

WHAT'S HAPPENING WITH ORGANICS?

SUPERMARKET ORGANICS RECYCLING - A WORKING PUBLIC/PRIVATE PARTNERSHIP IN MA

NORTHEAST RECYCLING COUNCIL
FALL 2014 CONFERENCE:

The New Era of Recycling

NOVEMBER 7, 2014
AMHERST, MA

STARTED OUT AS AN EVOLUTIONARY PROCESS

- DEP COMPLETES A NUMBER OF STUDIES SHOWING ORGANICS TO HAVE THE GREATEST ADDITIONAL DIVERSION POTENTIAL & BENEFITS;
- THE MA DEP ESTIMATES FOOD WASTE ACCOUNTS FOR >25% OF THE WASTE STREAM IN MA AFTER RECYCLING, OR >1 MILLION TONS/YEAR.
- 1991 - DEP APPROACHED MFA TO DISCUSS HOW SUPERMARKETS COULD DIVERT ORGANIC WASTE;
- MFA WORKED WITH ENVIRONMENTAL SUB-COMMITTEE TO EXPLORE INTEREST;
- RETAILER (STAR MARKET) AGREED TO PILOT A COUPLE OF STORES.

WHY SUPERMARKETS?

- MORE THAN 600 SUPERMARKETS IN THE STATE;
- DEP ESTIMATES THAT BETWEEN 75 AND 85% OF THE WASTE THEY GENERATE IS COMPOSTABLE OR RECYCLABLE;
- WASTE DISPOSAL REPRESENTS A SIGNIFICANT AND GROWING BUSINESS COST FOR THE SUPERMARKET INDUSTRY, PARTICULARLY IN MA WHERE DISPOSAL FEES RANGE FROM \$80 TO \$100/TON, AS OF THE EARLY '90'S;
- SAVINGS: ORGANICS ALONE = \$3,000-\$20,000 per store.

KEY CONCERNS FOR RETAILERS

- CHICKEN OR THE EGG SYNDROME (WHAT COMES FIRST – DIVERSION OR DEMAND?);
- HOW DO YOU MOVE WASTE IN A TIMELY MANNER – DO NOT WANT IT SITTING IN BACK ROOMS FOR EXTENDED PERIOD;
- HOW DO YOU CONNECT WITH THOSE WHO WANT THE WASTE (COMPOSTING FACILITIES, PIG FARMS, ETC.);
- OPTIONS FOR STORAGE --- TOTES, COMPACTERS, ETC..

1996 – BEGINNING OF THE FORMAL PILOT PROCESS

- DEP AND CET PROVIDED THE TECHNICAL ASSISTANCE TO TWO SUPERMARKET OPERATORS –STOP & SHOP (15 STORES) AND BIG Y SUPERMARKETS (4 STORES) IN THE BERKSHIRES AND ON CAPE COD TO ESTABLISH AN ORGANICS DIVERSION PROGRAM.

2002 - SUPERMARKET RECYCLING ORGANICS INITIATIVE...

- PARTNERSHIP – MA DEP, MFA, AND CET;
- DEP PUBLISHED STEP BY STEP GUIDE – RECYCLING ORGANICS INITIATIVE – A HANDBOOK FOR SUPERMARKET PROGRAM MANAGERS;
- ENGAGED UPPER MANAGEMENT OF SUPERMARKET OPERATORS REGARDING IMPLEMENTATION;
- DEP PROVIDED TECHNICAL ASSISTANCE AT 4 ROCHE BROS. SUPERMARKETS & DOCUMENTED WASTE REDUCTION & FINANCIAL SAVINGS (DEDICATED COMPACTOR TO ORGANICS, REALIZED 5-10 TONS OF MATERIAL DIVERTED PER WEEK PER STORE WITH \$10,000 - \$20,000 OVERALL ANNUAL SAVINGS PER STORE.)

THAT GREW INTO A “NETWORK”

SUPERMARKET ORGANICS RECYCLING NETWORK

- EPA FUNDING PROVIDED TO ADVANCE PROGRAM;
- GATHERED BASELINE INFORMATION ON EXISTING MA SUPERMARKET PROGRAMS;
- PROVIDED TECH. ASSISTANCE FOR START-UP AND PROGRAM EXPANSION.

2003-2006

SUPERMARKET ORGANICS RECYCLING NETWORK (SORN)

- PARTNERS – MA DEP, MFA AND CONSULTANTS;
- DEP GATHERED INFORMATION ON SUPERMARKET COMPOSTING PROGRAMS --- 54 STORES DIVERTING 65.9% OF THE TOTAL WASTE STREAM FOR THESE STORES OR 53,300 TONS OF WASTE PER YEAR/STORE;
- ~2/3 OF THIS TOTAL WASTE WAS BEING RECYCLED: 26,200 TONS OF CARBOARD & 8,900 TONS OF SOURCE SEPARATED ORGANICS TO COMPOST FACILITIES;
- THE REST – 18,200 TONS – WAS DISPOSED OF AS TRASH;
- DEP PROVIDED PROGRAM EXPANSION RECOMMENDATIONS TO SUPERMARKET CHAINS – IDENTIFIED NEW CHAINS FOR INCLUSION.

AUGUST 2005 –SIGNING OF MOU SUPERMARKET RECYCLING PROGRAM CERTIFICATION INITIATIVE (SRPC)

- THE MA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE MASSACHUSETTS FOOD ASSOCIATION LAUNCH SRPC INITIATIVE;
- PUBLIC/PRIVATE PARTNERSHIP BETWEEN MA DEP AND MFA TO ENCOURAGE SUPERMARKET INDUSTRY TO RECYCLE ORGANIC AND OTHER SUPERMARKET WASTE (SHRINK WRAP, CARDBOARD AS PART OF MOU).

MOU ELEMENTS

- **VOLUNTARY** SUPERMARKET RECYCLING CERTIFICATION PROGRAM;
- CERTIFIED STORES WOULD BE PROVIDED ANNUAL REGULATORY RELIEF FROM COMPREHENSIVE WASTE BAN INSPECTIONS (BEYOND COMPLIANCE PROGRAM);
- DEP TO PROVIDE TOOLS TO JUMP-START AND EXPAND PROGRAMS, INCLUDING COMPOSTING MANUAL, LIST OF HAULERS AND COMPOSTERS, AND TECHNICAL ASSISTANCE FOR TRAINING AND STORE PROGRAM DEVELOPMENT;
- DEP AND INDUSTRY CONTINUE TO WORK TOGETHER TO IDENTIFY SOLUTIONS FOR GROWTH OF ORGANICS AND OTHER RECYCLING EFFORTS IN THE SUPERMARKET INDUSTRY.

MOU ELEMENTS CONTINUED

CERTIFIED SUPERMARKETS WILL AGREE TO ESTABLISH AND MAINTAIN RECORDS ON:

- THEIR CARDBOARD RECYCLING AND SHRINK/PLASTIC WRAP RECYCLING PROGRAMS;
- FOOD REUSE AND DONATION PROGRAMS;
- ORGANICS (FOOD RESIDUALS, WAXED CARDBOARD) DIVERSION/RECYCLING PROGRAM.

DEP SUMMARY – FOOD WASTE GENERATION DATA

GENERATOR SECTOR	# LISTED IN DATABASE	% OF TOTAL LISTED GENERATORS	AVERAGE FOOD WASTE TONS/YEAR	EST. TOTAL TONS/YEAR	% OF TOTAL GENERATION
FOOD/BEV. MANUF.	836	12.2%	656	548,416	57.9%
RESTAURANTS	3,833	55.9%	43	164,819	17.4%
SUPERMARKETS	714	10.4%	146	104,244	11.0%
WHOLESALE DISTRIBUTORS	500	7.3%	147	73,500	7.8%
HEALTH CARE FACILITIES	672	9.8%	44	29,568	3.1%
COLLEGES/UNIVERSITIES	92	1.3%	209	19,228	2.0%
RESORTS/CONF. FACILITIES	181	2.6%	32	5,792	0.6%
CORRECTIONAL FACILITIES	14	0.2%	123	1,722	0.2%
INDEPENDENT SCHOOLS	19	0.3%	33	627	0.1%
	6,861	100%		947,916	100%

DATA FROM 2002 STUDY FOR MA DEP, UPDATED IN 2011 BY US EPA

MA DEP GOALS

- THERE ARE CURRENTLY ABOUT 30 PERMITTED COMPOSTING AND ANAEROBIC DIGESTION OPERATIONS ACCEPTING FOOD MATERIALS IN MA, WITH A COMBINED PERMITTED CAPACITY TO ACCEPT NEARLY 150,000 TONS OF ORGANIC MATERIAL/YEAR.
- IN THE MA 2010 – 2020 SOLID WASTE MASTER PLAN, DEP SET GOALS FOR REDUCING TOTAL SOLID WASTE DISPOSAL BY 30% AND DIVERTING $\leq 35\%$ OF SOURCE SEPARATED ORGANICS FROM DISPOSAL BY 2020. THIS 2020 GOAL OF FOOD WASTE DIVERSION WILL REQUIRE OVER 350,000 TONS/YEAR OF ADDITIONAL DIVERSION ACTIVITY AS WELL AS ADDITIONAL ORGANICS PROCESSING CAPACITY SUFFICIENT TO HANDLE 300,000 TONS/YEAR OF SOURCE SEPARATED ORGANIC MATERIALS.

WHAT MORE CAN BE DONE?

- AS OF JANUARY 2014, 327 SUPERMARKETS WERE SRPC IN MA, WITH ~30+ DIVERTING FOR A TOTAL OF 360 PRESENTLY DIVERTING;
- WITH AN AVERAGE OF 2 – 3 TONS OF ORGANIC WASTE/WEEK BASED ON SLIDE 12 CHART AND ROCHE BROS. EXPERIENCE;
- $360 \times 2\text{-}3 \text{ TONS/WEEK} = 720 - 1080 \text{ TONS/WEEK} \times 52 = 37,440 - 56,160 \text{ TONS/YEAR}$;
- DEPENDING ON PARTICIPATION OF OTHER ORGANICS PRODUCERS, ANOTHER 360 SUPERMARKETS COULD PRODUCE THE SAME AMOUNT PER YEAR AND STILL EASILY BE UNDER DEP'S ESTIMATED ORGANICS PROCESSING CAPACITY GOAL OF 300,000 TONS/YEAR BY 2020 ($720 \times 2\text{-}3 \text{ TONS/WEEK} = 112,320 \text{ TONS/YEAR}$);
- PRESENT CAPACITY IS 150,000 TONS/YEAR AND GROWING;
- LEAVE S PLENTY OF ROOM FOR GROWTH OF PROCESSING CAPACITY AND SUPPLY.