

6 Truths About Vinyl

Better Recycling



6 Truths About Vinyl

Better Recycling

1.1 Billion pounds of vinyl is recycled annually in North America, including 958 million pounds of pre-consumer and 142 million pounds of post-consumer materials, a 40% increase since 2014.

- In the U.S. most of the 10 billion pounds of vinyl resin produced annually goes into durable goods—approximately 5 billion pounds goes into water infrastructure (large pvc pipes) that is buried underground and has a service life in excess of 100 years—so it doesn't go into the recycling stream
- Less than 3% of all plastics sent to US landfills is PVC

Sources: 2019 Tarnell Company LLC Recyclers Survey, American Chemistry Council 2022 Resin Report, EPA SMM Report

Better Products



Elimination of lead and cadmium stabilizers since early 1980s.

- In the early 1980's the U.S. and Canadian vinyl industry began a stewardship program aimed at implementing alternative stabilization technology to eliminated the need for stabilizers that contain metals, such as lead or cadmium. This effort was complete for cadmium around the year 2000 and for lead around the year 2006.

Better Emissions



Better Emissions

52% decrease in dioxin emissions since 2009, which amounts to 4.6% of all government-regulated sources

- Chlor-vinyl industry dioxin ambient emissions amount to 4.6% of all 2018 regulated sources such as metals, cement, paper, power, wood, oil, and chemicals.

Sources: EPA TRI Air and Water Data

Better Emissions



6 Truths About Vinyl

86% decrease vinyl chloride emissions since 1987

- Technology advancements over the past 40+ years have resulted in an 86% decline in vinyl chloride ambient emissions since 1987, while vinyl resin production has increased 91% during the same time period

Sources: USEPA TRI Data, Air and Water Data

Better Social Responsibility



6 Truths About Vinyl

Better Social Responsibility

Elimination of worker exposure to vinyl chloride since 1975

- The 1970's was a time of tremendous innovation in the vinyl industry
- Development and implementation of closed-loop processing technology which eliminated exposure for facility workers and established a culture of safety that continues today
- Development and implementation of technology that strips out practically all the vinyl chloride monomer from the resin resulting in further reducing exposure to downstream vinyl product manufacturing workers
- Vinyl resin manufacturing worker related injury rate is 1/3 the rate of other chemical manufacturing and 1/5th the rate of general manufacturing

Sources: USEPA TRI Data, Air and Water Data; OSHA & BLS data

Better Stewardship

Self-reliant for chlorine production

- US and Canadian raw material manufacturers for vinyl resin produce their own chlorine at or near their facilities resulting in minimizing risks associated with chemical transportation, leaks from loading and unloading operations and reducing the industry's carbon foot print.
- The US vinyl chloride producers no longer rely on chlorine derived from mercury-cell technology to manufacture PVC resin.

Sources: EPA TRI Air and Water Data