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Testimony before the House Committee on Interstate and Foreign Commerce: Transportation and Commerce Subcommittee; by Dennis J. Dugan, Associate Director, Program Analysis Div.

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A national mandatory deposit law has been proposed as part of a solution to litter, solid waste disposal, and materials recycling problems of the Nation. The primary effects of such legislation on solid waste, litter, and materials and energy and the industry effects on labor and equipment costs were analyzed. The following results would arise from increasing the deposit coverage from about 25% to 100%: (1) there would be substantially less beverage container litter and somewhat less total litter and solid waste; (2) more containers would be returned and the costs of handling these containers would increase; and (3) the amount of money paid for deposits but not claimed would rise which would increase industry income. Other results of the analysis would depend on how many new containers are manufactured. Alternative assumptions concerning industry response to a mandatory system reflect uncertainty about industry response. The assumption of return rates is one of the most debated technical points of the mandatory deposit issue, but different return rates do not substantially change the main results of the analysis. In addition to primary concerns, a mandatory deposit system would most likely reduce energy and raw material use in the beverage industry. (RBS)

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Before the Subcommittee on Transportation and Commerce
of the
Interstate and Foreign Commerce Committee
United States House of Representatives

EXPECTED DELIVERY
10:00 a.m.
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Mr. Chairman and Members of the Committee. Thank you for the opportunity to discuss with you the results of the recent GAO study on the "Potential Effects of a National Mandatory Deposit on Beverage Containers," (PAD-78-19). We undertook this study in order to provide the Congress with pertinent information and analysis on this important issue.

A national mandatory deposit law has been proposed as part of a solution to litter, solid waste disposal, and materials recycling problems of the Nation. The dimensions of the solid waste problem have been noted by the Environmental Protection Agency in its fourth report to the Congress on Resource Recovery and Waste Reduction:

- Solid waste generation has doubled since 1950.
- Collection and disposal costs have risen rapidly.
- It is becoming increasingly difficult to find acceptable means and locations for disposal of solid waste.

Suggestions for alleviating solid waste problems have included measures to reduce the amount of post-consumer waste, to increase recycling, and to recover valuable materials from discarded solid waste. Mandatory deposits on beverage containers have been proposed as one way to reduce the amount of solid waste and litter, and to increase recycling.

Less than 25 percent of the beverage containers now sold bear a refundable deposit. The one-way container has become the beverage industry's container of choice and one that has

been convenient for consumers. Adapting to deposits on all containers is seen as a change which will have significant consequences. In our report, we analyzed both the primary effects of such legislation on solid waste, litter, materials and energy, and the industry effects on labor and equipment costs.

RESULTS OF THE STUDY

Any study of this type must be based in part on assumptions about the future. Some results are often very sensitive to these assumptions. Recognizing this, we have tried to distinguish those results of our study which are sensitive to the assumptions from those which are not. Our analysis leads us to the conclusion that the following results of a mandatory deposit would not be sensitive to the assumptions because they would arise from increasing the deposit coverage from about 25 percent to 100 percent.

1. There would be substantially less beverage container litter and somewhat less total litter and solid waste.

Our analysis indicates that there would be approximately an 80 percent reduction in beverage container litter. The reduction in total litter could range from less than 10 to almost 40 percent depending on local conditions, and total solid waste would go down about 4 percent.

2. More containers would be returned and the costs of handling these containers would increase.

The number of empty containers returned to retail stores, wholesalers, breweries and bottlers would increase roughly fourfold. If the industry does not shift to greater use of refillable bottles, some industry costs would rise because containers designed for one use would be returned and would have to be handled, transported, and made available for recycling or disposal.

3. The amount of money paid for deposits but not claimed would rise which would increase industry income.

Not every deposit container would be returned for deposit refund, so unrefunded deposits would accumulate. These monies, which are costs to the consumer who doesn't return the deposit container, are revenue to the firm which first put the deposit on the container. These deposits-not-claimed would increase roughly in proportion to the increase in deposit coverage.

Other results of our analysis depend on how many new containers are manufactured. There is more uncertainty attached to these results because they depend on the industry response to a mandatory deposit system. If the beverage firms decided to switch from containers designed for one use to refillable containers, there would be fewer new containers made in any given year compared with production of new containers under current circumstances. Our analysis assumed a range of industry responses to estimate the results of changing the number of containers made.

The main assumptions were:

- 90 percent of the glass bottles and 80 percent of the cans would be returned.
- The container mix, or market share, after adjustment to a mandatory deposit system would be in the range of 48 to 80 percent for bottles and 52 to 20 percent for cans.
- Beverage sales would not be adversely affected once the mandatory deposit system was fully in place.

Our alternative assumptions concerning industry response to a mandatory system--which we label container Mix I or Mix II in the report--reflects uncertainty about industry response. The cheaper refillable container would seem to be the logical result of a mandatory deposit. Industry might, however, decide to continue to use its currently available filling equipment and make adjustments very slowly, if at all, to containers designed for refilling. We selected a range of industry responses, and our cost analyses did not reveal large differences in the outcomes.

The results of a three-year transition period after implementation are:

- New plant and equipment costing \$.8 billion to \$2.4 billion would be required to convert the current beverage system to a mandatory deposit system.

- Container costs under a mandatory deposit system would decline by a net \$1.1 billion to \$3.7 billion.
- Net costs (including labor, plant and equipment, containers, and transportation) would decline by \$1.0 billion to \$1.3 billion.

After the industry adjusted to the new system, the following effects would occur:

- A net annual decrease in total industry costs--both capital and production--after adjustment of the beverage system to a mandatory deposit. These cost reductions are estimated to be in the range of \$1.3 billion to \$1.9 billion each year.
- Decreases in container production.
- Annual reductions of 2 to 3 percent in iron ore and bauxite requirements by the container industry by 1985.
- Energy reductions of approximately 155 trillion BTUs (2/10 of 1 percent of total energy demand) in 1985.

RETURN RATES

The assumption of the return rates for containers is one of the most debated technical points of the mandatory deposit issue. Our assumption rests on actual experiences in Oregon and Vermont, the two states which have recent experiences with mandatory deposits, the national experience with refillable

bottles since 1947, and, to a lesser extent, on Department of Defense experience with mandatory deposits at selected military bases. However, different return rates do not substantially change the main results of the analysis for litter and solid waste, containers returned, or unclaimed deposits.

In summary, Mr. Chairman, our analyses indicates that a refundable deposit on each beverage container sold nationally would reduce litter and solid waste by increasing the number of containers returned to the beverage industry. This would imply more handling by the industry, but we estimated that reduced container costs would cause net costs to industry to go down. In addition to these primary concerns, a mandatory deposit system would most likely reduce energy and raw material use in the beverage industry.

If the Congress should decide to enact legislation requiring deposits on beverage containers, there are a number of features which we think would be helpful.

- A deposit should be required on all beer and soft drink containers, since benefits result when as many containers as possible are returned for reuse.
- There should be efforts to inform the public about the need to return containers.
- Consideration should be given to enhanced access to retraining programs and unemployment compensation

for areas with employment problems resulting from the legislation.

- Some unredeemed deposits should be placed in a fund for municipalities to clean up litter and solid waste.
- Provision should be made to measure and analyze the effects of the system.
- Measures should be taken to assure that any cans which continue to be used are treated the same as refillable bottles, and are recycled after being returned.

That concludes my prepared statement, Mr. Chairman. We will be happy to try to respond to questions you and the other members may have.