

Meeting Notes from Solid Waste Master Plan Workgroup on Market Development/State Procurement

March 30, 2009

In attendance: Peter Kopczyk, CRT Recycling; Len Gallego, CRT Recycling; Tom Tomaszek, Spectrum Group; Dan Brodeur, PJ Keating; Amy Mosher, Expressive Capital Consulting, Ben Harvey, EL Harvey & Sons; Johnny Gold, The Newark Group; Bob Cappadona, Casella Recycling, Barton Kunstler, IST Energy, Karen Michalski, BDC Capital, Paul Catallano, Paint Can Recycling; Brad Gallagher, Paint Can Recycling, Meredith Lee, Toxics Action Center; John Blundo, MA Aggregate & Asphalt Paving Association (MAAPA); Erik Robateau, Northeast Recycle Group; Marcia Deegler, OSD; Gretchen Brewer, MassDEP; Alissa Bilfield, MassDEP; Greg Cooper, MassDEP.

Introduction: Alissa Bilfield reviewed the stakeholder workgroup process and purpose of the Market Development/State Procurement Workgroup. The goal of this workgroup is to provide inputs on market development tools, programs, and incentives to:

- Strengthen and increase in-state and regional industrial capacity to utilize recovered materials collected in Massachusetts for the manufacture of new products.
- Strengthen market demand for recycled content end-products made by local companies, thus supporting the state's existing and future recovery and diversion efforts.
- Identify support and other assistance existing recycling manufacturers need in order to ride out the present economic and market downturn.

Recycling Market Update: Various group members from the processing and end-product manufacturing sectors reported on the current status of recycling markets.

- Mixed Paper Grades/MRF Materials - Johnny Gold, CEO of The Newark Group (TNG)

TNG operates 8 paper mills in the US and 3 in Spain with 14 paper-making machines. The company utilizes mixed curbside paper (chiefly newspaper) to produce paper components of corrugated cardboard, construction tubes, packaging, wallboard, and other products. TNG collects 2.5 million tons/yr of paper, using 1.2 million tons/yr in its own production, and exporting 1.3 million tons/yr to China. With the economic downturn, TNG idled 3 mills in MA and 1 in NY, but its Fitchburg and Salem plants are still operating.

- China market
 - There was a slight upward blip in prices in late January/early February, but this did not hold and prices are low again
 - Currently, China is taking loads, but “bottom-fishing”—that is, taking advantage of the current market glut of paper to buy at rock bottom prices
 - Lower container shipping freight rates made export to China more viable, but container rates are about to go up
- Finished product demand down
 - Consumer confidence is way down, causing a significant slump in consumer buying of products made by TNG

- No buying of consumer products, so big drop in linerboard demand for corrugated packaging
 - No construction going on, so no demand for construction products
 - Feedstock supply down
 - Curbside collection volumes are down by 10%
 - With major and minor newspapers closing nationwide, recycled newsprint may become a scarce and costly raw material
 - TNG has serious concerns about the future of the Fitchburg paper mill in this scenario
 - Abitibi, a major Canadian producer of newsprint that operates Paper Retriever collections around MA, may be filing for bankruptcy due to lack of orders for its product (because newspapers closing)
 - MassPort bunker charges disadvantageous
 - Charge is \$48 per container
 - CT and NY ports charge \$10 less per container
 - Tractor-trailer shipping weight limits a problem
 - 80,000 pound truck limit is a disadvantage in MA
 - Federal limit is 100,000 pounds
 - Increase to 96,000 pounds would greatly assist cost-efficient hauling of fuller truckloads of materials to markets
- C&D/MRF Materials - Ben Harvey, EL Harvey & Sons

EL Harvey operates MRF and C&D processing facilities in Westborough, MA, as well as a transfer station, confidential records recovery, and hauling services. EL Harvey processes commercial and residential paper, corrugated cardboard, plastic, glass, and metal containers; electronics scrap; and construction and demolition (C&D) materials including scrap metal, asphalt, bricks, concrete, wallboard, and wood.

- China market
 - The offshore market for paper and scrap metal is very weak with low prices and slow movement of material
 - “We are sitting on a house of cards, and don’t know when it might collapse.”
 - “At a certain point everything will get jammed.”
 - C&D materials potential
 - RECs should improve wood waste markets, if biomass facilities can be sited in MA
 - Gypsum wallboard recycling potential is down because new construction is down
 - Asphalt shingles could be an additive feedstock for road paving projects, but barriers to use by MassHighway, Mass Turnpike Authority, other state agencies
- MRF Materials - Bob Cappadona, Casella Recycling

Casella Recycling is part of Casella Waste Systems, Inc, an integrated waste management company operating landfills, transfer stations, refuse and recycling collections, and

energy recovery in a number of states including Massachusetts. Casella Recycling recovers multi-materials (plastic, metal, glass containers, all paper except corrugated) through its Zero-Sort (single-stream) curbside collections, and operates a MRF in Auburn, MA.

- China markets
 - Has seen some improvement in export demand, though not prices
 - At least materials are moving
 - Casella has seen a 20% reduction in waste and recyclables collections across the board, due to decreased consumption and the economic downturn
 - There is a pronounced need to educate consumers to recycle
 - “Fifty percent recovery is not enough.”
- Plastics - Tom Tomaszek, Spectrum Group

Spectrum Group is a supplier of plastics recycling and processing equipment to companies throughout the Northeast, and also brokers post-commercial and post-industrial plastics to recycled plastic product molders in the region.

- China markets
 - For 20 years China has been THE market for post-consumer plastics due to absence of social or environmental laws impacting their industry
 - China is going into direct competition with the North American and European virgin and recycled plastics industries by putting on ChinaPLAS, a major trade exposition, one month ahead of the triennial NPE International Plastics Showcase, which has been the premier industry trade event for decades
- Companies closing
 - 25 recycled plastic molding companies have closed in the past 6 months in the Northeast
 - Approximately 200 jobs lost
 - Plastics recycling companies left
 - None in VT, NH, ME
 - One company left in RI, one in CT
 - Handfuls of companies left in MA and NY
 - Plastic equipment manufacturing used to be a big industry in Massachusetts, but now is being taken over by China
 - Of 400-500 jobs in MA companies making plastics processing equipment, only about 50 jobs are left
- Recycling plant investments going offshore
 - From about 1988 to late 1990s, investors, major plastics resin companies, and small entrepreneurs invested \$ millions in recycling capacity in the US & Canada
 - Now “Wall Street” is investing in Chinese and EU recycling infrastructure, not North American recycling infrastructure
- Zero markets for plastic film

- According to NY Empire State Development, the last large film plastics recycling plant in the nation (near LA) has just (early April 09) put its plant and equipment up for sale and filed for bankruptcy
 - This company did washing and pelletizing of HDPE and LDPE film, chiefly plastic retail bags, but also some agricultural plastic film
- TREX and AERT--the main 2 other companies using plastic film (retail bags) in their plastic-wood composite lumber (for decking, etc) are not buying film because their end-products are not selling (no construction or remodeling)
- Plastics packaging industry still strong
 - Demand for recycled plastics used in packaging is steady because most packaging has to be produced domestically
 - For instance, demand for recycled bottle grade HDPE and PET (e.g., used in detergent bottles and clamshells, respectively) is stable, though prices are low
- Post-commercial, post-industrial scrap plastics
 - Markets are strong for high-end industrial scrap plastics, but this material is hard to come by because production/consumption down
- Domestic markets for post-consumer plastics, if clean
 - Demand would be strong if quality and sorting were improved, for instance, to allow PET bottle-to-bottle recycling as in a new Coke plant in the southeast
- Construction & Demolition Paving Materials -- Group discussion including several C&D processors and paving industry representatives.
 - State agencies (MassHighway and Mass Turnpike Authority) are looking at increasing the use of recycled paving materials, but more progress is needed. Vermont recently increased the use of RAP (reclaimed asphalt pavement) up to 50%.
 - MassHighway has limited experience with use of recycled asphalt shingles in HMA (hot mix asphalt), and is now beginning to evaluate price and performance compared to virgin asphalt.
 - The state has a reprocessed gravel spec, but it is not used on a standardized basis.
 - The Turnpike Authority still uses all virgin materials; they did one project with recycled material about 20 years ago that was unsuccessful.
 - A number of other states recently have approved recycled asphalt shingle use in pavement, including:
 - Wisconsin
 - Minnesota (approval is pending)
 - Alabama
 - New Hampshire
 - Executive orders may be a good approach to foster greater purchase/use of recycled products from C&D materials.
- Overall Market Observations from the group
 - “China controls everything”

- “Market prices stated in the Tellus Report written last summer are way off, given the Chinese market crash in October 2008.”
- Though prices and demand are down, the recycling industry is not at risk
 - “Recycling is not in decline.”
 - “We are collecting more than ever before.”
- Predictions for the future see markets remaining tight for 2009, but picking up towards the end of 2010
- The industry is at an enormous disadvantage because of offshore container shipping costs, domestic freight weight limitations, and a general lack of support from the state
- Glass in single stream collections is a serious concern for processors
 - “Need to take glass out of the equation”
 - “Glass has no markets and is worthless.”
 - “Glass bottles contaminate other materials because of pressure-sensitive plastic tape (labels), plastic or metal lids, plastic or metal rings.”
 - Glass damages processing equipment at MRFs and mills

Recycling Market Development Needs: When asked what is needed to strengthen recycling markets and end-use industries, the group offered the following suggestions:

- Provide support to existing companies
 - Financial assistance
 - Tax incentives
 - Persuade MassPort to offer better bunker rates for recycling companies
 - Increase weight limit for truck shipping from 80,000 to 96,000 pounds
- Expand recycled product purchasing
 - Use Executive Orders by the Governor to mandate large agencies’ purchase/use of proven recycled content products like recycled asphalt and recycled concrete aggregate
 - Pass recycled content legislation
 - Identify/designate Sustainability Liaisons or Coordinators at key state agencies to be the point-persons for recycled product purchasing, or have roving coordinators
 - While measures like Extended Producer Responsibility (EPR), or LEED points (for locally sourced recycled building materials) may help create demand for recycled building materials in the future, the major concern now is *current* generation of large quantities of drywall and other C&D materials
- Permit and site more gypsum and asphalt shingle recycling facilities
- Permit and site more organics composting facilities so that companies can collect organics
 - For instance, organics collection is a natural add-on to C&D collection
- Address the glass issue
 - Exclude glass containers from single-stream collections
 - Develop more in-state glass markets
 - For container glass
 - For leaded CRT glass (only 2 companies in the world take this material)
- Establish requirement that demolition companies recycle 80% of materials from construction projects they take down

- This will level the playing field for C&D processing facilities, which currently compete with some demolition contractors/haulers that charge lower fees and ship loads to out-of-state landfills
- Piggyback on European Union and California toxic chemical initiatives (e.g., REACH) to remove toxics that are barriers to recycling
 - For instance, bromine fire retardant in expanded polystyrene (EPS) is a barrier to reusing this material in construction and insulation products being developed
- Promote Design to Promote Reduce, Reuse, Recycle
 - Utilize MIT and other Massachusetts universities and institutions in product redesign to eliminate toxics
 - Redesign products to be longer life and more easily reused, repaired, reconditioned, and recycled

Recycling Market Development Needs Previously Identified: At the first meeting the workgroup proposed additional steps to strengthen and expand recycling markets and manufacturers, and increase demand for recycled content products locally and regionally. This input has been included in the brainstorming matrix below.

Brainstorming Ideas and Final Input: The group's proposed recycling market and industry development inputs are summarized in the chart below.

Conclusions: The group concluded the meeting and the workgroup after the final brainstorming session. MassDEP staff announced that the meeting notes would be made available on the MassDEP web site and thanked participants for their input and time.

Summary of Workgroup Input

Technical Assistance

- Recycling Market Development Center (New England or Northeast Region)
- NEWMOA or NERC as host of RMDC and/or to help facilitate industry groups
- Reach small, medium and large sized businesses (WasteWi\$e, Sustainable Business Network, chambers of commerce, small industry associations)
- Highlight success stories, recognize outstanding companies
- Bring together key stakeholders
- Exchange information, resources – web-based resource for different industry groups (doesn't necessarily have to be a physical place)
- Occasional meetings/summits
- Regional industry alliances
- Support separate glass collection pilots to explore alternatives to including glass in single-stream; evaluate marketability of non-glass single stream materials, and separated glass

Financial Assistance/ Economic Development

- Utilize RLF, RIRC, and other state financial agencies/resources to help strengthen existing recycling manufacturers/processors, and help launch new manufacturing and reuse capacity
- Tax incentives for technological developments
- Explore/foster development of regional recycling capacity and market strategies to counterbalance dependence on Chinese markets
- Foster development of end-use markets for container and CRT glass in Massachusetts

Outreach & Coordination

- Training Program to help build manufacturing/reuse industry – intern scheme
- Vocational tech training, entrepreneurship focus
- Use local resources like MIT, Harvard, UMass Dartmouth, UMass Lowell, Babson for R&D to remove toxics, make products better able to be reduced, reused, repurposed, repaired, reconditioned, or recycled)
- Esp. develop new technologies and products to help strengthen recycling industry moving forward
- Marshal resources to help recycling industries with energy retrofits, efficiency, etc.

<p>State Agency Involvement</p>	<ul style="list-style-type: none"> • Designate recycled product/EPP staff liaisons at major state agencies to promote recycled product purchasing, set up and evaluate purchasing pilots • Work with MassPort to exempt recycling industry containers from bunker charges (or reduce charges) • Work with MassHighway and Mass Turnpike Authority to incorporate glass, RAS, RAP, and recycled aggregate into highway projects • Work with Mass Highway and Turnpike Authority to utilize compost in highway landscaping • Work with DCAM to incorporate recycled content products into project purchasing • Ease Massachusetts permitting process, especially for organics composting, asphalt recycling facilities, gypsum wallboard facilities, C&D wood • Executive Orders for recycled content state/institutional procurement
<p>Legislation/ Policies</p>	<ul style="list-style-type: none"> • Raise truck tonnage limit for transporting materials • Financial incentives for manufacturers to utilize recycled feedstocks • Recycled content legislation and or 'carrot' approach to help support recycling markets, especially local/regional • Incentivize use of recycled material in products manufactured in Massachusetts • Continue Waste Ban enforcement to foster market development (e.g., C&D) • Require that 80% of materials from all demolition and deconstruction projects be recycled • Explore Vermont or other states' legislation/specs as models for requiring use of recycled asphalt in pavement, recycled concrete aggregate, etc. • Design for recycling (e.g., packaging, glass containers) – piggyback on larger economies that have already made progress removing toxics (EU, California), or making products more recycling-friendly • Develop certification and clearly understood, catchy eco-label for recycled products made in Massachusetts • Shift costs from un-EPP products/packageging to EPP products/packageging • Leverage LEED statewide, building off of Boston requirement