

**The Economic Effects on Michigan
of the Aspen Bay Pulp and Fibre Plant Location Decision**

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October 24, 1995**

Abstract

Aspen Bay Pulp and Fibre is considering locating its premium bleached Chemi-Thermo-Mechanical Pulp plant in Michigan, which would employ 95 people. We estimate that by 2016, this facility will have generated a total of 359 jobs in the state. Total state government revenues through 2016, net of MEGA costs and adjusted for inflation, would be increased by \$17,734,000 (1995 dollars) due to the location of the Aspen Bay plant.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Aspen Bay Pulp and Fibre's locating its premium bleached Chemi-Thermo-Mechanical Pulp plant (SIC 2611) in the state. A new facility would be built between 1995 and 1997, with an investment of \$183.4 million, and would begin production in mid-1997. The facility would employ 95 workers.

The estimates of the benefits include the total number of jobs created in Michigan (by major industry, including spin-off jobs), and the associated personal income and state government revenue. Benefits net of the MEGA incentive package, from 1995 to 2016, are shown in the attached table. The MEGA incentive package includes relief from 75 percent of the single business tax for the period 1997-2006 and a tax credit to the company equal to the income tax withheld from the plant's employees for the period 1997-2016.

The total employment effects, reported in the first line of the table, include the direct jobs created at the plant itself plus spin-off jobs. The spin-off jobs are generated from two sources, increased purchases from Michigan suppliers and spending by people who receive income due to the increased economic activity. The construction of the facility and investment in machinery and equipment is expected to generate a total of 8 jobs in 1995, 1,016 in 1996, and 382 in 1997; almost all of these jobs are temporary. In 1998, the first year of full production, an additional 264 jobs are generated in the state. We estimate that by 2016, this facility will have generated a total of 359 jobs in the state. The total number of jobs created (direct plus spin-off) for every direct job introduced constitutes the "employment multiplier." The employment multiplier for the location averages 3.2 over the period 1998-2016. Sectoral detail on the employment gains is also shown in the table.

Personal income is shown in the next section of the table. Personal income is defined as the income of Michigan residents from all sources, after deduction of contributions to social

insurance programs but before deduction of income tax and other personal taxes. As shown in the table, if the Aspen Bay facility were to locate in Michigan under the incentive program, state personal income in 1998 would be higher by \$17.8 million (in current dollars) than it would be without the facility, and in 2016 it would be \$42 million higher. Adjusted for inflation, these numbers in 1995 dollars would be \$11.1 million in 1998 and \$16.5 million in 2016.

The gain in economic activity results in higher state government revenues. The construction of the plant and investment in machinery and equipment would generate \$16,000 in 1995 and \$3,160,000 in 1996 (in current dollars) in additional gross state revenue. Since there are no MEGA incentives offered to the construction companies, these values are also the impact on net state revenue. We estimate that the additional economic activity resulting from the operation of this plant and the investment in machinery and equipment would generate \$2,408,000 in additional gross state government revenue in 1997. The MEGA package would provide a \$138,000 incentive to Aspen Bay in 1997. Thus, the Aspen Bay facility would generate additional net state revenue of \$2,270,000 in 1997. We estimate that in 1998, the first year of full production, the operation of the plant would generate \$1,424,000 in additional gross state government revenue, and that the MEGA package would provide a \$194,000 incentive to Aspen Bay. Thus, the Aspen Bay facility would generate an additional \$1,230,000 in revenue to state government in 1998, net of MEGA incentive costs.

Over the period 1995-2016, gross state government revenue is projected to increase by \$45,784,000 (in current dollars) due to the location of the Aspen Bay plant. The MEGA incentive package for Aspen Bay is forecast to cost \$11,199,000 over the period, resulting in a net increase in state government revenue of \$34,585,000. Adjusted for inflation, the total net increase in state government revenue from 1995 to 2016 would be \$17,734,000 in 1995 dollars. These calculations do not include any revenue losses due to the property tax abatement. If the cost of the abatement were included, the net revenue gain to state government would be slightly less.

None of these estimates include the nonmeasurable effects that would produce additional economic and fiscal benefits for Michigan, such as the intangible advantages of influencing other location and expansion decisions.

Economic and Fiscal Effects on Michigan of the Aspen Bay Pulp and Fibre Plant Location Decision

Net Benefits with the Incentive Package

Economic/Fiscal Indicator	1995	1996	1997	1998	1999	2000	2005	2010	2016	Total 1995-2016
Total employment	8	1,016	596	264	249	249	284	334	359	—
Manufacturing	2	172	159	98	95	96	103	108	110	—
Nonmanufacturing	6	844	437	166	154	153	181	226	249	—
Retail trade	1	128	80	33	30	29	34	41	46	—
Services	2	255	153	54	49	49	62	78	88	—
Other	3	461	204	79	75	75	85	107	115	—
In current dollars (thousands):										
Personal income	200	39,500	30,100	17,800	17,000	17,100	21,500	30,500	42,000	572,300
Gross state revenue	16	3,160	2,408	1,424	1,360	1,368	1,720	2,440	3,360	45,784
MEGA cost*	0	0	138	194	625	851	897	352	466	11,199
State revenue net of MEGA cost	16	3,160	2,270	1,230	735	517	823	2,088	2,894	34,585
Adjusted for inflation (thousands of 1995 dollars):										
Personal income	200	33,142	23,064	11,141	11,487	11,079	11,902	14,663	16,547	315,824
Gross state revenue	16	2,651	1,845	891	919	886	952	1,173	1,324	25,266
MEGA cost*	0	0	128	172	536	701	607	196	205	7,532
State revenue net of MEGA cost	16	2,651	1,717	719	383	185	345	977	1,119	17,734

*These estimates do not include any state government revenue losses due to the property tax abatement.