

# Recycling Wallboard



Presented By

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# Mid Atlantic Wallboard Market

- 2.8 million tons of drywall sold in NJ, NY & PA 2008
- 20% is wasted during const
- 550,000 tons of scrap generated
- PA recycled 35,000 tons (6%)



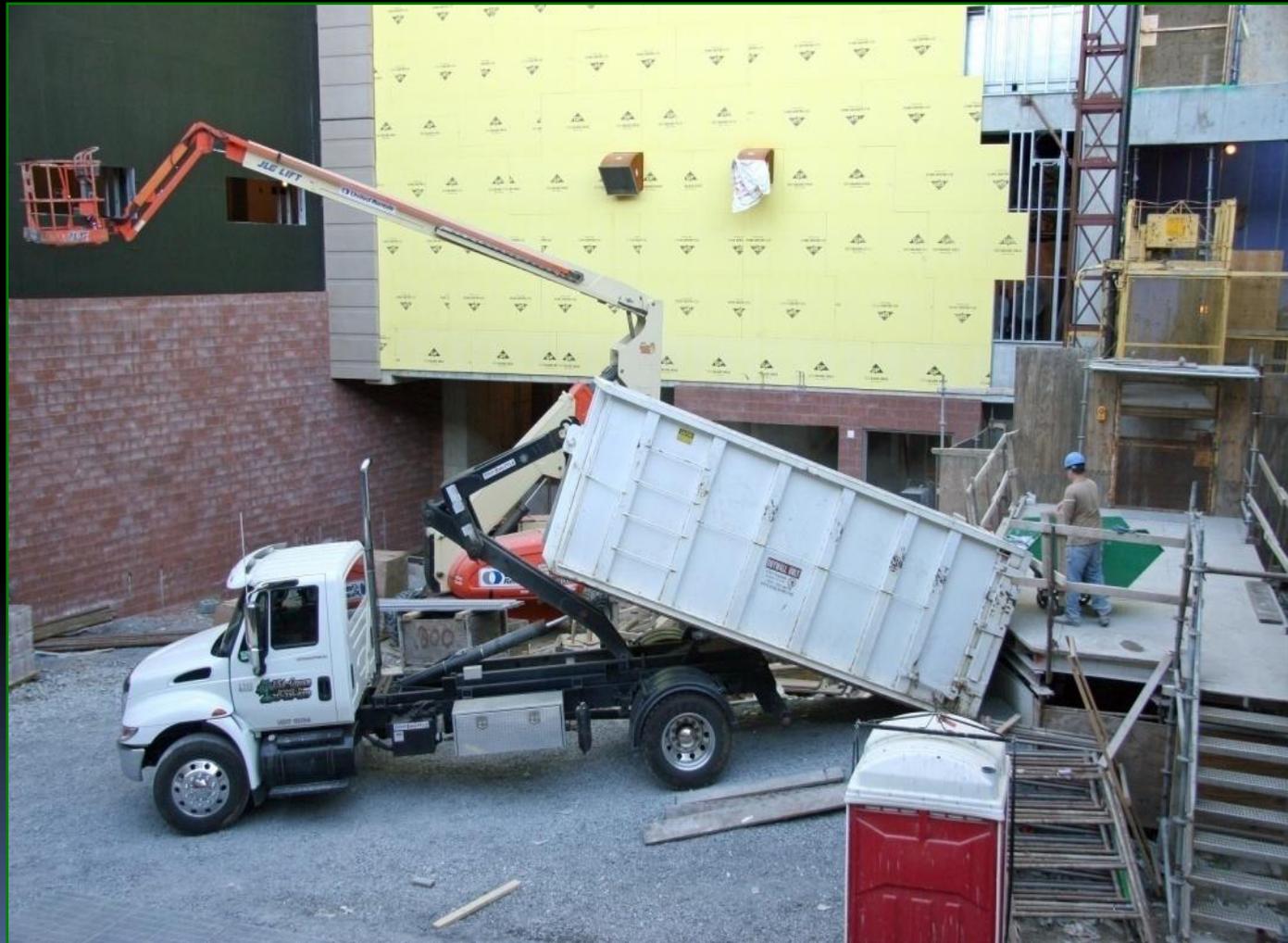
# Types of Wallboard

- Accepted: New gypsum based wallboard products, including type X fire rated (89%)
- Not accepted: Specialty green, purple or gold board (11%)
- No painted or demolition



# Construction Service

- Crews pick up scraps
- Roll off containers
- Pallets



# Transfer Stations & Recyclers

- Transfer stations receive source separated waste
- Recyclers receive co-mingled waste & sort



# Wallboard Recycling Facility

- Since 1997
- Activities enclosed
- Permit by rule status
- Co-product status de-wastes products



# New General Permit in PA WMGM038

## Processing & beneficial use

- For soil additive and animal bedding
- Requires sampling & analysis
- Air quality permit? RFD
- Specialty wallboard handling?
- Research needed to recycle specialty and demo wallboard.



# Process

- Wallboard inspected for contamination
- Enclosed machinery connected to a “bag house” dust collector
- Magnets remove metal screws



# Products

- 3 primary products
  - Fine pulverized gypsum
  - Granular course gypsum
  - Paper



# Agricultural Gypsum Market

- 3 mt used nationally
- Gypsum trucked from Virginia or Indiana to PA
- PA 767,000 tons of lime
- 8 mt of synthetic gypsum



# Why Gypsum For the Soil?

- Calcium & sulfate
- No effect on pH
- Dissolves easily
- Loosens clay soils
- Reduces erosion
- Repairs salt damage



# Evolution Trial & Error

- Early products had dust & spreading pattern problems



# Pulverized Gypsum

- Agricultural soil amendment
- Damp or dry
- Needs state license



# Animal Bedding

- Course materials & paper are used for animal bedding
- PA market is 550,000 tons per year for cattle



# Ultra Fine Gypsum

- Further processed gypsum has flour-like consistency
- Process developed by USA Gypsum.



# Granular Gypsum

- Apply with any spreader
- Low dust
- Blend fertilizer.
- Proprietary process



# Golf anyone?

- 60% of golf courses in the NE use gypsum
- No tillage to incorporate
- Reduces salt levels
- Applied to surface or injected into irrigation systems



# Wallboard recycling a proven solution!

- Landfills reduce gypsum volume
- Building owners & contractors save money
- Farmers save money

