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## RESEARCH AND DEVELOPMENT

The *Arvada Municipal Code* defines Research and Development as the research of new or experimental technologies, or the development of new or experimental materials, product components or manufacturing processes.

### Research and development equipment is:

- (1) Equipment used permanently and exclusively in the research of new or experimental technologies; or
- (2) Equipment used exclusively and directly in the development of new or experimental materials, products, product components or manufacturing processes; or
- (3) Research and development equipment does not include research and development product prototypes.

Research and development equipment that is sold or leased when the purchase price of each piece of equipment is \$100.00 or more and the aggregate purchase price for all such pieces of equipment is over \$1,000.00 annually is exempt for sales and use tax. For purposes of determining purchase price, each piece of equipment shall be considered separately.

The research and development equipment exemption does not extend to a proto-type that is manufactured. The researcher or taxpayer that is building a proto-type owes use tax on the materials, parts and supplies used in the production of the proto-type. If proto-types are later put into inventory and later sold, it is also subject to sales tax when sold.

### EXAMPLE

ABC Manufacturing hired R & D Specialist to produce a proto-type of their new product, the "Super Vac." ABC removes parts from their inventory and orders special parts to give to R & D Specialist for the production of the new Super Vac. If the proto-type remains only that a proto-type, then sales and/or use tax is due on the parts used to build the proto-type. However, once the Super Vac proto-type has been perfected and ABC starts manufacturing the Super Vac then they are no longer proto-types, but manufactured goods for resale.

**ARVADA MUNICIPAL CODE – Chapter 98 – Taxation**

**Sec. 98-61. Definitions.**

**Prototype** means an original model on which something is patterned after.

**Research and development** means the research of new or experimental technologies, or the development of new or experimental materials, products, product components or manufacturing processes.

**Research and development equipment** means:

- (1) Equipment used permanently and exclusively in the research of new or experimental technologies; or
- (2) Equipment used exclusively and directly in the development of new or experimental materials, products, product components or manufacturing processes; or
- (3) Research and development equipment does not include research and development product prototypes.

**Sec. 98-70 i.** Any sale or lease of research and development equipment in which the purchase price of each piece of equipment is \$100.00 or more and the aggregate purchase price for all such pieces of equipment is over \$1,000.00 annually. For purposes of determining purchase price, each piece of equipment shall be considered separately.

**Sec. 98-78 (8).** Research and development equipment sold or leased when the purchase price of each piece of equipment is \$100.00 or more and the aggregate purchase price for all such pieces of equipment is over \$1,000.00 annually. For purposes of determining purchase price, each piece of equipment shall be considered separately.

**COLORADO DEPARTMENT OF REVENUE – TAXATION DIVISION**  
SALES AND USE TAX – SPECIAL RULES FOR SPECIFIC BUSINESSES  
1 CCR 201-5

**SERVICE ENTERPRISES**

A research and development contract is distinguished from a contract for the manufacture of a custom made item. In the latter, the research, design, etc., although necessary to the manufacture of the item, is incidental to the primary purpose of the contract. Generally, custom made items are for consumption or resale. The buyer wants the item for its intrinsic value as an item, and is not interested in the data developed in the course of its manufacture. In such contracts, the entire contract price is subject to tax if the tax applies. A person contracting for research and development is primarily contracting for information which is intangible. Generally, the person contracting for information is going to use it to manufacture and sell some item of tangible personal property.

The development of the information in a research and development contract is not a sale of tangible personal property. It is a service. Since the information such as plans, design, and parts lists, etc., cannot ordinarily be conveyed orally, the information is conveyed on paper. The transfer of the information on paper is not a sale of tangible personal property and the transfer is incidental to the service of developing information. In certain instances, the information cannot be conveyed without the transfer of a prototype. In these cases, the transfer of the prototype is incidental to the transfer of the information and is not a sale of the prototype.

In a true research and development contract where a prototype is manufactured, the researcher (taxpayer) owes use tax on the materials used to construct the prototype since it was used to compile data, design, drawings, etc. The measure of the tax is the cost of the materials going into the manufacture of the prototype as well as all other materials consumed.

Contracts for research work which require only the development of ideas, plans, engineering data, etc., do not constitute sales of tangible personal property although models and drawings are furnished to convey such ideas.

If thereafter an entirely separate contract is entered into for the production of the finished product, tax applies to the gross receipts received from the sale of that finished product which gross receipts will not be deemed to include the charges for the drawings, visualizations, etc., performed under a separate agreement.

Example: Original construction plans - A \$50 charge for original plans made according to the desires of each person interested in converting existing buses or van trucks into "house cars" would not be subject to tax. The total charge would be subject to tax if the plan sold was merely a duplicate of a plan drawn for a preceding customer. The planner is the consumer of the paper and other materials used to present the plan.

**RELATED TOPICS**  
**MANUFACTURING**

THE ABOVE INFORMATION IS A SUMMARY IN LAYMAN'S TERMS OF THE RELEVANT ARVADA TAX LAW FOR THIS SUBJECT, INDUSTRY OR BUSINESS SEGMENT. IT IS NOT INTENDED FOR LEGAL PURPOSES TO BE SUBSTITUTED FOR THE FULL TEXT OF THE ARVADA MUNICIPAL CODE. HOWEVER, THE TAX GUIDE SHALL BE USED IN CONJUNCTION WITH THE ARVADA MUNICIPAL CODE (CHAPTER 98) IN DETERMINING TAX LIABILITY.