



# Recycling Markets Center

Solid Waste Advisory Committee  
Recycling Fund Advisory Committee  
September 18, 2014



Pennsylvania  
**Recycling Markets Center**



# ***RMC - Overview***

- Formation & Structure
- Programming
- Business Assistance
- Applied Commercialization Research
- Work Planning
- Student Engagement
- Successes



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# ***RMC – Formation & Structure***

## ■ Formation & Structure

- ❖ Acts 101 (1988), Act 175 (2002)
- ❖ DEP RFP (2004)
- ❖ Operations July 2005
  - Independent 501c(3) Pennsylvania non-profit corporation
  - 11 voting, 5 ex-officio board (26 states)
  - Board Chair, President, Secretary, Treasurer
  - Tethered relation with Penn State, Penn State Harrisburg



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# ***RMC – Formation & Structure***

- Formation & Structure

- ❖ Core Service Groups

- Recycling Markets Technical Assistance
- Recycling Markets Business Assistance
- Industry Outreach & Programming
- Enterprise Portal to Recycling Markets Information
- Applied Commercialization Research



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# ***RMC – Formation & Structure***

- Formation & Structure

- ❖ Industry-Wide Programming Material Sectors

- E-Scrap
- Organics
- Glass
- Plastics

- ❖ Demand-Pull Model, Typically back to Processing



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# ***RMC – Programming***

- Programming

- ❖ RMC – NRC Webinars

- Composting – Why it Matters
- Recycled Paper Commodities
- Zero Waste Corporate Strategies Part II
- Used Clothing Markets
- Greening Recycling & Refuse Truck Fleets
- Scrap Tire Markets



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# ***RMC – Programming***

## ■ Programming

### ❖ RMC – NRC Webinars

- Oct 11 – Sept 14
- 8,280R / 5,738A (70%)
- 29.5% PA & Contiguous States
- 50 states
- 4 US Territories
- 7 CAN Provinces
- 4 Foreign Countries



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# ***RMC – Programming***

- Programming

- ❖ State Museum of Pennsylvania

- Recycling Works Exhibit
- America Recycles Day
- November 14 – January 27
- Ribbon Cutting Event - 50
- Visitors/Youth



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# RMC – Programming

- Programming
  - ❖ Recycling Works Exhibit



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# ***RMC – Programming***

- Programming

- ❖ Markets Development Summits
  - Organics Summit (February 20) - 65
  - CRT Summit (September 11) - 150
  - Plastics Symposium (May 09, 2013) - 95



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# ***RMC – Programming***

- Programming

- ❖ CDRA2014

- February 19
- International/Out-of-State Attendees
- 90 attendees
- OEMs/DEP/Processors/Collectors/Associations
- Upcoming Meetings (December 2014)



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# ***RMC – Programming***

## ■ Programming

### ❖ NAPCOR Grant

- Supply-Chain Dynamics, Rural Thermoforms Markets
- Thermoform to Market
- Field Analysis
- Toolkit Development
- April 2014



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# ***RMC – Programming***

- Programming

- ❖ 2015 Recycling Industries Congress

- January 28, 2015



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# ***RMC – Business Assistance***

## ■ Business Assistance

### ❖ Harsco Mineral

- Black Beauty® Glass Abrasive
- Started as LVH Industries, Inc.
- 2008 Recycling Markets Infrastructure Development Grant
- 2 Shifts, Full-Production
- Using previously non-usable material, now product
  
- Uniform Density
- Chemically Inert, non-reactive
- Less than 1% free silica
- Produces a white metal surface
- QPL Approved ([SSPC-AB1](#), [MIL-A-22262B\(SH\)](#))



Courtesy of Black Beauty Abrasives  
[www.blackbeautyabrasives.com](http://www.blackbeautyabrasives.com)  
Referenced September 18, 2014



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# ***RMC – Applied Research***

## ■ Business Assistance

### ❖ Pitt Moss

- Pittsburgh
- Market Opportunity
- Research, Commercialization
- End Market, low-grade paper
- Proprietary mix design(s)



Courtesy of Pitt Moss [www.pittmoss.com](http://www.pittmoss.com)  
Referenced April 03, 2014



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# ***RMC – Work Planning***

- FY 14/15 Forward
  - ❖ Plastics Symposium
    - December 04
  - ❖ New Website Markets Information Expansion
  - ❖ CRT Glass
    - International Technologies & Industry Leaders Forum
  - ❖ SRI Grant
  - ❖ CDRA Data Organization & Analysis
  - ❖ Materials Processing Summit
  - ❖ Markets Contracts Assessment
  - ❖ Materials Trader



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# ***RMC – Student Engagement***

- Student Engagement

- ❖ Penn State Harrisburg

- 15 Student Employees
- 12 Majors/Disciplines
- 6 Graduate Research Papers
- Active Faculty Partnerships
- Lectures, Freshmen Seminar, Graduate Colloquium



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# ***RMC – Featured Successes***

## ■ Featured Successes

### ❖ Summary

- Assisted ≈800 organizations, individuals, businesses
- 54 Counties, 80%
- Diversion Opportunity of ≈175,000T (700)
- Since 2007, \$50M capital investment
- Investment return estimated \$10/\$1



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