

New York State Department of Taxation and Finance
Taxpayer Services Division
Technical Services Bureau

TSB-A-96 (20)S
Sales Tax
March 22, 1996

STATE OF NEW YORK
COMMISSIONER OF TAXATION AND FINANCE

ADVISORY OPINION

PETITION NO. S951113B

On November 13, 1995, the Department of Taxation and Finance received a Petition for Advisory Opinion from Empire Airgas, Inc., 1200 Sullivan Street, Elmira, New York 14901.

The issue raised by Petitioner, Empire Airgas, Inc., is whether Petitioner's purchases of cryogenic converters constitute purchases of machinery or equipment exempt from tax pursuant to Section 1115(a)(12) of the Tax Law.

Petitioner submits the following facts as the basis for this Advisory Opinion.

Petitioner is in the business of manufacturing and selling industrial and medical gases. The gas commodities listed below are purchased by Petitioner in a refrigerated, liquefied form and stored in vacuum jacketed bulk tanks. Most tanks hold approximately 10,000 gallons of liquefied gas.

<u>Gas Commodity</u>	<u>Storage Temperature (Degrees Fahrenheit)</u>
Oxygen	-297.3
Argon	-302.6
Helium	-452.1
Carbon Dioxide	-109.4
Hydrogen	-432.0
Nitrogen	-320.4

These gases are not normally consumed by Petitioner's customers in liquid form. Petitioner rarely sells liquefied gas. For the vast majority of its customers, Petitioner must convert the liquid product it receives into a gaseous product before the product can enter the market. In addition, the gas must be "repackaged" because the steel cylinders, valves and other equipment required to hold and distribute the gaseous form of the product are significantly different from those used for the liquid form.

The equipment that is the subject of this Advisory Opinion is a cryogenic converter. The cryogenic converter operates as follows.

1. Liquid gas is stored in a special vacuum jacketed tank. The liquid gas is introduced into a cryogenic pump which moves the liquid product from the storage vessel through the conversion process. Since the saturated vapor pressure of the product in the tank varies, the cryogenic pump is designed to operate at very low Net Positive Suction Head (NPSH).

2. The cryogenic pump moves the liquid product into an ambient air vaporization system where the liquid begins to boil as the temperature is increased. The liquid gas is pumped at high pressure through the ambient vaporizers. Here the liquid picks up sufficient heat from the atmosphere to transform the liquid into gas.

3. The end result of the vaporization is a gaseous form of the product which the customer can consume. The gas is directed to the cylinder fill manifolds that are equipped with individual filling hoses for each cylinder. The pump automatically shuts off when the cylinders are filled. The gas is packaged in large steel cylinders which are of a size, dimension and pressure rating that meets the customer's specifications. (These steel cylinders are not part of the cryogenic conversion equipment at issue.) The repackaging cannot be accomplished by any other means.

This basic process may be modified by a number of steps. For example, medical gases, breathing air and rare gases require a considerably greater degree of processing and control than standard industrial gases because specific tolerances are required for specific mixes. Some gases are required to be 99.999999 percent pure. Additional equipment must be added to the cryogenic system to ensure that the purity of the product is maintained and can be certified as required. Other products may involve a mixture of several gases to tolerances of specific parts-per-million (PPM). Again, specific equipment must be added to the process to ensure the proper mixture of gases to produce the final product for market.

The cryogenic converter is used 100 percent of the time in the foregoing process.

Applicable Law and Regulations

Section 1115(a)(12) of the Tax Law provides an exemption from the sales and compensating use taxes for:

(12) Machinery or equipment for use or consumption directly and predominantly in the production of ... gas ... for sale, by ... processing

Section 528.13 of the Sales and Use Tax Regulations defines the following terms:

(b) Production.

* * *

(ii) "Production" includes the production line of the plant starting with the handling and storage of raw materials at the plant site and continuing through the last step of production where the product is finished and packaged for sale.

* * *

(c) Directly and predominantly. (1) "Directly" means the machinery or equipment must, during the production phase of a process:

(i) act upon or effect a change in material to form the product to be sold, or

(ii) have an active causal relationship in the production of the product to be sold, or

(iii) be used in the handling, storage, or conveyance of materials or the product to be sold, or

(iv) be used to place the product to be sold in the package in which it will enter the stream of commerce.

* * *

(4) Machinery or equipment is used predominantly in production, if over 50 percent of its use is directly in the production phase of a process.

Section 531.2(e) of the Regulations provides:

(e) Processing. "Processing" is the performance of any service on tangible personal property which effects a change in the nature, shape or form of the property.

Opinion

Petitioner's purchases of cryogenic conversion equipment fall within the exemption from tax provided by Section 1115(a)(12) of the Tax Law. This equipment is used by Petitioner directly and predominantly in the production of industrial and medical gases, for sale to customers, by processing the gases from a liquid state to a gaseous state. (See, Matter of AGA Burdox, Adv Op Comm T&F, December 22, 1982, TSB-A-82(52)S; Matter of National Fuel Gas Distribution Corporation, Dec Tax App Trib, March 14, 1991, TSB-D-91(15)S.)

DATED: March 22, 1996

/s/
Doris S. Bauman
Director
Technical Services Bureau

NOTE: The opinions expressed in Advisory Opinions are limited to the facts set forth therein.