# NORTH CAROLINA GENERAL ASSEMBLY

## LEGISLATIVE FISCAL NOTE

**BILL NUMBER**: House Bill 1583 (Second Edition)

**SHORT TITLE**: Nonhazardous Dry-Cleaning Technology Incentive

**SPONSOR(S)**: Representative Gibson, et al.

### FISCAL IMPACT

**Yes (X)** **No ( )** **No Estimate Available ( )**

| | FY 2000-01 | FY 2001-02 | FY 2002-03 | FY 2003-04 | FY 2004-05 |
|---|---|---|---|---|---|
| **REVENUES** | | | | | |
| General Fund | | ($1,022,175) | ($740,250) | ($888,300) | ($1,094,100) |
| **EXPENDITURES** | | | | | |

**PRINCIPAL DEPARTMENT(S) & PROGRAM(S) AFFECTED**: Department of Revenue

**EFFECTIVE DATE**: This act is effective for taxable years beginning on or after July 1, 2001.

**BILL SUMMARY**: This bill provides a tax credit equal to 35% of the cost of purchasing or leasing nonhazardous dry cleaning equipment. To qualify as nonhazardous, the equipment must not use chlorine-based solvents, hydrocarbon-based solvents, or any other substance deemed hazardous by the Environmental Protection Agency or the Director of the National Institute of Occupational Safety and Health. In addition to not using any hazardous solvent, the equipment must be designed primarily to dry-clean clothes.

**ASSUMPTIONS AND METHODOLOGY**:

**SOLVENTS**

Hazardous dry cleaning solvents include hydrocarbon or petroleum based products and chlorine based solvents such as perchloroethylene. According to the National Institute of Environmental Health Sciences, 80% to 85% of the dry cleaners in the U.S. use perchloroethylene (commonly called perc). The Executive Director of the North Carolina Association of Launderers and Cleaners estimates that 84% of the dry cleaners in this state use perc and 15% use petroleum products. The remaining 1% of the state's dry cleaners use nonhazardous materials such as liquid carbon dioxide, Rynex, silicon based Green Earth, and water (wet cleaning). Although regulated as a hazardous material by the EPA, perc has been the solvent of choice because it can be used

on all common textiles and fibers without risk of fabric shrinkage or faded dyes. Perc is also very effective at removing fats, oils and grease out of clothes. While remaining the dominant dry cleaning solvent, perc use has declined 70% over the past decade due to innovations in equipment design, better operation and maintenance of equipment, and better training of employees.

## NC DRYCLEANING MARKET

Growth in the dry cleaning industry was stagnant in the 1990's and is not expected to improve in the next five years. Economic census reports reveal that from 1992 to 1997, the number of dry cleaning plants in NC grew .56% a year. Meanwhile, the state's population grew 1.75% a year in the same five-year period. An analyst with the International Fabricare Institute said there were too many cleaners in the industry making the business very competitive. This was confirmed by the EPA Office of Compliance Sector Notebook Project: Profile of the Dry Cleaning Industry when it reported in September 1995 that "commercial dry cleaning is not a high profit business and many dry cleaners are barely able to stay in business." Sixty three percent of dry cleaners in 1993 had annual revenue of $113,000 or less. Sole proprietorship returns in 1997, showed that 74.3 % of dry cleaners were profitable and the net income for dry cleaners was $12,432 a year (Summer 1999 SOI Bulletin).

In 1997, the US Census Bureau published an Economic Census for North Carolina that listed 696 dry cleaning plants in the state. The Executive Director of the North Carolina Association of Launderers and Cleaners estimates that the average number of dry cleaning machines per facility is 1.1 due to the large number of small operations. Using the 696 plants reported in 1997 times 1.1 machines per facility equals 766 dry cleaning machines in North Carolina. The estimated life span of these machines is 12 to 15 years. Assuming an equal number of machines are retired each year, then between 51 (every 12 years) and 64 machines (every 15 years) will be purchased. This projection is in line with the Association of Launderers and Cleaners' estimate that 50 to 60 dry cleaning machines will be replaced in each of the next five years. Some of the replacement equipment may go into large central operations as the result of consolidation among smaller shops.

## SWITCH TO NONHAZARDOUS SOLVENTS

As mentioned above, nonhazardous dry cleaners make up about 1% of the dry cleaning market. A Raleigh dry cleaner is one of 32 test sites in the world for silicone based Green Earth solution. Micell Technologies uses liquid carbon dioxide in its Hangers franchises in Wilmington, Morrisville, and Greensboro. Under a license agreement with Global Technologies, Sail Star USA will begin assembly of carbon dioxide dry cleaning machines in Charlotte this year. No advance orders have been received from North Carolina dry cleaning plants.

While nonhazardous dry cleaning machines are available, there has been no stampede to invest in the new technologies. Price is one obstacle. Given the low profit margins of many dry cleaning operations, many cannot afford the new technology. The cost of a new perc machine can range from $35,000 to $60,000, with an average of $50,000 for a 50 pound load machine. The carbon dioxide machines offered by Micell Technologies have an average cost of $165,000 plus a franchise requirement that cost $25,000 and a pledge of 5% of gross revenue as a royalty. The carbon dioxide machines built by Sail Star USA will cost between $80,000 to $120,000, but can be purchased without franchise obligations. Green Earth machines are not yet in full

production but are estimated to cost between $40,000 to $60,000. (Hydrocarbon machines can be retrofitted to use Green Earth solution for less than $5000.)

Another obstacle to conversion to new technologies is the reluctance to invest in a technology that does not have a proven track record. Dr. Manfred Wentz, visiting professor at N.C. State University College of Textiles, said the new technologies have not reached maturity and that skeptics abound in the dry cleaning industry. A dry cleaning equipment dealer in Raleigh said the new technologies need a two or three year "shake out period" and that many dry cleaning operators may wait to see if the prices go down. The CEO of the Neighborhood Cleaners Institute said that carbon dioxide machines "have promise", but that the technology is "not all there yet". Some cleaners use wet cleaning in conjunction with their dry cleaning operation. Research by the International Fabricare Institute found "that up to 40 percent of garments could be wetcleaned quite readily but that it takes a serious commitment to proper training of employees to clean 60 to 80 percent of all garments." Wet cleaning machines can clean most garments but cannot adequately dissolve lipophilic stains such as oils, greases, fats and waxes.

Another hurdle to conversion in the short run is that many dry cleaning operators have invested in new perc machines in response to EPA regulations on hazardous solvents. These operators will get the maximum use of these machines before buying a new one. These new machines have reduced solvent use while providing the operators with the best and most consistent cleaner.

**TAX CREDIT**

In the short run, Micell Technologies seems to be the only nonhazardous solvent dry cleaning equipment company in position to capture a share of the new and replacement market of dry cleaning machines. Micell Technologies has estimated that it will sell 10 machines in North Carolina in 2001, 8 in 2002, and 7 in 2003 without the tax credit. With the tax credit, the company expects a 50% boost in sales to 15 in 2001, 12 in 2002, and 11 in 2003. Bank of America's announcement on April 22, 2000 that it would finance the purchase of Hangers franchises in conjunction with the Small Business Administration should make Micell's market projections more achievable.

By 2003 and 2004, the other nonhazardous solvent equipment manufacturers will have completed several years of tests and should produce enough machines to be more price competitive with perc and petroleum machines. Sail Star USA in Charlotte projects total production for the US market will increase from 150 units in year 2000 to maximum of 4,000 units in 2003. By 2003, the cost of each Sail Star unit could be as low as $60,000, a price competitive with perc. By 2003, Green Earth machines will have had three to four years of market experience and if the results are positive, the machine's $50,000 price tag will make it competitive in the market place.

This fiscal note assumes that 60 dry cleaning machines will be purchased each year from 2000 to 2005. The note assumes that Micell machines will be the only nonhazardous solvent machines sold until 2003. Beginning in 2003, it is assumed that all new and replacement dry cleaning machines will use nonhazardous solvents due to EPA and state environmental regulations. It is assumed that half of these dry cleaning machines will be purchased in the first six months of the fiscal year and half will be purchased in the second half of the fiscal year. (The exception is in 2001 when dry cleaners can be expected to delay purchase of Micell equipment until July 1 to get the 35% credit and use 100% of the credit in the tax year and fiscal year.) The dry cleaning

companies will deduct the 35 % tax credit from quarterly estimated income tax payments. In order to calculate fiscal year impact, it is assumed that 45% of the tax credit will be taken within the first 6 months (two quarters) of the purchase and 55% in the following two quarters. It is assumed that the companies purchasing Micell equipment and Hangers franchise will be able to use the full tax credit in the year the equipment is purchased or leased. (For leased property, the tax credit is applied to eight times the annual rental rate.) For those purchasing or leasing other equipment, primarily replacement machines, it is assumed that they will be small businesses that do not have sufficient income to absorb the full tax credit and thus the credit will be carried forward for five years. To calculate the impact by fiscal year, the credit is divided equally over a five-year period. The chart below shows how the fiscal impact was calculated.

| | | FY 2000-01 | | FY 2001-02 | | FY 2002-03 | |
|---|---|---|---|---|---|---|---|
| | | July-Dec 2000 | Jan - June 2001 | July-Dec 2001 | Jan - June 2002 | July-Dec 2002 | Jan - June 2003 |
| Micell | | | | | | | |
| Cost/ #machines | $165,000 | 0 | 0 | 15 | 6 | 6 | 6 |
| 35% tax credit | $57,750 | | | $866,250 | $346,500 | $346,500 | $346,500 |
| Estimated payments | | | | $866,250 | $155,925 | $346,500 | $346,500 |
| | | | | | | | |
| Green Earth/ Sail Star/other | | | | | | | |
| Cost/ #machines | $60,000 | 0 | 0 | 0 | 0 | 0 | 25 |
| 35% tax credit | $21,000 | | | | | | $525,000 |
| Estimated payments | | | | | | | $236,250 |
| 5 year carry forward | | | | | | | $47,250 |
| | | | | | | | |
| Sum | | | | $866,250 | $155,925 | $346,500 | $393,750 |
| | | | | | | | |
| Fiscal Year Total | | | | | $1,022,175 | | $740,250 |

| | FY 2003-04 | | FY 2004-05 | | FY 2005-06 | |
|---|---|---|---|---|---|---|
| | July-Dec 2003 | Jan - June 2004 | July-Dec 2004 | Jan - June 2005 | July-Dec 2005 | Jan - June 2006 |
| Micell | | | | | | |
| #machines | 5 | 6 | 5 | 6 | 5 | 6 |
| 35% tax credit | $288,750 | $346,500 | $288,750 | $346,500 | $288,750 | $346,500 |
| Estimated payments | $320,513 | $314,738 | $320,513 | $314,738 | $320,513 | $314,738 |
| | | | | | | |
| Green Earth/ Sail Star/other | | | | | | |
| #machines | 24 | 25 | 24 | 25 | 24 | 25 |
| 35% tax credit | $504,000 | $525,000 | $504,000 | $525,000 | $504,000 | $525,000 |
| Estimated payments | $515,550 | $513,450 | $515,550 | $513,450 | $515,550 | $513,450 |
| 5 year carry forward | | $47,250 | | $47,250 | | $47,250 |
| | $103,110 | | $103,110 | | $103,110 | |
| | | $102,690 | | $102,690 | | $102,690 |
| | | | $103,110 | | $103,110 | |
| | | | | $102,690 | | $102,690 |
| | | | | | $103,110 | |
| | | | | | | $102,690 |
| Sum | $423,623 | $464,678 | $526,733 | $567,368 | $629,843 | $670,058 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Fiscal Year Total | | $888,300 | | $1,094,100 | | $1,299,900 |

**TECHNICAL CONSIDERATIONS**:

**FISCAL RESEARCH DIVISION 733-4910**
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**DATE**: June 23, 2000


**Signed Copy Located in the NCGA Principal Clerk's Offices**