



A DIVISION OF MILLER PAVING LIMITED

Miller Waste Systems

8050 Woodbine Avenue
Markham, Ontario L3R 2N8
E-mail: millerwaste@millergroup.ca

Tel: (905) 475-6356

Fax: (905) 475-6396

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Ms. Kelly Spitzig
Policy & Planning Coordinator
York Region – Solid Waste Branch
17250 Yonge Street,
Newmarket, Ontario
L3Y 6Z1

Re: Film Plastic, Styrofoam and Blister Pack Processing

Dear Ms. Spitzig:

As requested, Miller Waste Systems is pleased to submit to you some preliminary costing and production impacts which would be expected should film plastic, styrofoam and blister packaging be added to the recycling material stream collected throughout York Region.

These estimations are preliminary and relatively general and would require a detailed engineering study prior to finalization.

1) Film Plastic

Film plastic acceptance would impact the facility through a number of different ways, primarily through decreased tonnage throughput of the existing recyclables due to changes in burden depth and a need to slow the processing system down to handle a high volume material such as film plastic. It is anticipated that tonnage throughput would decrease from the facility design benchmark of 20 tonnes per hour, to 16 tonnes per hour, while at the same time the required compliment of sort staff would need to be increased by an additional 15-16 persons.

Collection of the sorted film plastic would be accomplished through the addition of a suction system and dedicated baler, both of which had originally been included in the facility design but removed as a cost reduction component.



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Maintenance costs and operational times at the facility would also need to be extended as the tonnage throughput decrease would necessitate longer shift times to process the same level of recyclable material as current, and maintenance staff as well as supervision would also need to be increased in order to facilitate an increased level of star screen, suction system and conveyor belt maintenance (film plastic around shafts, in bearing housings, blower blades etc.).

Preliminary operational cost implications would be approximately \$2 million per year for sorting staff and \$200,000.00 per year for extended shift times, maintenance staff, utilities etc. for a total of \$2.2 million per year.

One time capital expenditures for the suction system and a small dedicated baler would be expected to be in the \$400,000.00 range.

2) Styrofoam

Styrofoam acceptance would impact the facility to a lesser, although still substantial, extent. At this time it is expected that 4 additional sorters would need to be added to the presort room where the majority of the styrofoam would be removed and placed into the large presort room bunker. Any styrofoam that was not captured in the presort room would then travel through the star screens and appear on the mixed fibre line, both #8 ONP lines and the container line. An additional sorter (one per line) will be required on each of these lines to remove the styrofoam from the current recyclable materials (primarily paper to avoid material contamination and downgrades). Total additional staff compliment is therefore predicted to be 7-8 sort staff.

With this additional staff compliment, it is not anticipated that the overall tonnage throughput of the facility would be decreased below the facility design benchmark of 20 tonnes per hour.

There is a concern regarding the presence of popcorn and small size styrofoam contaminating the fibre stream and resultant material downgrades, as well as the presence of styrofoam in the primary sort room, all of which would likely be disposed of as residue due to a lack of additional storage bunkers serving the primary sort area.

3) Blister Pak

As per our discussion, we understand that blister pak refers to the rigid clear packaging material that is primarily heat sealed around smaller consumer articles to make them of sufficient size to prohibit easy concealment.

From our market research, we are under the impression that this type of packaging is primarily PVC, for which little to no market currently exists.

Thank you for your inquiry regarding the impacts and recyclability of adding these additional materials to the York Region blue box program. Should you have any further questions regarding these materials, please contact myself at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. South', with a long horizontal flourish extending to the right.

George South, H.B.Sc., M.A.
District Manager
MILLER WASTE SYSTEMS