



## Legislative Fiscal Bureau

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Joint Committee on Finance

Paper #377

### **Sales and Use Tax Exemption for Qualified Research in Biotechnology and Manufacturing (General Fund Taxes -- General Sales and Use Tax)**

[LFB 2009-11 Budget Summary: Page 282, #7]

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#### **CURRENT LAW**

Wisconsin imposes a 5% general sales and use tax on the gross receipts from the sale and rental of tangible personal property and selected services. Currently, there are no sales and use tax exemptions specific to qualified research in biotechnology and manufacturing.

#### **GOVERNOR**

Create exemptions from the sales and use tax for purchases of: (a) machinery and equipment, including attachments, parts, and accessories, that are sold to persons who are engaged primarily in manufacturing or biotechnology in this state and are used exclusively and directly in qualified research; and (b) tangible personal property that is sold to persons who are engaged primarily in manufacturing or biotechnology in this state, if the property is consumed, destroyed, or loses its identity while being used exclusively and directly in manufacturing or biotechnology qualified research.

The Governor's proposal would create the following definitions to specify what activities would relate to qualified research in biotechnology and manufacturing:

"Biotechnology" would mean the application of biotechnologies, including recombinant deoxyribonucleic acid (DNA) techniques, biochemistry, molecular and cellular biology, genetics, genetic engineering, biological cell fusion, and other bioprocesses, that use living organisms or parts of an organism to produce or modify products to improve plants or animals or improve animal health, develop microorganisms for specific uses, identify targets for small molecule pharmaceutical development, or transform biological systems into useful processes and products.

"Primarily" would mean more than 50%.

"Qualified research" would mean research undertaken for the purpose of discovering information which is technological in nature, and the application of which was intended to be useful in the development of a new or improved business component of the taxpayer.

"Used exclusively" would mean used to the exclusion of all other uses except for other use not exceeding 5% of total use.

As under the current property tax statutes, "machinery" would mean a structure or assemblage of parts that transmits forces, motion, or energy from one part to another in a predetermined way by electrical, mechanical, or chemical means, but "machinery" would not include a building.

A separate provision of the budget bill would make a number of modifications and clarifications to the definition of "manufacturing" under the sales and use tax statutes to reflect DOR's current application of the law. The administration's intent is for the new definition of manufacturing to be used for the proposed exemptions. However, as drafted, the new exemptions reference the existing definition of manufacturing, which would be repealed under the bill. A technical modification is necessary to correct this error.

The proposed exemptions for qualified research in biotechnology and manufacturing would become effective January 1, 2012. There is no fiscal effect for the 2009-11 biennium. The administration estimates that the exemptions would reduce sales tax revenue by \$5,000,000 in 2011-12 and \$10,000,000 in 2012-13 and annually thereafter.

## **DISCUSSION POINTS**

1. As an industry, "biotechnology" encompasses a range of activities that is difficult to precisely describe. The North American Industry Classification System (NAICS), which is the industry classification system used by the federal government, does not specify a "biotechnology industry" for classification purposes. According to a definition provided by the University of Wisconsin Biotechnology Center, biotechnology, viewed broadly, is the use of a living organism to make a product or run a process. Initially, the term was generally used to refer to DNA technology. As used currently, biotechnology can encompass a wide range of fields, including activities in areas such as agriculture, biochemistry, molecular biology, and genetics.

2. Biotechnology has had a presence in this state on the University of Wisconsin-Madison campus at least since July, 1984, when the Biotechnology Center was founded. That presence has since increased dramatically, in part through the Biostar Initiative, a multiyear program started in the early 2000s that provided for construction of additional bioscience facilities at state university campuses. This initiative, funded through a combination of state funding and private gifts and grants, was undertaken with the goal of helping the University maintain a national leadership role in the biosciences, including biotechnology.

3. It was also anticipated that the investment would enhance the development of biotechnology businesses in general, based on the expectation that biotechnology businesses would locate in the same area as a university at which initial research was performed. Based on information from the Battelle Technology Partnership Practice's report *Technology, Talent, and Capital: State Bioscience Initiatives 2008*, up to 684 companies in Wisconsin in 2006 were classified as biotechnology companies. Of these companies, 76 were within the agricultural feedstock and chemicals industry, 69 were in the drugs and pharmaceuticals industry, 314 were in the medical devices and equipment industry, and 225 companies were engaged in research, testing, and medical laboratories.

4. According to the National Science Foundation and the Wisconsin Technology Council, the University of Wisconsin-Madison reported the nation's second largest amount of academic research and development expenditures by an academic institution in 2007. The State of Wisconsin ranks 13<sup>th</sup> in the nation for total academic research and development expenditures and accounts for approximately 2.16% of U.S. academic research and development (\$1.1 billion).

5. According to representatives of the industry, a typical Wisconsin biotechnology company requires approximately five years to emerge from a start-up company to a profitable business. The start-up cost dedicated to machinery and equipment generally ranges from 4% to 10% of the total start-up cost. With regards to tangible personal property consumed and destroyed exclusively and directly in qualified research, industry representatives report that approximately 95% of property is consumed and destroyed in biotechnology research, whereas approximately 50% of property is consumed or destroyed by biotech companies engaged in manufacturing research.

6. According to the administration, the Governor has proposed exemptions for qualified research in biotechnology and manufacturing to better position Wisconsin to become a leader in emerging technologies and biotechnology. The Governor's delayed effective date was proposed to offset the fiscal impact to the state, while allowing biotechnology and manufacturing businesses to plan strategically for the future.

7. According to the Battelle report, 32 states currently provide an exemption from the sales and use tax for equipment used in biotechnology research and development. Four of these states, Colorado, Missouri, New Jersey, and Rhode Island, provide the exemption specifically targeted to the biotechnology industry; whereas the other 28 states exempt all equipment used in research and development from the sales and use tax.

8. According to the National Science Foundation (NSF), total U.S. manufacturing and scientific research in 2006 accounted for \$165.3 billion of total non-federally funded research and development expenditures, of which Wisconsin expenditures accounted for 1.3% (\$2.1 billion). Based on this data, if the proposed exemption were imposed in 2006, sales and use tax collections would have been reduced by an estimated \$10.7 million.

9. The administration's estimate did not incorporate any assumption of growth in the biotechnology and manufacturing qualified research expenditures. Using forecasted growth rates of

research and development expenditures projected by IHS Global Insight, Inc., it is estimated that the proposed exemption would reduce revenues by approximately \$13 million annually when fully implemented, or \$3 million more than estimated by the administration.

10. An argument could be made that the proposal would put research and development companies performing other types of qualified research not related to manufacturing or biotechnology at a competitive disadvantage. Non-manufacturing and non-biotechnology companies engaged in qualified research would not receive the proposed sales tax exemption and would be subject to higher start-up costs than their manufacturing and biotechnology counterparts. A counter-argument could be made that the proposed exemption from the sales and use tax would give Wisconsin manufacturing and biotechnology research and development companies a competitive advantage as compared to similar companies in other states.

11. Total Wisconsin non-federally funded research and development expenditures in 2006 were \$2.9 billion, according to the NSF. If the proposed exemption from the sales and use tax for qualified research in manufacturing and biotechnology were modified to extend to all qualified research, the exemption would reduce estimated sales and use tax collections by about \$18 million per year.

12. An argument could be made that the proposed sales and use tax exemption for these industries does not need to be acted upon during the current 2009-11 budget. The proposed exemption would not become effective until January 1, 2012, or six months after the close of the 2009-11 biennium. As noted, the proposed exemption would have no fiscal effect in the 2009-11 biennium.

13. Under the Governor's proposal, the proposed exemption would cross reference the current statutory definition of "manufacturing"; however, under a separate provision in the budget bill, the definition of "manufacturing" would be renumbered and redefined. If this provision was not amended and the proposed changes to the definition of "manufacturing" were passed into law, the definition of "manufacturing" under this provision would refer to a non-existent statute. The administration has requested a technical modification to reference the definition of "manufacturing" as proposed in the budget bill, for the purposes of this exemption.

14. The administration has requested a modification to language in the budget bill to extend the proposed sales and use tax exemption to the following three items:

a. Machines and specific processing equipment, including accessories, attachments, and parts for the machines or equipment, that are used exclusively and directly in raising animals that are sold primarily to a biotechnology business, a public or private institution of higher education, or a governmental unit for exclusive and direct use by any such entity in qualified research or manufacturing;

b. Tangible personal property used exclusively and directly in raising animals that are sold to a biotechnology business, a public or private institution of higher education, or a

governmental unit for exclusive and direct use by any such entity that is primarily engaged in qualified research in biotechnology or manufacturing, including: (i) certain tangible personal property the sales of which are currently exempt when used in the business of farming (seeds for planting, plants, feed, fertilizer, soil conditioners, animal bedding, sprays, pesticides, fungicides, breeding other livestock, poultry, farm work stock, baling twine and baling wire, containers for fruits, vegetables, grain, hay silage, animal wastes, and plastic bags, sleeves, and sheeting used to store or cover hay or silage); (ii) medicines; (iii) semen for artificial insemination; (iv) fuel; and (v) electricity; and

c. Animals that are sold to a biotechnology business and used exclusively and directly in qualified biotechnology research.

15. The administration indicates that the fiscal estimate provided for this provision had incorporated the requested modifications regarding the production and purchase of animals used directly and exclusively in biotechnology research.

## **ALTERNATIVES**

1. Approve the Governor's proposal with a modification to reference the new definition of "manufacturing" included in the bill. Modify the estimated reduction in sales and use tax revenues to \$13 million per year, beginning January 1, 2012.

2. In addition to Alternative 1, approve the administration's request related to the production of animals used directly and exclusively in qualified biotechnology research.

3. Expand the proposed exemptions so that they would apply to items purchased for all types of qualified research, not just research related to biotechnology or manufacturing. This exemption would reduce estimated sales and use tax revenue by approximately \$18 million, annually, beginning in 2012. This alternative may be selected in addition to Alternative 1, or in addition to Alternatives 1 and 2.

4. Delete provision.

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