

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

TSB-A-88(10)S
Sales Tax
January 15, 1988

STATE OF NEW YORK
COMMISSIONER OF TAXATION AND FINANCE

ADVISORY OPINION PETITION NO. S870901B

On September 1, 1987, a Petition for Advisory Opinion was received from Union Carbide Corporation, 39 Old Ridgebury Road, Danbury, Connecticut 06817-0001.

The issue raised is the availability of the sales tax research and development exemption under section 1115(a)(10) of the Tax Law for computer-aided design and engineering equipment.

Section 1115(a)(10) of the Tax Law provides an exemption from state and local (including New York City) sales and use taxes for:

Tangible personal property purchased for use or consumption directly and predominantly in research and development in the experimental or laboratory sense. Such research and development shall not be deemed to include the ordinary testing or inspection of materials or products for quality control, efficiency surveys, management studies, consumer surveys, advertising, promotions or research in connection with literary, historical or similar projects.

Additionally, sales tax regulation section 528.11(b)(1) defines the term "research and development" as follows:

- (b) Research and development. (1) Research and development, in the experimental or laboratory sense, means research which has as its ultimate goal:
- (i) basic research in a scientific or technical field of endeavor;
 - (ii) advancing the technology in a scientific or technical field of endeavor;
 - (iii) the development of new products;
 - (iv) the improvement of existing products; and
 - (v) the development of new uses for existing products. (20 NYCRR 528.11).

Sales and use tax regulation 528.11(c) defines the terms "directly and predominantly" as follows:

- (c) Directly, predominantly, exclusively.
- (1) Direct use in research and development means actual use in the research and development operation. Tangible personal property for direct use would broadly include materials worked on, and machinery, equipment and supplies used to perform the actual research and development work. Usage in activities collateral to the actual research and development process is not deemed to be used directly in research and development.

(2) Tangible personal property is used predominantly in research and development if over 50 percent of the time it is used directly in such function. (20 NYCRR 528.11).

Petitioner performs research in order to produce for sale to consuming manufacturers on the world market various atmospheric gases of greater and greater purity by using and developing "state of the art" technology and equipment to effect the production of these gases in the most efficient manner that allows economy of scale and cost to be met when this equipment is installed and erected as a plant facility on the customer's property. The facility, modified as required to the topography of the customer's land site, is directly hooked up to and feeds the customer's own production equipment.

Petitioner utilizes computer-aided design and engineering equipment (hereinafter C.A.D.E.) to develop three dimensional electronic models of integrated components of production equipment for sale or for integration into a plant facility that has the overall general characteristics of size and dimension to comply with the exigency of economy of cost and scale allowing for future expansion.

The customer either purchases the newly developed gas producing facility outright to produce its own gas, or buys a package which includes as required the constant provision and purchase of the purest available gas delivered by client-owned atmospheric gas producing equipment. The C.A.D.E. equipment referred to includes floor computers, desk top terminals, plotters, graphic presentation equipment and related software, equipment and articles dedicated to the above type activities.

The use of computer equipment has already been recognized as qualifying for the research and development exemption under certain circumstance. In Houdaille Industries, Inc., Advisory Opinion of the State Tax Commission, May 1, 1985, TSB-A-85(13)S, it was determined that:

The use of the CAD/CAM by Petitioner to draw the relative dimensions of machine parts pursuant to customer request as described above contains no element of research and development and is nothing more than the ordinary design and drafting of machine parts. However, the use by Petitioner of the CAD/CAM for purposes of experimenting with different configurations to test the ability of the configurations to comply with design standards falls within the purview of Example 4 as cited above and is, therefore, deemed to be used directly in research and development.

Clearly, to the extent that the C.A.D.E. equipment is used to perform research and experimentation to develop better and more efficient production equipment, it is being used to advance the technology in a technical field of endeavor within the meaning of regulation section 528.11(b)(1).

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However, to qualify for exemption, the C.A.D.E. equipment must be used predominantly (over 50% of the time) in research and development. If the C.A.D.E. equipment is used more than 50% of the time in activities other than research it does not qualify for exemption. For example, the use of C.A.D.E. equipment for ordinary design and drafting functions does not qualify as research and development in the experimental or laboratory sense. Moreover, the use of C.A.D.E. equipment to establish facility configurations or to modify facilities to conform to the topography of the customer's land site does not qualify as research and development in the experimental or laboratory sense.

Additionally, to qualify for exemption, the C.A.D.E. equipment must be used directly in research and development. Usage in activities collateral to research and development (e.g. administrative and management functions) does not qualify as research and development.

Accordingly, if the C.A.D.E. equipment is used directly and predominantly (more than 50% of the time) for qualified purposes, it will qualify for the exemption provided by section 1115(a)(10) of the Tax Law.

DATED: January 15, 1988

s/FRANK J. PUCCIA
Director
Technical Services Bureau

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