VERMONT DEPOSIT LAW AND RECYCLING
PRESENTED AT VT. SOLID WASTE SUMMIT - NOVEMBER 8, 1985
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PRE-DEPOSIT LAW HISTORY - BEFORE 1972

THE DEPOSIT-REDEMPTION SYSTEM FOR SODA AND BEER CONTAINERS HAS MANY NAMES. IT IS CALLED A BOTTLE BILL, FORCED DEPOSIT, MANDATORY DEPOSIT, LITTER CONTROL AND HAS MANY SIMILAR TITLES. IT IS IMPORTANT TO UNDERSTAND THE EVOLUTIONARY PROCESS BECAUSE THE VARIOUS NAMES GIVEN TO THE DEPOSIT SYSTEMS REFLECT THE CIRCUMSTANCES AND KEY FEATURES OF THE PROGRAM.

IN THE 'OLD DAYS,' I.E. BEFORE 1950, MOST BEVERAGES WERE PACKAGED IN GLASS CONTAINERS. RETURNABLE BOTTLES WERE TYPICALLY USED FOR BEER AND SODA PRODUCTS. THE WORD RETURNABLE AT THAT TIME MEANT A GLASS BOTTLE WHICH WAS RETURNED AND REFILLED IN PRACTICE. THERE WAS A DEPOSIT OF 2 CENTS FOR THE CONTAINER WHICH WAS RETURNED TO THE CUSTOMER WHEN THE CONTAINER WAS RETURNED. THIS WAS CONSIDERED A VOLUNTARY DEPOSIT SYSTEM BECAUSE IT WAS NOT REQUIRED BY LAW.

THERE WERE COMPETING BEVERAGE CONTAINERS AVAILABLE IN THE MARKET PLACE AFTER WORLD WAR II WHICH WERE HAVING A SIGNIFICANT IMPACT IN THE BEVERAGE INDUSTRY. NOTABLE AMONG THE NEW CONTAINERS WERE CANS AND THE N/R BOTTLE OR NON-RETURNABLE GLASS BOTTLE, WHICH ARE ALSO CALLED ONE-WAY GLASS CONTAINERS OR SINGLE TRIP GLASS CONTAINERS. THE EFFECT OF USING THESE CONTAINERS IS
THAT THEY ARE DISCARDED AS LITTER OR RUBBISH INSTEAD OF BEING REUSED. THERE WAS AN ATTEMPT TO CHECK THE GROWING LITTER PROBLEM IN THE 1950's BY PROHIBITING NON-RETURNABLE GLASS BEER BOTTLES. THAT LAW WAS IN EFFECT FROM 1953 TO 1957, AND WAS QUITE SUCCESSFUL IN REDUCING THE GLASS BEER BOTTLE FRACTION OF ROADSIDE LITTER. THAT PROHIBITION WAS ALLOWED TO EXPIRE DUE LARGELY TO BEER INDUSTRY PRESSURE.

IT WAS LARGELY THAT STRONG DESIRE TO HAVE ATTRACTIVE ROAD-SIDES WHICH LED TO THE ENACTMENT IN 1972 OF THE MANDATORY DEPOSIT-REDEMPTION SYSTEM FOR BEER AND SODA CONTAINERS. AT THAT TIME, VERMONT AND OREGON WERE THE ONLY STATES TO TRY THE MANDATORY DEPOSIT APPROACH. IMPLEMENTATION IN OREGON WAS JULY 1971 AND IN VERMONT, IMPLEMENTATION WAS JULY 1, 1973. THE LEGISLATURE IMPOSED A TAX, OR LITTER LEVY, FOR A ONE YEAR PERIOD ON MOST NON-RETURNABLE BEVERAGE CONTAINERS. THE AMOUNT WAS 0.4 CENTS, AND THAT TAX WAS IN EFFECT FROM JULY 1, 1972, UNTIL THE MANDATORY DEPOSIT SYSTEM TOOK EFFECT IN 1973. THE LITTER TAX ON WINE AND LIQUOR CONTINUED UNTIL 1979, WHEN IT WAS REPEALED. THE REVENUES FROM THIS TAX WENT TO THE TOWNS AND CITIES IN PROPORTION TO THE POPULATION IN THE COMMUNITY.

ELEMENTS OF THE MANDATORY DEPOSIT SYSTEM IN VERMONT

THE DEPOSIT-REDEMPTION SYSTEM WE NOW HAVE IN VERMONT WAS ORIGINALLY DEVISED IN 1972. THERE HAVE BEEN A FEW FINE TUNING ADJUSTMENTS SINCE THAT TIME, BUT THE FUNDAMENTAL ELEMENTS ARE UN-CHANGED. THEY ARE AS FOLLOWS.

1. THE SYSTEM APPLIES TO THE FOLLOWING BEVERAGES: BEER AND OTHER MALT BEVERAGES, MINERAL WATERS, SODA WATER AND CARBONATED SOFT DRINKS.

2. A MINIMUM DEPOSIT OF FIVE CENTS IS REQUIRED ON ALL CON-
TAINERS FOR THESE BEVERAGES, WHICH IS REFUNDED UPON RETURN OF THE EMPTY CONTAINER TO ANY RETAILER WHO SELLS THAT KIND, SIZE AND BRAND.

3. RETAILERS AND REDEMPTION CENTER OPERATORS GET A HANDLING FEE OF TWO CENTS MINIMUM PER CONTAINER FOR THE REDEMPTION AND SORTING SERVICE. THE FEE WAS ORIGINALLY SET AT 20% OF THE AMOUNT OF THE DEPOSIT, OR ONE CENT FOR FIVE CENT DEPOSIT, BUT WAS AMENDED IN 1980 FOR THE TWO CENTS MINIMUM.

4. THE ENTIRE SYSTEM IS SELF ADMINISTERED WITHIN THE BEVERAGE INDUSTRY WITH VERY LITTLE DIRECT INVOLVEMENT BY THE STATE.

IN ADDITION TO THESE FOUR BASIC ELEMENTS, THERE ARE NUMEROUS OTHER REQUIREMENTS WHICH WILL NOT BE DETAILED TODAY SO WE CAN FOCUS ON THE CURRENT ISSUE OF SOLID WASTE MANAGEMENT.

IMPACT OF DEPOSIT-REDEMPTION SYSTEM

MANDATORY DEPOSIT LEGISLATIONTION IS ALWAYS PREDICTABLE AS A DEBATABLE ISSUE WITH PROONENTS AND OPPONENTS ARMED WITH STUDIES AND DATA TO PROVE THEIR POINT. ARGUMENTS ARE TYPICALLY BUILT ON SUCH TOPICS AS LITTER, PRICES, JOBS, RECYCLING AND PUBLIC ATTITUDES. IT IS DIFFICULT TO OBTAIN TRULY OBJECTIVE INFORMATION.

A REPORT DESCRIBING THE FIRST FOUR YEARS OF EXPERIENCE IN VERMONT TITLED "VERMONT FIVE CENT DEPOSIT" WAS ISSUED BY

THAT REPORT ACCURATELY REFLECTS THE IMPACT OF THE INITIAL SYSTEM IMPLEMENTATION. THE MAJOR CONCLUSIONS DRAWN AT THAT TIME WERE ESSENTIALLY AS FOLLOWS:

1. THE SYSTEM WAS VERY EFFECTIVE AT REDUCING ROADSIDE LITTER.

2. BEVERAGE SALES CORRESPONDED WITH NATIONAL AND REGIONAL TRENDS AT THAT TIME.

3. SOFT DRINK PRICES WERE UNAFFECTED BECAUSE THEY WERE USING RETURNABLE - REFILLABLES AS THE PRIMARY PACKAGE ANY WAY. BEER PRICES WENT UP INITIALLY BECAUSE OF THE UNCERTAINTY AND INEXPERIENCE IN THAT INDUSTRY BUT WERE ADJUSTED WITHIN A FEW MONTHS TO BE COMPARABLE WITH REGIONAL PRICES. STATE TAXES VARY CONSIDERABLY FROM ONE STATE TO ANOTHER, SO IT IS IMPORTANT TO NOTE THE AMOUNT OF THE TAX IN THE BEVERAGE PRICE.

4. MOST OF THE REDEEMED CONTAINERS WERE REFILLED OR RECYCLED. THE RECYCLING PORTION OF THE BUSINESS WAS NEW TO THE INDUSTRY, AND THERE WERE NO COMMERCIAL RECYCLERS IN BUSINESS
IN THE EARLY 1970'S WHO COULD ACCOMODATE THIS CHANGED CONDITION.

5. RETAILERS ORIGINALLY WERE OPPONENTS TO THE MANDATORY DEPOSIT SYSTEM, BUT THEIR CONCERNS WERE RECONSIDERED AND AFTER SOME ADJUSTMENTS THEY TOO BECAME PROPONENTS.

RECENT EVALUATIONS OF ALL THESE CRITERIA CONFIRM THAT THE EARLIER POSITIVE FINDINGS ARE STILL VALID.

EFFECT ON SOLID WASTE

SINCE WE ARE CONCERNED WITH SOLID WASTE QUANTITIES, THE BEVERAGE CONTAINER FRACTION WILL BE SCRUTINIZED MORE CAREFULLY. THERE ARE SEVERAL TRADE AND INDUSTRY PUBLICATIONS WHICH REPORT PRODUCT SALES FOR BEER, SOFT DRINK, ETC. INFORMATION ABOUT CONTAINER ARRAY IS ALSO AVAILABLE TO INDICATE HOW MUCH PRODUCT IS PACKAGED IN GLASS, PLASTIC OR CANS. CONTAINER WEIGHTS AND CAPACITY IS ALSO REPORTED, SO IT IS JUST A MATTER OF DOING A LITTLE ARITHMETIC TO CALCULATE THE TOTAL WEIGHT OF BEVERAGE CONTAINERS.

A PER CAPITA PROFILE FOR ONE YEAR IS AS FOLLOWS:

BEER CONSUMPTION - 23.3 GALLONS
SOFT DRINK AND MIXES - 35.6 GALLONS
BEER CONTAINERS - 80% GLASS, 20% CANS
SOFT DRINK CONTAINERS - 60% GLASS, 20% CANS, 20% PLASTIC

IF ALL THESE CONTAINERS ARE TO BE DISCARDED, THE PER CAPITA WEIGHT WOULD BE 195 POUNDS PER YEAR. STUDIES OF THE AMOUNT OF RESIDENTIAL SOLID WASTE GENERATED IN VERMONT IS ESTIMATED TO BE APPROXIMATELY 800 POUNDS PER CAPITA PER YEAR, SO THE BEVERAGE CONTAINER FRACTION IS APPROXIMATELY 20% BY WEIGHT USING THE 1984 FIGURES. THE RETURN RATE IN VERMONT IS QUITE HIGH FOR ALL THE POPULAR BRANDS OF BEER AND SODA. THERE IS NO REPORTING REQUIREMENT, BUT THE DISTRIBUTORS OFFER SOME INDICATION OF RETURN RATES. THERE IS OVER 95% RATE OF RETURN FOR REFILLABLE GLASS BOTTLES, ABOUT 75 TO 85% RETURN RATE FOR CANS AND A SOMEWHAT LOWER RETURN RATE FOR THE PLASTIC BOTTLES. THE RETURN RATE FOR LOW VOLUME PRODUCTS IS TYPICALLY LOWER THAN FOR THE MORE POPULAR NATIONAL BRANDS.

IT IS THE DISTRIBUTORS OF BEER AND SODA PRODUCTS WHO ARRANGE FOR THE REUSE OR RECYCLING OF THE REDEEMED CONTAINERS. EACH RETAILER IN VERMONT TYPICALLY HAS THREE SEPARATE SOFT DRINK DISTRIBUTORS AND THREE SEPARATE BEER DISTRIBUTORS WHO SUPPLY MOST OF THE BEVERAGES. THERE ARE ABOUT 8 COMMERCIAL RECYCLERS WHO PROCESS THE REDEEMED CONTAINERS. IT IS ACTUALLY QUITE COMPETITIVE, AND SOME DISTRIBUTORS SHOP AROUND FOR THE BEST DEALS ON THE SALE OF MATERIALS SUCH AS ALUMINUM, GLASS AND PLASTIC. THERE IS A WINDFALL IN THE SYSTEM FROM ALL THE CARD-
BOARD WHICH IS ALSO RECYCLED. AT TIMES, THE VALUE OF RECYCLED CARDBOARD, OR CORRUGATED, REPRESENTS A SIGNIFICANT LEVERAGE IN THE BARGAINING. ALL OF THESE MATERIALS RECYCLED THROUGH DISTRIBUTORS COMMAND BETTER PRICES BECAUSE THERE IS A STEADY SUPPLY AND THERE ARE FEWER CONTAMINANTS WHICH INTERFERE WITH THE MARKET VALUE. SOME OF THE LOW VOLUME INDEPENDANT DISTRIBUTORS HAVE SOME DIFFICULTY IN ARRANGING FOR THE RECYCLING OF REDEEMED CONTAINERS, AND SOME DO NOT EVEN BOther - THEY MERELY CANCEL THE CONTAINERS AND DISCARD THEM IN THE RUBBISH. HOWEVER, THE TOTAL OF ALL SUCH DISTRIBUTORS PUT TOGETHER REPRESENTS A VERY SMALL PERCENTAGE OF BEVERAGE CONTAINERS IN VERMONT.

PROPOSALS TO EXPAND THE DEPOSIT SYSTEM TO OTHER PRODUCTS

THERE HAVE BEEN PROPOSALS TO INCLUDE OTHER BEVERAGES TO THOSE ALREADY SUBJECT TO THE DEPOSIT-REDEMPTION SYSTEM. NON-CARBONATED PRODUCTS SUCH AS ICE TEA, FRUIT DRINKS, PUNCH, ETC. WHICH ARE PACKAGED IN CANS OR BOTTLES SIMILAR TO SODA COULD BE INCLUDED. SOME WOULD ALSO LIKE TO SEE WINE AND LIQUOR CONTAINERS INCLUDED, AND MORE RECENTLY, THE COOLERS. ANY OR ALL OF THESE TOGETHER WOULD NOT LIKELY HAVE A DRAMATIC EFFECT ON SOLID WASTE QUANTITIES OR RECYCLING, BUT IT CERTAINLY WOULD FURTHER REDUCE THE AMOUNT OF SOLID WASTE.
WHAT IS EXPECTED FROM THE PUBLIC?

1. RETURN EMPTY CONTAINERS FOR REDEMPTION - TO ANY RETAILER WHO WHO SELLS THAT KIND, SIZE AND BRAND OR TO ANY LOCAL REDEMPTION CENTER.

2. SHOULD BE CLEAN CONTAINERS (I.E. NO EXCESSIVE FOREIGN MATTER).

3. NO BROKEN GLASS CONTAINERS PLEASE!

4. ANY CONTAINERS ON WHICH A DEPOSITE HAS BEEN PAID.

PUBLIC IS CUSTOMER, BOTTLE DRIVE SPONSOR, OR ANYONE WHO RETRIEVES DISCARDED CONTAINERS.

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WHAT IS EXPECTED FROM THE RETAILER?

1. CHARGE A DEPOSIT ON BEVERAGE CONTAINERS - BEER, SODA, ETC.

2. ACCEPT KIND, SIZE AND BRAND SOLD
   A. WITH DEPOSIT MESSAGE (UNLESS EXEMPT)
   B. CLEAN - NO EXCESSIVE FOREIGN MATTER
   C. NO BROKEN GLASS

3. FOR AT LEAST 40 HOURS PER WEEK.
   SHOULD POST HOURS - CONSISTENT SCHEDULE

4. REIMBURSE THE AMOUNT OF DEPOSIT
   CASH OR NEGOTIABLE INSTRUMENT (CHECK, ETC.)
   CAN NOT REQUIRE CREDIT ON PURCHASES

5. PROMPT AND COURTEOUS SERVICE

6. SORT BY KIND, SIZE AND BRAND OR AS ALLOWED BY THE DISTRIBUTOR

NOTE: A RETAILER MAY BE EXEMPTED FROM THE OBLIGATION IF THERE IS A DULY ESTABLISHED REDEMPTION CENTER IN THE AREA. DETAILS MUST BE WORKED OUT IF APPLICABLE.
WHAT IS EXPECTED FROM THE DISTRIBUTOR?

1. ACCEPT KIND, SIZE AND BRAND SOLD BY DISTRIBUTOR.
   A. FROM RETAILER - AT THE STORE.
   B. FROM REDEMPTION CENTER.

2. PAY THE REFUND VALUE AND 'HANDLING FEE' - PROMPTLY.

3. PROVIDE SUFFICIENT SHELLS.
   A. IF THERE IS A CHARGE, USE REVOLVING DEPOSIT BASIS.
   B. MUST REIMBURSE FOR ACTUAL COST OF ALTERNATE TO SHELLS IF NOT PROVIDED BY DISTRIBUTOR.

5. EXTEND REDEMPTION SERVICE FOR DISCONTINUED BRAND OR CONTAINER FOR AT LEAST 2 MONTHS AFTER RETAIL SALES ARE ENDED. THIS MAY BE UP TO ONE YEAR OR MORE AFTER THE INVENTORY HAS CLEARED THE DISTRIBUTOR'S WAREHOUSE.

* IN ADDITION TO THE CONVENTIONAL DISTRIBUTORS, ANY DEALER OR RETAILER, WHO Sells BEVERAGES IN CONTAINERS WITHOUT HAVING PURCHASED THEM FROM A PERSON OTHERWISE CLASSIFIED AS A DISTRIBUTOR, SHALL BE A DISTRIBUTOR.

NOTE - DISTRIBUTORS

A DISTRIBUTOR MAY SATISFY THE REDEMPTION OBLIGATION BY ALTERNATE ARRANGEMENTS IF THEY ARE ACCEPTABLE AND WORKABLE, BUT IS NOT RELIEVED OF THE FULL RESPONSIBILITY.

EXAMPLES OF ALTERNATE ARRANGEMENTS ARE:
1. PICKUP AND FULL SERVICE BY ANOTHER DISTRIBUTOR.
2. THIRD PARTY CONTRACTOR TO SERVICE RETAILERS AND REDEMPTION CENTERS. VERIFY COUNT, COMPLETE PURCHASE ORDER OR SALES VOUCHER, ARRANGE FOR DISPOSAL OF CONTAINERS.
3. AGENT FOR DISTRIBUTOR VERIFY COUNT, COMPLETE PURCHASE ORDER OR SALES VOUCHER AND ALSO PAY RETAILER OR REDEMPTION CENTER FOR 'CANCELING' CONTAINER.
OTHER MISC. ITEMS

1. DETACHABLE OPENING ON CANS PROHIBITED FOR ALL LIQUID DRINKS - HUMAN CONSUMPTION/EXEMPTION PROCEDURE IF UNABLE TO COMPLY. *

2. PLASTIC RINGS OR SIMILAR DEVICES MUST BE BIODEGRADABLE.

3. GLASS BOTTLES MUST BE REFILLABLE 5 TIMES.

4. DISCONTINUED BRANDS - REDEEM AT LEAST 60 DAYS AFTER RETAIL SALES ENDED.

* MILK BASED PRODUCTS AND SOY BASED PRODUCTS WHICH REQUIRE STERILIZATION AND PRESSURE IN THE CANNING PROCESS.

FOR MORE INFORMATION
CONTACT

VERMONT AGENCY OF ENVIRONMENTAL CONSERVATION
103 SOUTH MAIN STREET
WATERBURY, VT 05676

TEL: (802) 244-8702

2. Data for 1972 to 1974 indicate a departure from steady growth. There are several significant contributing factors.

3. Mandatory Deposit System caused a clearance of product from wholesale and retail inventory in FY 73 to comply with labeling changes.

4. During FY 74, Vermont Tourism suffered severe restrictions due to lack of snow in winter and major floods during summer. Gasoline shortages and inflation compounded the natural disaster. Legal drinking age in two adjacent states were lowered from 21 to 18.
BEVERAGE PROFILE
VERMONT

GALLONS

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<th>TOTAL GALLONS (OOO)</th>
<th>PER CAPITA (GALLONS)</th>
<th>RETAIL DOLLARS (OOO)</th>
<th>RETAIL PRICE PER GALLON (DOLLARS)</th>
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<td>Gals.</td>
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NOTES:
2. Per capita data for alcoholic beverage is adult per capita
3. Beer, soft drinks and drink mixes are subject to Vermont deposit system
4. Carbonated fruit drinks and bottled water are subject to Vermont deposit system

Vermont Agency of Environmental Conservation

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