

**PARTNERING WITH YOU.
PROTECTING THE
ENVIRONMENT.**



INTRODUCTION TO EFS-PLASTICS INC.

(LETHBRIDGE AB/ HURON PARK ON/ LISTOWEL ON/ HAZLETON PA)

**MARK SABOURIN, CCLP
PROCUREMENT AND LOGISTICS MANAGER**

ENVIRONMENTALLY FRIENDLY SOLUTIONS

EFS was formed in 2007 with a simple mission:

- Reduce plastic waste by producing a high-quality, low-carbon replacement for virgin plastic.

The acquisition of Exi-Plast is the opportunity to expand EFS's vision:

- Creating a true circular economy through increased use of PCR resins.

SOLUTIONS FOR DOMESTIC RECYCLING IN NORTH AMERICA

Keeping plastics on the continent

- Solutions needed. Following 2018 China's Green Sword import ban of mixed plastics, western markets for mixed plastics have been upended. It is essential to process materials in North America, if they cannot be exported, the landfill is often the only other option.

Alberta location: Expanded reach for West Coast supplies.

- Ensuring opportunities for easier recycling and recovery of plastics from Alberta- as well as important Western US markets.

EFS-PLASTICS LETHBRIDGE, ALBERTA



EFS-plastics Alberta

EFS GROUP OF COMPANIES

110+ employees | Annual sales of \$35+ million | 300,000 sq ft of operations

EFS-plastics



OUR RAW MATERIALS

- Quality raw materials lead to quality finished product.
- We buy rigid and film plastics- there are many grades needed for our production lines.
- Our plants have advanced sorting capacity, reducing labour required at MRF (Material Recovery Facility) and maximizing reclamation of materials.
- I travel to MRFs everywhere to assess their sorting quality (looking for clean bales, low contamination).
- Work with rural communities to develop collection programs for all #1-7 plastics.



SORTING AT THE MRF

- EPR for blue bin under way in Ontario as of July 1.
- MRFs sort plastics into different grades.
- Most of the time #1 (PET), #2 (HDPE Colour and natural), Bulky Rigids (MRP), #3-7 mixed and LDPE film (coloured). There is a growing trend to more separation of #5 PP at MRFs across North America.
- EFS-plastics buys all grades except #1 (PET) and #2 HDPE natural. HDPE natural is most valued overall.
- Resin codes are ranked in order of recyclability, 1 and 2 are easiest to handle, at EFS-plastics we typically challenge ourselves with #3-7s.



IC & I

- Institutional, commercial and Industrial
- At Hazleton PA, our plant runs exclusively on clear warehouse film and IC & I films (i.e. blue film from food processing, agricultural film).
- Rigid plastics from IC&I are bulkier than consumer packaging- many pails, drums, crates. Thicker plastics need specialized processing.
- A lot of progress to be made, IC&I recycling not consistent in most of Canada.
- We engage with companies to assess what we can recycle and develop collection programs.
- Closing the loop- returning own plastic back to retailers in a sellable product, bag or container.



ABOUT TUBS AND LIDS

- Several thousand types of plastics used in packaging. As many as 13,000 variants of polypropylene (PP #5).
- HDPE #2 and PP #5, must be fully separated for processing into resin, each one is a contaminant if blended.
- A plastic food container i.e. for margarine has a HDPE #2 lid, a PP#5 tub.
- Our proprietary technologies assure separation of materials, and we can process containers made with different types of resin.
- We work with manufacturers to encourage design of products for recyclability. Waste is a design problem.



BARRIERS TO RECYCLABILITY

- Some plastics are too small, literally fall through cracks at the MRF.
- Only LDPE film is recycled in Canada, here are many other types of film used in packaging. Film becoming more important as a packaging choice- lightweight, efficient, effective but not always recyclable.
- Presence of contamination in film is a major headache- no interest in investment at MRF without a positive market value.
- If no added value to the recycled material, not economically possible.
- Capital cost of changing manufacturing production lines a barrier/ loss of production a barrier to packaging redesign for recyclability.



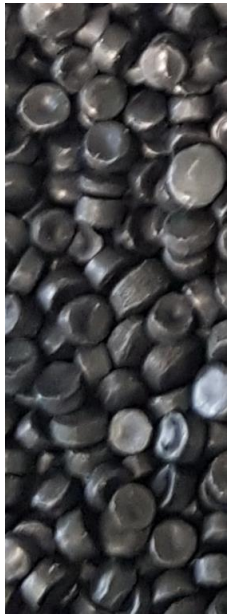
ENCOURAGING CIRCULARITY

- Most plastic recycled from food packaging not readily usable for food-grade applications.
- If we displace the use of virgin material in other plastic industries, there is a huge net benefit.
- Construction and automotive sectors are very important outlets- more and more plastic components in both areas.
- Recycled plastic is **technically** engineered to match properties of virgin material, our final products are customized to each end manufacturer's needs.
- Economic challenge- we must be able to sell product of recycling back to industry. Developing local manufacturers in Ontario and mandating minimum recycled material content in new plastics will help.
- As a consumer, choosing products with **post-consumer recycled** content gives a boost to all players in the industry.

OFFERINGS TO THE MARKETPLACE



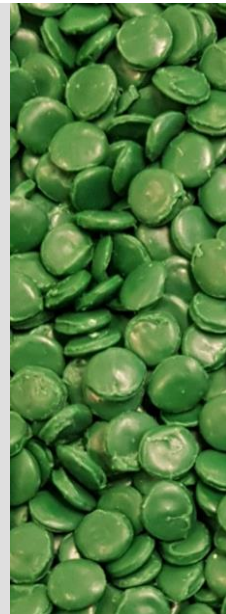
**HDPE
Film**



**HDPE
Blow Mold**



PP Custom Compounded



**LDPE
Transparent**



**LDPE
Grey**



**Non-pelletized
products**



Scrap Metal



Alternative Fuel

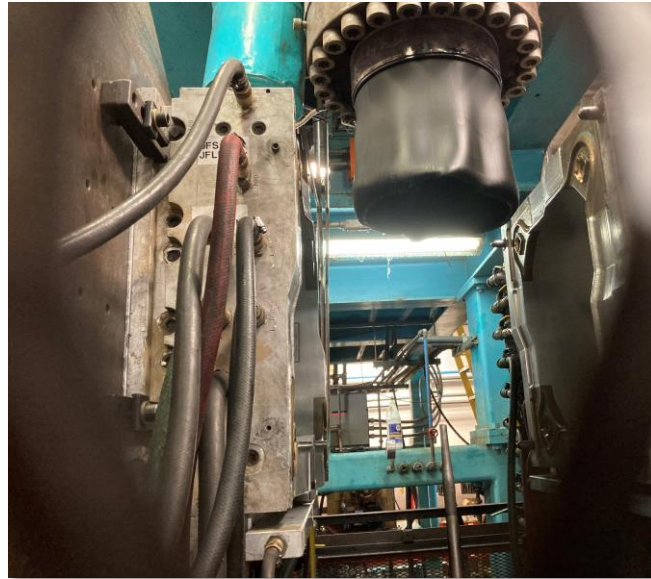


PET Thermoform



Aluminum Bales

EXAMPLES OF EXI-PLAST PRODUCTS



EXAMPLES OF PRODUCTS



EXAMPLES OF PRODUCTS



MORE R'S

- Reimagine packaging design, only use what is necessary to get product to market safely. The quality of the product is what matters, not the marketing appeal of packaging.
- Redesign packaging for recyclability: avoid problematic #3 (vinyl) and #6 (polystyrene). Use transparent/no colour material, with less print and smaller labels. Mono-material LDPE #4 is preferred over other films and multi-layers.
- Refill containers are great, this should be normalized in grocery and big-box stores.
- Repair whenever possible, give an item a second life and support local businesses/trades.

LINKS

- EFS-plastics website: <https://www.efs-plastics.ca/>
- Association of Plastic Recyclers: <https://plasticsrecycling.org/>
- APR design guidelines: <https://plasticsrecycling.org/apr-design-guide/>
- Canada Plastics Pact Roadmap to 2025: <https://roadmap.plasticspact.ca/>
- CPP golden design rules: <https://goldendesignrules.plasticspact.ca/>



EFS-PLASTICS
MARK SABOURIN, CCLP
PROCUREMENT AND LOGISTICS MANAGER
MARK.SABOURIN@EFS-PLASTICS.CA

WWW.EFS-PLASTICS.CA

WWW.EXIPLASTCM.COM