



# *Best Practices Guide* for the Recovery of Vinyl Siding from Residential New Construction and Demolition Projects

August 2005



EPIC and the VCC are councils of the Canadian Plastics Industry Association.



## INTRODUCTION

The information contained in the *Best Practices Guide for the Recovery of Vinyl Siding from Residential New Construction and Demolition Projects* is the result of pilot projects undertaken by the Environment and Plastics Industry Council (EPIC) and the Vinyl Council of Canada (VCC), both of which are councils of the Canadian Plastics Industry Association.

Although EPIC and VCC have endeavoured to provide accurate and reliable information to the best of their ability, they cannot be held liable for any loss or damage resulting from the interpretation or application of this information. This information is intended as a guide for use at your discretion and risk. EPIC and VCC cannot guarantee favourable results and assumes no liability in connection with its use.



## NEW CONSTRUCTION

*The new construction pilot project took place in Ajax, Ontario, in the fall of 2002 through Tribute Homes. The pilot involved the monitoring and co-ordination of the separation and recovery of vinyl siding during the construction of 32 homes over five to six weeks. The homes were of various models and styles, including both single-family homes and townhouses with varying amounts of vinyl siding.*

### Findings:

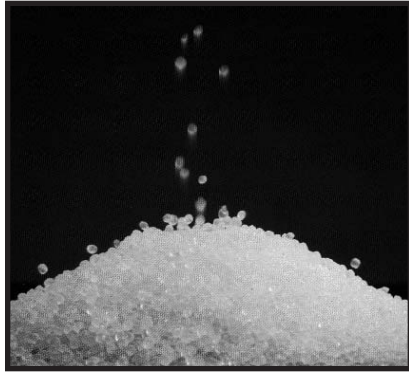
- ➔ No additional time was spent on collecting the off cuts separately.
  - ➔ The program proved relatively easy to implement when training of the work crews was provided and where procedures were followed.
  - ➔ The recovery of vinyl siding off cuts provided a revenue stream (amount depends on distance to recycler) and avoids landfill tipping fees.
-



## TO START

*Before actually beginning a residential new construction or demolition project, it is necessary to have certain elements in place. These include:*

- ➔ A confirmed recycler who has agreed to take the vinyl siding.
  - ➔ Knowledge of the recycler's specifications, i.e. that materials be free of mud, nails and other debris, revenues for recovered materials, etc.
  - ➔ A co-operative builder/demolition company.
  - ➔ Education/guideline for the work crew on procedures.
-



## MARKETS

*The first step in developing a vinyl siding recovery program is to find a market that will purchase or accept the recovered material. The market will dictate the price paid and the material specifications. Things to keep in mind include:*

- ➔ The distance to the project: the closer the market, the lower the transportation cost.
  - ➔ EPIC provides a free, on-line database dedicated to bringing together buyers and sellers of recycled plastics. The “Recycling Markets” navigation button on the EPIC web site [www.plastics.ca/epic](http://www.plastics.ca/epic) provides access more than 1,650 recycling companies throughout North America.
  - ➔ Once you have identified a number of potential markets, conduct a market survey to determine which one is right for you (ask about experience in processing vinyl siding, length of time in business, experience in doing this type of reprocessing, availability of any technical assistance, etc.).
-



# NEW CONSTRUCTION

## On-Site Management



Estimates suggest that vinyl off cuts will represent between five to 10 per cent of the total amount of vinyl siding used per house. The vinyl off cuts (which typically will be two inches in diameter or two inches square) should be placed in a small box, which is hooked onto the outside rail of the stage (ie. construction platform). This will make the box more accessible to the labourers and will avoid contamination of the vinyl by dirt and snow. The contents of this box should be emptied into a large bin (40-cubic yard bin if possible in order to minimize transportation of the siding to the recycler and to maximize the financial returns).



If a small box or container is not available, then vinyl off cuts should be placed in the front yard of each home in a separate pile from the other wastes, preferably on top of a sheet of discarded corrugated cardboard. The off cuts on the cardboard should be loaded by hand into a front-end loader for transport to the 40-cubic yard bin daily.

*(continued on next page)*



# NEW CONSTRUCTION

## On-Site Management (continued)

It is recommended that the vinyl be placed in a dedicated 40-cubic yard bin. This is the preferred size that will maximize financial returns in terms of transportation and the resulting sale to the vinyl recycler. The bin should:

- be labeled “vinyl siding off cuts only” in large letters;
  - be located near the site trailer in order to minimize contamination and to avoid any confusion with other bins being used on the site; and
  - be covered and locked at the end of each day, with the foreman/supervisor in charge of the keys.
-



## Demolition

*The demolition pilot project took place in late 2003 and involved 149 houses clad in vinyl siding at Base Borden, Angus, Ontario. The demolition took place under the direction of Defence Construction Canada (DCC), which has a strong commitment to material diversion. The VCC collaborated with RENOVA Consultants to develop and initiate this research project.*

### Findings:

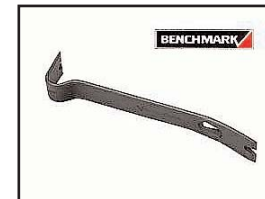
- ➔ Co-operation of all parties is required for a successful demolition.
- ➔ Additional time is required to deconstruct versus standard demolition procedures.
- ➔ The costs of recovering vinyl siding can be off set through the sale of the siding to the public for reuse and through the revenue from vinyl recyclers. Additional revenue can be generated through the sale of other materials with strong retail potential (i.e. windows).
- ➔ The demolition and recovery of vinyl siding is relatively easy if the work crew has been trained and if procedures have been followed.



# DEMOLITION

## Removal of Siding

- ➔ The use of an ice scraper or shingle remover is the most efficient.
  - ➔ The scraper is slid underneath the siding from the bottom or side.
  - ➔ If properly hung (not nailed tightly), the siding will be easy to remove.
  - ➔ Alternatively, a “wonderbar” or “pry bar” can be used to remove the vinyl. This tool is available from most building supply or hardware outlets (see photo).
  - ➔ Taking care with removal allows for the siding to be sold at higher value for reuse.
  - ➔ It is inefficient to try to remove the vinyl trim, inside and outside corners, j-moulding and starter strips.
- 



*A pry bar or wonderbar can also be used to remove the vinyl siding.*

# DEMOLITION

## On-Site Management



The vinyl siding is removed as a separate and distinct phase.



Separate out the material to be sold for reuse.



The other vinyl siding is immediately placed in a dedicated 40-cubic yard bin:

- this is the preferred size to accommodate the length;
- the bin is labeled “vinyl siding only” in large letters;
- the bin is located close to the work site;
- the bin is covered and locked at the end of each day, with the keys held by the foreman/supervisor; and
- the vinyl is laid flat, with twisting to be avoided in order to maximize the bin capacity.



The Environment and Plastics Industry Council (EPIC)  
5915 Airport Road, Suite 712  
Mississauga, Ontario L4V 1T1  
Tel: (905) 678-7748  
Fax: (905) 678-0774  
Web site: [www.plastics.ca/epic](http://www.plastics.ca/epic)

Vinyl Council of Canada (VCC)  
5915 Airport Road, Suite 712  
Mississauga, Ontario L4V 1T1  
Tel: (905) 678-7748  
Fax: (905) 678-0774  
Web site: [www.plastics.ca/vinyl](http://www.plastics.ca/vinyl)

EPIC and the VCC are a council of the Canadian Plastics Industry Association

