

CIF Plastics Recycling Projects Update

Inaugural Conference Call

September 30-9-10 AM

Dial in: Local- 416-443-4588 or Toll-free-1 866-518-0791
Conference ID: 4635149

Agenda – 60 minutes

- Introductions/Roll call
- Update on CIF Plastics Projects + Q&A
- Thermoform PET Project with NAPCOR + Q&A
- Round Table Discussion on other plastic recycling developments
- Wrap-up and next call

CIF-supported Plastics Recycling Projects

- 2 types of CIF plastics projects
 - Collection/processing projects where there are major container processing system changes that also help to address plastics (e.g. optical sort installations as part of London and Bluewater projects)
 - Plastics focused projects (e.g. NAPCOR project)
- 2 types of plastics focused projects
 - CIF-led projects with municipal support - e.g. PS densification project
 - Partnership projects (e.g. NAPCOR and Stewardship Ontario)



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Profile of key CIF-supported projects with plastic related benefits

- London regional mrf project
 - \$23mil plant (\$4.5 mil from CIF) that includes optical sort technologies
 - Also looking to encourage consistent plastics collection in SW Ontario
- Bluewater project
 - Conversion to automated collection
 - Optical sort being added to address growing plastics volume and complexity
- Niagara project
 - Investment in upgrading fibre and container sorting systems
 - *Results* - Has allowed for processing of Waterloo fibres, with knock on benefits for container/plastics processing in Waterloo to “feed” the NAPCOR project



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Profile of CIF-led municipally supported plastics projects

- PS densification project – recently completed CIF study; posted on CIF as project #130
- Examines technologies & estimates costs for a range of PS collection and processing options
- Costs range from \$17/kg for small mobile operations (i.e. 45kg/da) to breakeven (against landfill costs) at quantities over 315 t/year
- Is this the kind of project CIF should be doing more of? We welcome your suggestions.



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Project #1 - Thermoform Pet Project with NAPCOR

- Mike Schedler will present details on the project during this call
- CIF and Stewardship Ontario are co-funders (along with several US NAPCOR members)
- Why is CIF involved?
 - Municipalities have repeatedly expressed concern with this material
 - Growth of thermoform PET in waste & blue box streams (its currently a contaminant in PET bottle bales)
 - Questions whether thermoforms should be collected separately or as part of bottle bales going forward



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Project #2 – EFS film/3-7 rigids project with SO

- EFS was one of two successful Ontario reprocessing respondents to RFP – can manage both film and mixed rigid plastic packaging
- Phase 1 expansion from 4900 t/yr to 6300 (mainly film - planned for fall 2009)
- Phase 2 expansion in Q1 of 2011 with addition of second processing line; expanding film plus rigids - 10,800 -14,400 t/yr capacity
- 22% funding from CIF/22% from SO (grants and loans)/56% EFS – total investment \$5 mil over 3 years
- Currently processing material from Waterloo, York, Hamilton, Peel and Toronto (among others) – contract requires new partner municipalities be added in the future
- *Current Status* – Due diligence almost complete; CIF proceeding to Steering Committee for approval Oct. 2/09



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Project # 3 – Entropex #1-7 Rigid Plastics pilot with SO

- Entropex is the largest Ontario based post consumer plastic recycler & 9th largest in North America
- Ontario's mixed rigid recovery capacity requirement exceeds 30,000 tonne/year
- Pilot Phase to process 1,000 tonnes - \$2.6 mil to be funded by SO & Entropex; CIF committing \$750K - \$1 mil for MRF infrastructure improvements (timing 2010)
- 5 municipal partners identified by Entropex for pilot phase: Toronto, Hamilton, Sudbury, OVRC & Guelph
- Full scale dependent on pilot success; if funding not available, Entropex will still have created 16,000 tonne capacity for bottle grade blue box materials
- *Status* – Due diligence review underway



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2009 NAPCOR Work Plan to Facilitate the Recycling of PET Thermoformed Containers

NAPCOR Overview

- What is NAPCOR?
 - NAPCOR is the trade association for the PET packaging industry in the United States and Canada.
 - NAPCOR's primary objectives are to:
 - ✓ Facilitate the recycling of PET packaging;
 - ✓ Communicate the attributes of the PET container as an environmentally sustainable package.

Project Objective

Eliminate the barriers that prevent PET thermoformed packaging from being recycled.

PET Thermoformed Packages - *Definition*

PET packages other than bottles and jars that have the #1 resin identification code, including but not exclusively, clamshells, cups, trays, covers and lids.

2009 Program Plan for Recycling Thermoformed Packages

Target four streams of PET thermoformed packaging to develop reclamation capacity and end markets:

- Bottle reclaimer residuals;
- Mixed rigid bales;
- Out throws from MRF autosorts;
- Cups from arenas / stadiums.

2009 Program Plan for Recycling Thermoformed Packages (cont.)

Methodology:

- Provide technical assistance, education, and technology transfer to all segments of PET packaging recycling industry:
 - Collection
 - Intermediate Processing
 - Reclamation
 - End Use
- Identify and nurture targets of opportunity.
- Identify technical barriers and address through appropriate research.
- Share financial risk.
- Ensure system is economically sustainable.

2009 Program Plan for Recycling Thermoformed Packages *(cont.)*

Collection and Intermediate Processing (MRFs):

- Educate program managers to options;
- Identify specifications and onerous contaminants;
- Provide technical assistance with respect to collection tools and schemes and IP technology.

Involvement of Canadian Partners

- The CIF & Stewardship Ontario are providing funding and logistical support for Ontario component of the program.
- Region of Waterloo & EFS Plastics (Elmira) are shipping sample thermoform PET loads to U.S.-based reclaimers.
- To date, three loads have been sent.
 - test results being evaluated

2009 Program Plan for Recycling Thermoformed Packages *(cont.)*

Reclamation:

- Identify, nurture and formalize reclamation capacity for above collection and IP options;
- Match various streams to appropriate reclamation technology;
- Provide technical assistance to reclaimers with respect to material properties, sort and market options;
- Assist in the development of bale/regrind specs;
- Share financial exposure.

2009 Program Plan for Recycling Thermoformed Packages *(cont.)*

End Use:

- Identify and develop a range of market options for thermoformed packaging recycled PET (RPET) from low value, highly contaminated, to RPET suitable for re-manufacture of thermoformed packages;
- Facilitate the provision of sample materials;
- Network appropriate stakeholders;
- Coordinate laboratory and production trials;
- Share financial risk.

2009 Program Plan for Recycling Thermoformed Packages *(cont.)*

Anticipated Results:

- Specifications and market options developed for post consumer thermoformed PET packaging collected and offered to the market as:
 - A dedicated stream of PET containers either from autosort units or manually sorted at MRFs;
 - Mixed Rigid plastic packaging bales;
 - PET cups collected at venues and special events.
- An education plan to convey these results to the recycling industry.

Find Out More

More about NAPCOR at www.napcor.com

Mike Schedler
NAPCOR Technical Director
mschedler@napcor.com

Questions?

Please dial *6 to “unmute” your line



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Next Call

- Proposed date: Wednesday, October 28 (to be confirmed)
- Information to be posted and distributed in early October



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Thank you!

For more information:

Mike Birett: mbirett@wdo.ca/905-936-5661

Geoff Love: loveenvironment@routcom.com/905-859-0196

