is recycled into the networks and sometimes used to generate additional steam. Condensate not returned is generally drained or pumped into the municipal sewer system.

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<sup>6</sup> Once the steam has been used at a customer's site, it is generally condensed into liquid, called condensate.

### ***C. The Supervisory Control and Data Acquisition System***

The Generation Facilities, networks, and customer sites are monitored through a centralized supervisory control and data acquisition ("SCADA") system. The SCADA system is accessible by means of the Internet and it is accessed at several places in the networks and on certain mobile telephones. Mr. Silvia testified that at times relevant to this appeal, Veolia's employees operated the SCADA system.

Each of the Generation Facilities has an internal control system that feeds data to the master SCADA system. At a given point in time, a shift supervisor maintains oversight and directs operation of the entire SCADA system. The shift supervisor can view all the networks, including the status of each of the Generation Facilities, the status of multiple monitoring points in the networks, and the status at customer sites.

### ***D. Purchase and Sale of Steam***

Veolia purchases steam generated from the Kendall Station, which it distributes in the Boston network and sells to Veolia customers. The steam generated at the Kneeland Facility and the Scotia Facility are likewise distributed in the Cambridge network. The steam purchased from the Kendall Station is comingled with steam from the Kneeland Facility and the Scotia Facility. "There's no way to identify Kendall steam from Scotia

or Kneeland steam," according to Mr. Weafer. He added that "the steam that comes from the Kendall facility in 2015, represents 72 percent of the total sales volume for 2015," with the remaining 28 percent coming from the Kneeland Facility and the Scotia Facility.

Veolia purchases the Kendall Station steam from Kendall Green in accordance with a Steam Supply Agreement dated May 26, 2006 and a Steam Pipeline Development and Supply Agreement dated December 21, 2010. Kendall Green invoices Veolia on a monthly basis for any steam sold under these agreements and Veolia pays these invoices through its normal accounts payable process.

Samples of invoices and service rates in the record demonstrate that Veolia provides steam to customers and bills customers for purchases of steam. As testified to by Mr. Weafer, "it is a variable product that is based on the amount and pounds we sell to that customer, not a service."

***E. Veolia's Gross Receipts, Tangible Property, and Employees***

Mr. Weafer testified extensively as to Veolia's gross receipts, tangible property, and employees, substantiated by documentation in the record. Based upon this evidence, both the Commissioner and Veolia concluded that approximately 97 percent of Veolia's tangible property is used in manufacturing. Veolia also offered two more conservative approaches: (1) it excluded

the value of the Kneeland Facility and the Scotia Facility themselves, as well as other manufacturing property, for a tangible property factor of approximately 73 percent, and (2) it only took into account the pipes and certain appurtenant equipment for a tangible property factor of approximately 59 percent. The Commissioner and Veolia, using a conservative approach excluding factors such as fuel revenues designed to recapture costs, derived gross receipts of more than 25 percent from manufacturing activities. Veolia calculated the percentage of employees performing manufacturing functions (including employees involved in construction, customer service, distribution, metering, operations, and plant maintenance) at approximately 59 percent, but also offered a conservative approach that only considered operations and plant maintenance employees, which resulted in an employee percentage of approximately 27 percent.

#### **IV. The Board's Conclusions**

Based upon the record in its entirety, the Board found that Veolia's transformation of raw water, fuel, and chemicals into usable thermal energy in the form of steam was manufacturing. None of these substances on their own were equivalent to the end product sold to hundreds of customers for exacting purposes, including hospitals using steam for sterilization and hotels using steam to generate hot water. Instead, these substances

required the complex physical and chemical processes engaged in by Veolia - from the treatment of water, to initial steam production in the Generation Facilities, the introduction of steam into the interdependent networks, and completion of the steam manufacturing at the point of delivery to customers - to transform raw materials into a new product with a new name (steam), nature (vapor rather than liquid), and use (usable thermal energy).

The Board was unconvinced by the city's focus on Veolia's purchase and resale of steam generated from the Kendall Station as minimizing Veolia's own manufacturing activities. Veolia was not merely a reseller of the Kendall Station steam; it operated and maintained the Kendall Station, and it oversaw the entirety of the networks through its employees and the SCADA until the steam generated at all three Generation Facilities that it operated and maintained was delivered to customers. Thus, Veolia performed a critical role over the entire manufacturing process.

The Board also found that Veolia's manufacturing activities were substantial. Mr. Weafer's testimony and documentation in the record established that Veolia's gross receipts, tangible property, and employee percentages were of a sufficient degree to establish substantiality. The city failed to establish that Veolia's business operations were substantially focused on any activities other than manufacturing thermal energy. Even if

steam that Veolia purchased from the Kendall Station represented 72 percent of Veolia's total sales volume, Veolia operated and maintained the Kendall Station so was ultimately responsible for generating that steam in the first place.

Accordingly, as discussed further in the opinion, the Board found that the Commissioner correctly classified Veolia as a manufacturing corporation for the tax year at issue and issued a Decision for the appellee in this appeal.

#### OPINION

This appeal concerns the city's challenge under G.L. c. 58, § 2 to the Commissioner's classification of Veolia as a manufacturing corporation. The statute allows any person - including boards of assessors - aggrieved by the Commissioner's classification to appeal to the Board. G.L. c. 58, § 2.

The city claims that it is aggrieved by a loss of tax revenue. General Laws c. 59, § 5, Sixteenth provides an exemption from taxation for all property owned by manufacturing corporations as defined in G.L. c. 63, § 42B "other than real estate, poles and underground conduits, wires and pipes."<sup>7</sup> General Laws c. 63, § 42B states that "[e]very business

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<sup>7</sup> In addition to the property tax exemption under G.L. c. 59, § 5, Sixteenth, a corporation so classified is also entitled to an investment tax credit under G.L. c. 63, § 31A and an exemption from sales and use tax for the sale or use of certain property under G.L. c. 64H, §§ 6(r) and (s) and 830 CMR 64H.6.4. 830 CMR 58.2.1(4).



corporation subject to taxation under section 39 that has a usual place of business in the commonwealth, and is engaged in manufacturing in the commonwealth"<sup>8</sup> shall be considered a manufacturing corporation. See also 830 CMR 58.2.1(3) (A corporation may be classified under G.L. c. 58, § 2 as a manufacturing corporation for any calendar year "in which it is in existence and is engaged in manufacturing as defined in 830 CMR 58.2.1(6), as of January 1 of that year.").

Massachusetts courts have "recognized . . . the elusiveness of the term 'manufacturing,'" *York Steak House Systems, Inc. v. Commissioner of Revenue*, 393 Mass. 424, 425-26 (1984) (quoting *Southeastern Sand & Gravel, Inc. v. Commissioner of Revenue*, 384 Mass. 794, 795 (1981)), and that a "critical component of manufacturing is 'the implication of change wrought through the application of forces directed by the human mind, which results in the transformation of some preexisting substance or element into something different, with a new name, nature or use.'" *Genentech, Inc. v. Commissioner of Revenue*, 476 Mass. 258, 262 (2017) (citations omitted).

Though "statutes granting exemption from the local tax on the machinery of corporations engaged in manufacturing must be fairly construed and reasonably applied in order to effectuate

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<sup>8</sup> The city did not contest that Veolia's activities occurred anywhere other than Massachusetts.

the legislative intent and purpose to promote the general welfare of the Commonwealth by inducing new industries to locate here and to foster the expansion and development of" the Commonwealth's own industries, ***Assessors of Boston v. Commissioner of Corporations and Taxation***, 323 Mass. 730, 741 (1949), courts have also recognized the need for adequate safeguards to prevent frivolous claims. "Because the Legislature did not intend to confer a windfall tax exemption on nonmanufacturing corporations that engage in manufacturing 'which is only trivial or only incidental to its principal business,'" case law has required that the degree of manufacturing be "'substantial,' or 'important and material,' when measured against the entire operations of the corporation." ***Fernandes Super Markets, Inc. v. State Tax Commission***, 371 Mass. 318, 322 (1976) (internal citations omitted). See also ***Genentech***, 476 Mass. at 264 ("Genentech claims that even if it is engaged in manufacturing, it still does not qualify as a manufacturing corporation because it does not satisfy the necessary test for engaging in 'substantial' manufacturing. The board rejected Genentech's argument, as do we.").

Thus, the test to qualify as a manufacturing corporation involves a twofold analysis: an entity must establish that its activities involve manufacturing in the Commonwealth and that these manufacturing activities are substantial. See ***Assessors of***

**Boston**, 323 Mass. at 733 ("The nature of the entire businesses actually conducted by these corporations respectively must be examined in order to determine whether their commercial activities conducted in this Commonwealth are such that they may be properly considered as engaged in manufacturing and to such a degree that they may fairly be considered as manufacturing corporations."). See also 830 CMR 58.2.1. The Board found and ruled that Veolia satisfied both requisites.

#### **I. Veolia's Activities Involved Manufacturing**

The Supreme Judicial Court has noted that "[t]he term manufacturing has no technical meaning, and definitions are not of much assistance in cases lying close to the line between nonmanufacturing and manufacturing activities." **Assessors of Boston**, 323 Mass. at 740. See also **Onex Communications Corporation v. Commissioner of Revenue**, 457 Mass. 419, 424 (2010) ("Under our traditional test, to qualify as a manufacturing company, a company's activities must be an 'essential and integral' part in the manufacturing process."); **Boston and Maine Railroad v. Billerica**, 262 Mass. 439, 444-45 (1928); 830 CMR 58.2.1(6)(b) (defining manufacturing as "the process of substantially transforming raw or finished materials by hand or machinery, and through human skill and knowledge, into a product possessing a new name, nature and adapted to a

new use") (as quoted in *Onex Communications Corporation*, 457 Mass. at 424 n.9).

Case law has examined the question of whether a corporation's activities constitute manufacturing in numerous factual contexts. The process of roasting, grinding, and packaging coffee beans is manufacturing. *Assessors of Boston*, 323 Mass. at 741-42. In considering the coffee business at issue, the court in *Assessors of Boston* found that the corporation's activities "consisted in the conversion of a raw material which was unfit for human consumption or any other practical use into a finished product which differed substantially from the raw material in appearance, form and taste, and which was thereby made adaptable to a use for which it otherwise would not be available." *Id.* Of significance to the court was that "the transformation wrought by these processes has, as a practical matter, resulted in a new article and a new use, even though the name of the raw material still is retained." *Id.* ("The determination of the amount of heat to be applied [to blended coffee] requires considerable skill and experience so that the coffee will not be baked and all the oils and aroma destroyed.").

Similarly, Veolia transforms raw water, fuel, and chemicals - substances that could not be used on their own for customers' desired purposes - into a fundamentally different and usable

product, steam. See *id.* See also *The Sherwin-Williams Company v. Commissioner of Revenue*, Mass. ATB Findings of Fact and Reports 2003-200, 212 ("Accordingly, the Board found that the base paint has been so altered with the addition of liquid colorants, using a multiplicity of processes, that it has transformed into something new, a can of colored paint with a different use and marketability.").

In *Mobil Oil Corporation v. Commissioner of Revenue*, Mass. ATB Findings of Fact and Reports 2000-121, 131, the Board found that the taxpayer's "treatment of jet fuel, gasoline, and diesel fuel and its gasoline vapor recovery processes constituted" manufacturing. The Board reasoned "that the base fuel . . . was transformed by a multiplicity of processes into something different: useable, saleable gasoline, diesel fuel and jet fuel, each having a different nature and use." *Id.* Here, Veolia is taking raw materials and using them to create a new, different, useful, and more marketable product. See *id.* at 2000-137 ("Accordingly, the additized fuel is substantially different than the base fuel received because, like the diesel fuel, it has been converted into a marketable product with new properties.").

Cases where a corporation's activities were not found to constitute manufacturing generally focus on the lack of change and new products. See *York Steak House Systems*, 393 Mass. at

425-26 (holding that thawing meat is not manufacturing because "no change resulted from the processing that occurred in Massachusetts"). For instance, in **Tilcon-Warren Quarries, Inc. v. Commissioner of Revenue**, 392 Mass. 670, 673 (1984), the taxpayer engaged in quarrying and crushing stone. The court likened the taxpayer's activities to mining rather than manufacturing, "conclud[ing] that extracting pieces of rock from the ground and crushing them into usable sizes does not compel the conclusion that the process fits within the natural and ordinary meaning of 'manufacturing.'" *Id.* at 672-73.

The taxpayer in **Genentech**, 476 Mass. at 263, claiming that it was not engaged in manufacturing as it wished to avoid the single-sales factor apportionment of G.L. c. 63, § 38(1), contended that its activities were akin to those in **Tilcon-Warren Quarries**. The court disagreed. Genentech's activities included the development of drugs derived from the proteins of living cells and the court found that "Genentech is not merely paring something down to a smaller size," but rather its "scientists and other employees, by hand or machine, implant DNA molecules into a cell to genetically transform the medium to behave in ways other than what its natural genetic code would dictate." **Genentech**, 476 Mass. at 263.

Here, Veolia's activities constitute the transformation of raw water, fuel, and chemicals into usable thermal energy in the

form of steam through a series of complex physical and chemical processes. By means of the Generation Facilities and networks and through application of human skill and knowledge - the extensive monitoring and maintenance of the entirety of the interdependent system - Veolia transformed raw water, fuel, and chemicals into a product with a new name (steam), nature (vapor rather than liquid), and use (usable thermal energy). See 830 CMR 58.2.1. See also **Mobil Oil Corporation**, Mass. ATB Findings of Fact and Reports at 2000-136 ("Mobil took an original substance, base fuels and gasoline vapors, and transformed them into something different.").

The Board was unpersuaded by the city's reliance on **Hopkinton LNG Corp. v. State Tax Commission**, 372 Mass. 286, 287 (1977). The taxpayer in that matter was in the business of converting natural gas into liquid through a refrigeration process. It had previously been classified as a manufacturing corporation but its classification was later revoked. The court found that the

taxpayer does not own, buy or sell gas in its natural or liquid form. Its customers deliver gas to it in the warm months, when supplies exceed demand, and it converts the gas into liquid form. The liquid is stored and later, in the cold months of peak demand, is vaporized and distributed. The process of liquefaction is one of refrigeration, compression and removal of certain components of the gas. The processing causes substantial physical and chemical changes in the gas; the purpose is more efficient storage, handling and shipment.

**Id.** The court held that "the board's findings do not as a matter of law require a conclusion that natural gas has a new nature, name or use after it has been liquefied and later vaporized, even though there are physical and chemical changes incidental to the process." **Id.** at 288. The Board distinguished **Hopkinton** in **Mobil Oil Corporation**, Mass. ATB Findings of Fact and Report at 2000-139, finding that

[i]n **Hopkinton**, nothing was removed from the raw ingredient to give it a different nature, use or name. In contrast, Mobil, by a series of steps, transforms dangerous, highly combustible and unuseable gasoline vapors, which are essentially gasoline by-products, into useable gasoline, which can then be sold to consumers.

In the matter at hand, Veolia is manufacturing a product - steam - used by customers for myriad distinct purposes, rather than providing the "efficient storage, handling and shipment" service contemplated in **Hopkinton**.

The Board was also unpersuaded by the city's focus on Veolia's purchase and resale of steam from the Kendall Station as somehow diminishing the significance of Veolia's overall manufacturing activities. The city disregards the intertwined relationship of all three Generation Facilities and the networks, and Veolia's critical contribution to the whole process, without which there would be no steam manufactured in any of the Generation Facilities, including the Kendall Station,



and the networks. In *Onex Communications Corporation*, 457 Mass. at 425, the Supreme Judicial Court found "that the proper test for determining whether a company is engaged in manufacturing continues to be whether the company was engaged in an 'essential and integral' step in the manufacturing process." Veolia goes even further than *Onex* because it not only engages in a step of the manufacturing process but the entirety of the process. As explained by Mr. Silvia, Veolia provides "the operation and maintenance and repair of the Kendall station and the generating equipment," the same services that Veolia provides for the Kneeland Facility and the Scotia Facility. See also *Boston Gas Company v. Assessors of Boston*, 334 Mass. 549, 565 (1956) ("There is no requirement that 'one great integral machine' be exclusively owned by a single company any more than that it be contained within the boundaries of a single municipality.").

Accordingly, the Board found and ruled that Veolia's activities involved manufacturing.

## **II. Veolia's Manufacturing Activities Were Substantial**

Even if a corporation's activities involve manufacturing, those manufacturing activities must be substantial. See *Genentech*, 476 Mass. at 264. Under the Commissioner's regulation, he will "ordinarily classify a corporation's manufacturing activities as substantial if any one of" four tests is met: (1) a 25 percent gross receipts test; (2) a 25

percent/15 percent employee/gross receipts test; (3) a 25 percent/15 percent tangible property/gross receipts test; or (4) a 35 percent tangible property test. 830 CMR 58.2.1(6)(d). However, "[a] corporation whose activities satisfy none of the four tests for substantiality may nevertheless qualify for manufacturing corporation classification by establishing, through other relevant criteria, that its manufacturing activities are substantial." 830 CMR 58.2.1(6)(d). See also *The First Years, Inc. v. Commissioner of Revenue*, Mass. ATB Findings of Fact and Reports 2007-1004, 1020-1021 ("While the Commissioner's regulation sets forth four specific numerical tests for determining whether a corporation's manufacturing activities are substantial, the regulation also provides that a corporation can demonstrate through other criteria that its manufacturing activities were substantial. 830 CMR 58.2.1(6)(d).").

The record included testimony from Mr. Weafer and documentation to support any of the four percentage tests articulated in 830 CMR 58.2.1(6)(d). The city questioned the applicability of the percentage tests to the facts of this matter, contending that "the real issue is whether those percentage tests truly determine, in the unique circumstances of this case, whether Veolia meets the substantiality requirement, or whether their rote application confers a windfall."

Disregarding the Commissioner's regulation does not further the city's cause. The record did not establish that Veolia engaged substantially in any other activity apart from steam generation. The assessors provided no credible basis as to why Veolia's manufacturing activities were not otherwise substantial. Cf. **Deckers Outdoor Corporation v. Commissioner of Revenue**, Mass. ATB Findings of Fact and Reports 2018-227, 239-240 ("The appellant offered no evidence showing that it fell short of numerical thresholds set forth within the statute. . . . [T]he Board found that it did not meet its burden of demonstrating that it was not" engaged substantially in manufacturing.). See also **Noreast Fresh, Inc. v. Commissioner of Revenue**, 50 Mass. App. Ct. 352, 357-58 (2000) ("It is abundantly clear from the undisputed evidence that Noreast's vegetable processing operation is not a mere sideline, but the heart of the corporate business.").

Accordingly, the Board found that Veolia's manufacturing activities met the requisite substantiality requirement.

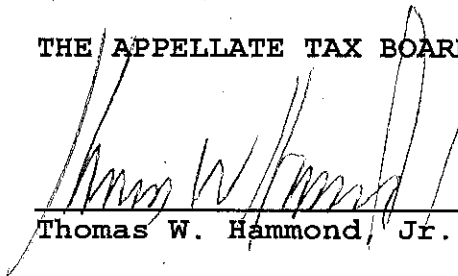
#### CONCLUSION

On the basis of all the evidence in the record, the Board found and ruled that Veolia was correctly classified as a manufacturing corporation. By means of the Generation Facilities and networks and through application of human skill and

knowledge - the extensive monitoring and maintenance of the entirety of the interdependent system - Veolia transformed raw water, fuel, and chemicals into a product with a new name (steam), nature (vapor rather than liquid), and use (usable thermal energy). The processes undertaken by Veolia involved significant physical and chemical changes to the original raw materials. Additionally, Veolia's manufacturing activities were not trivial or incidental but substantial, a chief component of its business operations. The Board therefore issued a Decision for the appellee in this appeal.

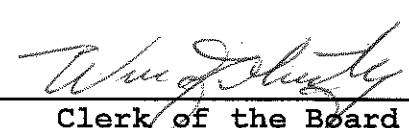
THE APPELLATE TAX BOARD

By:

  
Thomas W. Hammond, Jr., Chairman

A true copy,

Attest:

  
Clerk of the Board