



Toxics Release Inventory Analysis of Pollution Prevention (P2) Information

May 17, 2011



Background

- The TRI Program
 - compiles data on toxic chemical releases and waste management activities reported by certain industries and federal facilities
 - makes data available through data files and database tools
 - data are reported annually
 - data are reported at the chemical level
- Section 8.11 of TRI's Form R is an Open Response section that allows respondents to provide information on:
 - Source Reduction
 - Recycling
 - Pollution Control Activities



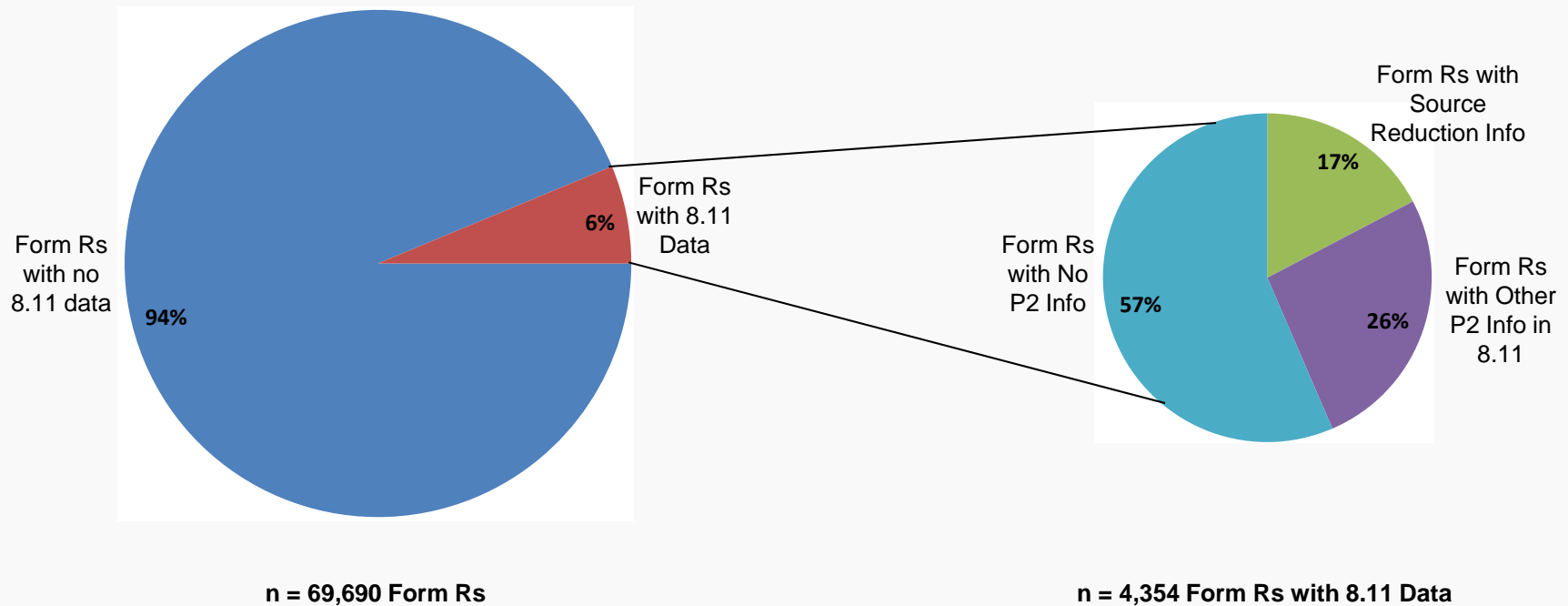
Pollution Prevention Information Submittal Rate

- Out of total of 20,797 facilities filing for 2009, 9% entered information in 8.11
 - Out of those facilities with 8.11 data, approximately 50% reported Pollution Prevention activities
- Out of total of 69,690 Form R submissions for 2009, 6% included information in 8.11
 - Out of those forms with 8.11 data, approximately 42% recorded Pollution Prevention activities
- Although the purpose of 8.11 is to enter source reduction, recycling, and treatment information, many filers use it to enter unrelated information



P2 Reporting on RY 2009 Form Rs

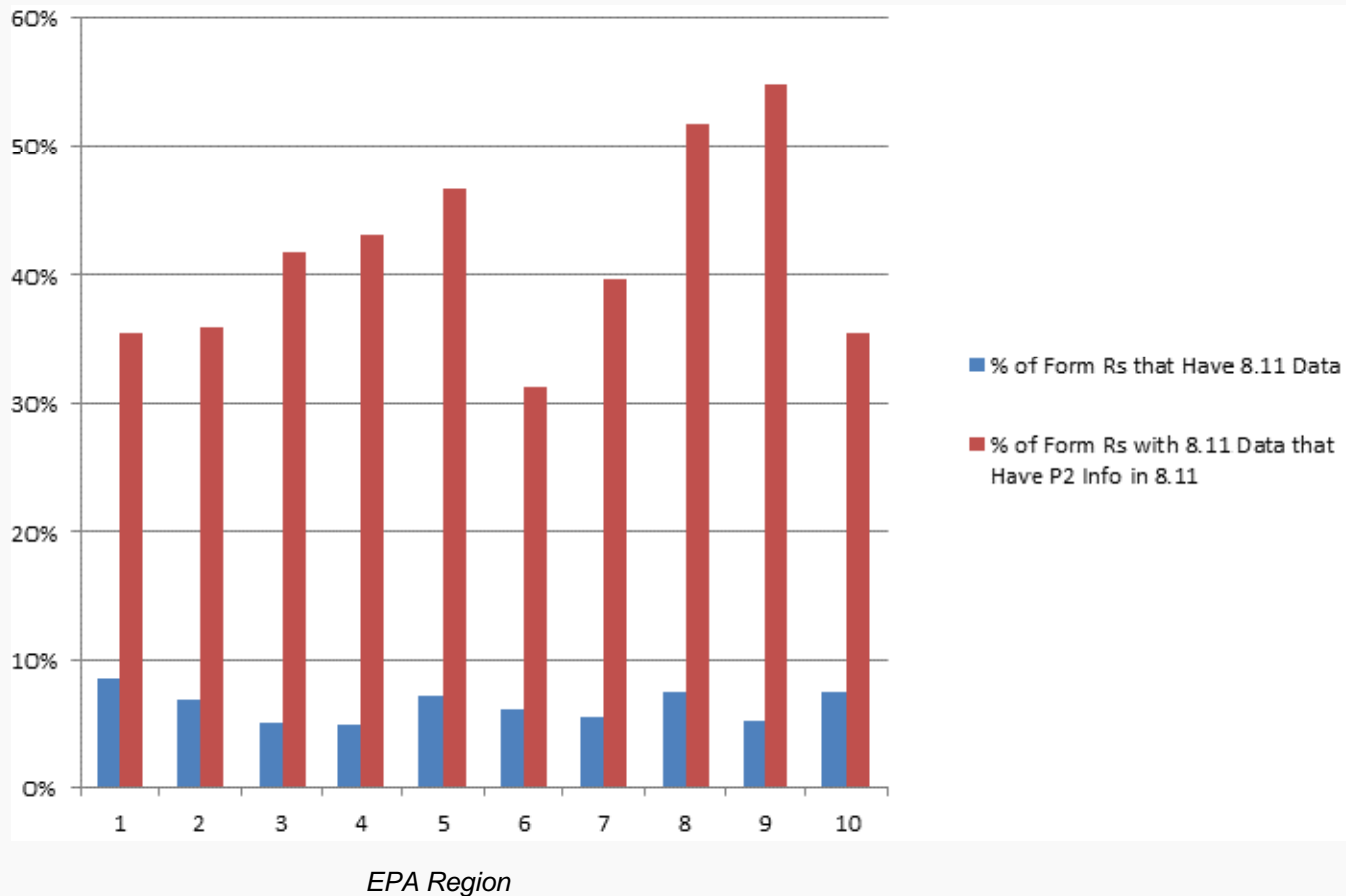
Pollution Prevention Information in RY 2009 Form R Submissions (*% of Form Rs*)





Findings by Region

RY 2009 Pollution Prevention Reporting by Region





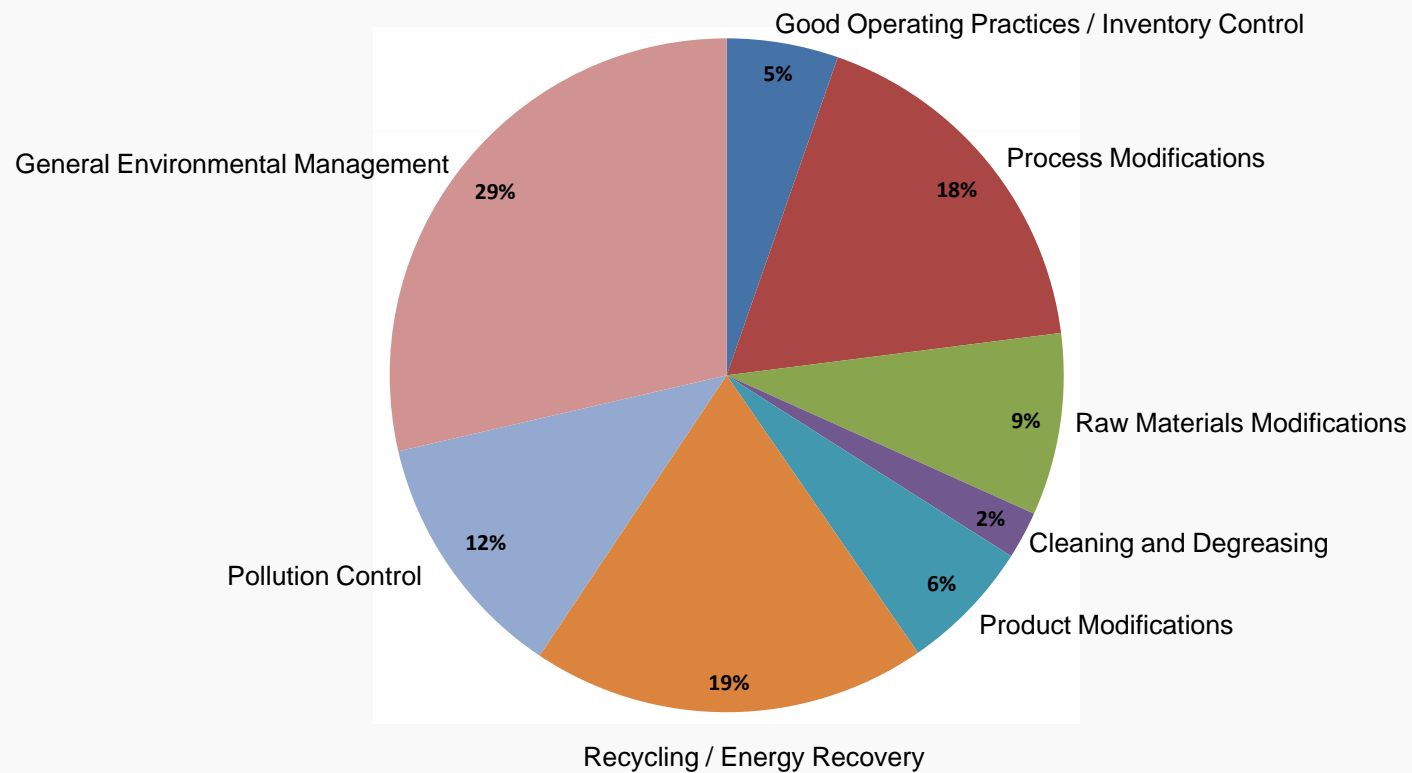
Method

- Analysis performed to categorize reporter's open responses by Pollution Prevention activity category
- Categorized open-ended information
 - 43 specific activity codes falling into 8 main categories:
 - Good Operating Practices / Inventory Control
 - Process Modifications (including Spill and Leak Prevention)
 - Raw Materials Modifications
 - Cleaning and Degreasing
 - Product Modifications (including Surface Preparation and Finishing)
 - Recycling/Energy Recovery
 - Pollution Control
 - General Environmental Management (including P2 Planning)
 - The categories are also crosswalked to the Pollution Prevention Act categories PPA§13106 and §13102



Findings by Pollution Prevention Category

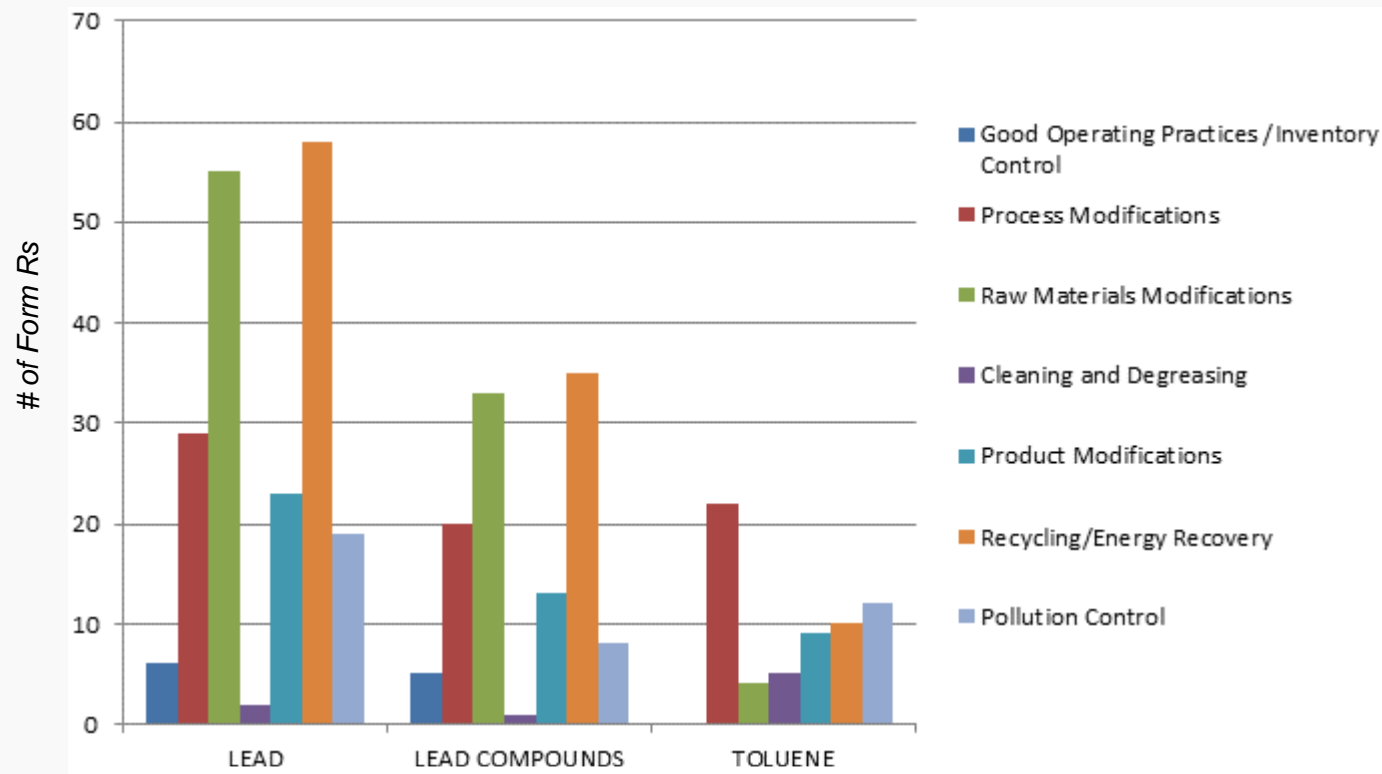
RY 2009 Pollution Prevention Activities by Activity Category



n = 1,808 Form Rs with P2 Information in 8.11



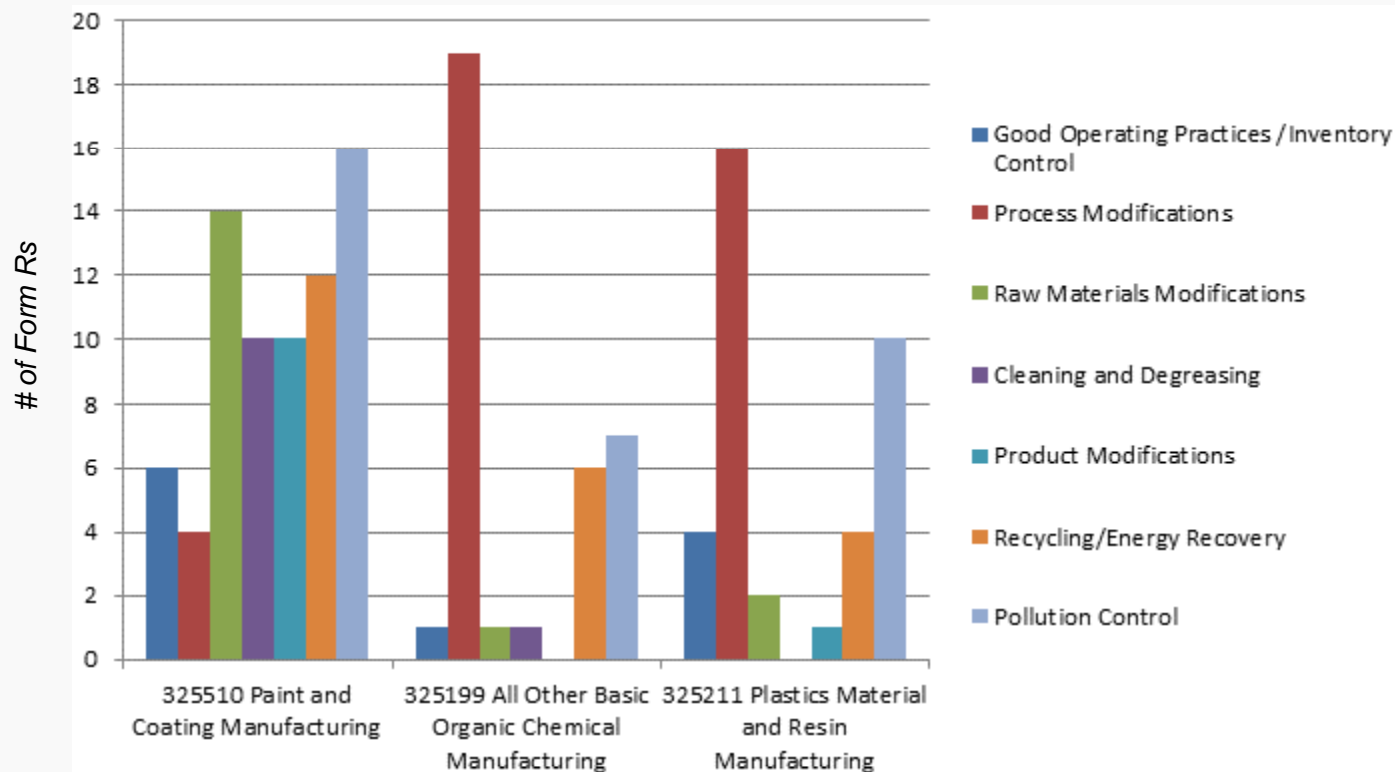
Top 3 Chemicals by Pollution Prevention Activity Category, RY 2009 Findings by Chemical





Top 3 Sectors by Pollution Prevention Activity Category, RY 2009

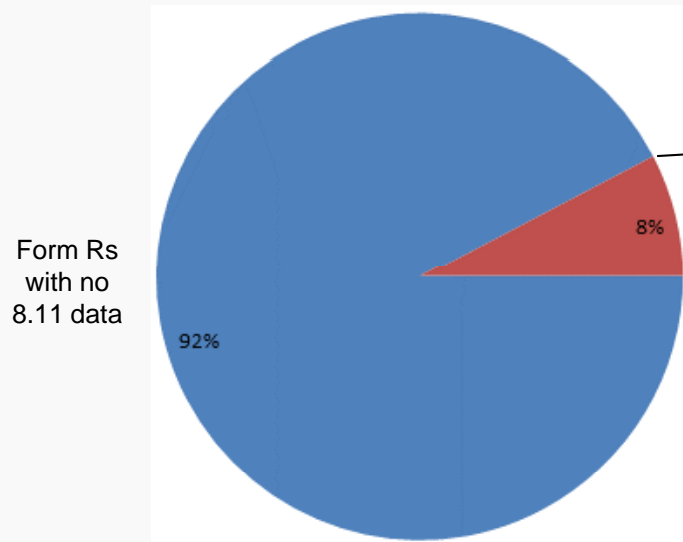
Findings by Sector



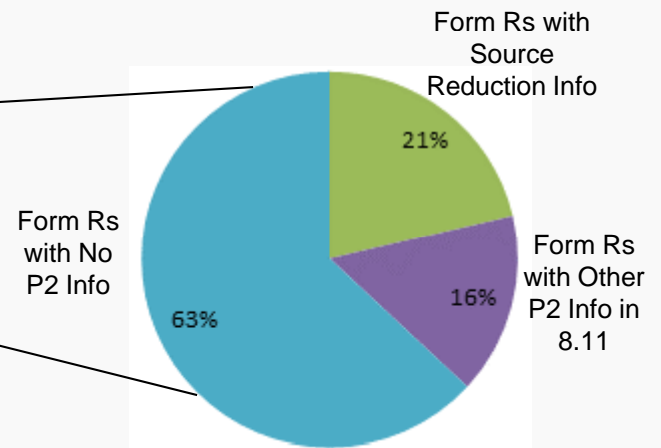


Pollution Prevention Reporting on RY 2009 Form Rs -- Regions 1 and 2

Pollution Prevention Information in RY 2009 Form R Submissions, Regions 1 and 2
(% of Form Rs)



n = 6,502 Form Rs

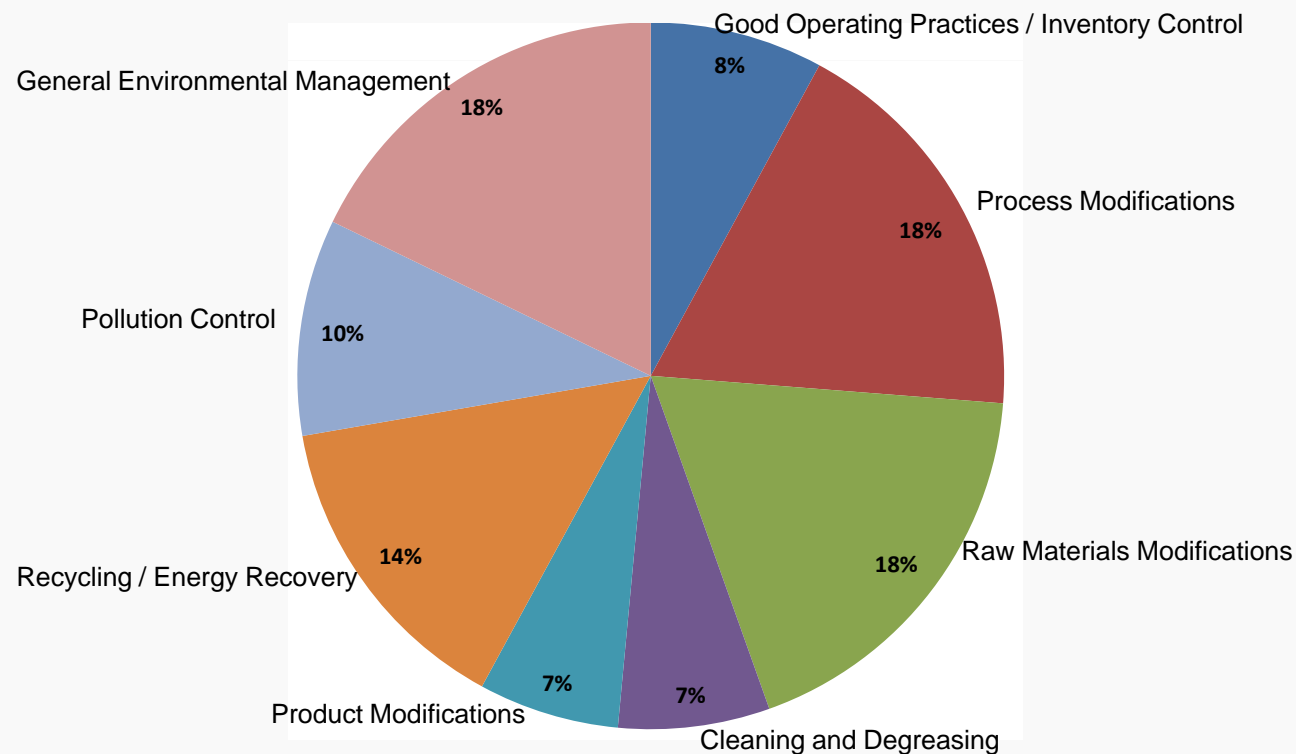


n = 499 Form Rs with 8.11 Data



Findings by Pollution Prevention Category -- Regions 1 and 2

RY 2009 Pollution Prevention Activities by Activity Category, Regions 1 and 2

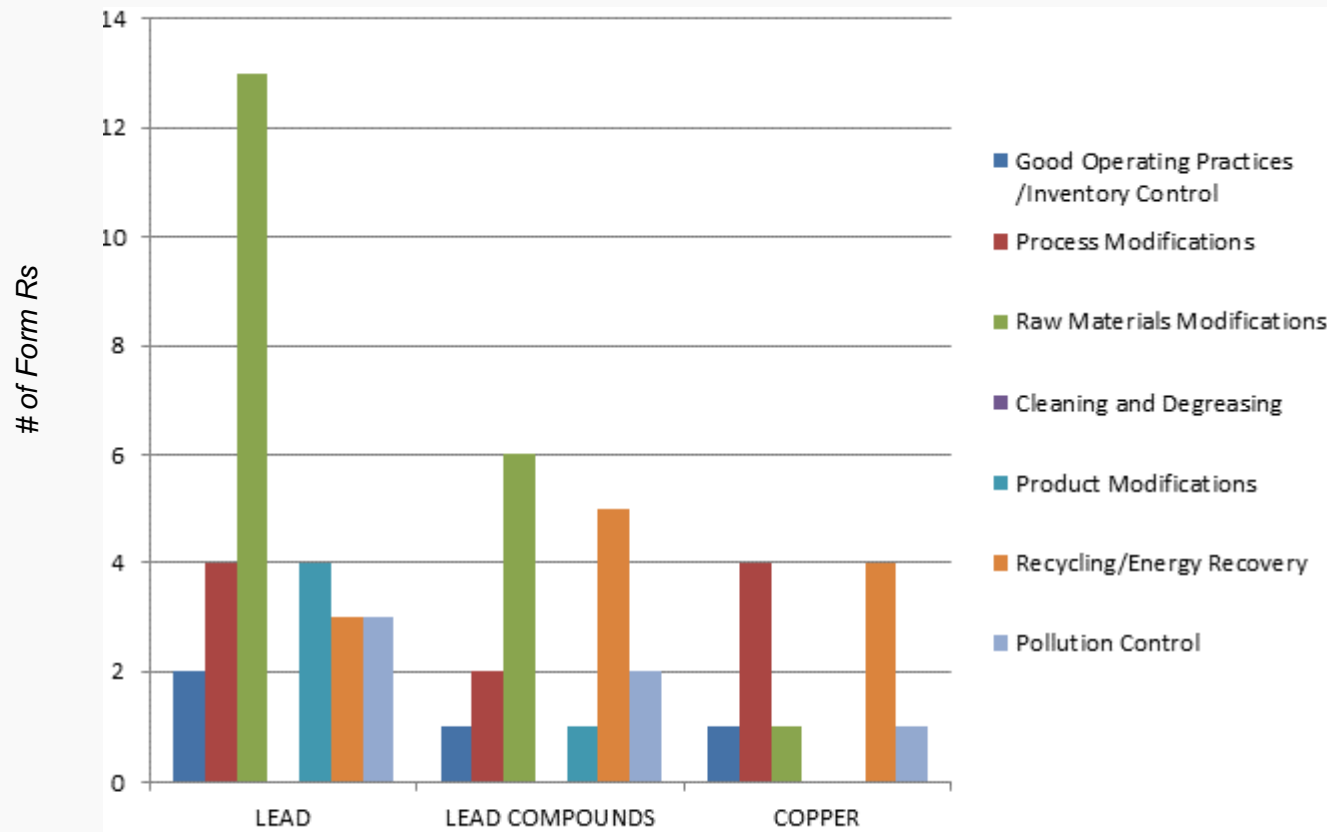


n = 176 Form Rs with P2 Information in 8.11



Findings by Chemical: Regions 1 and 2

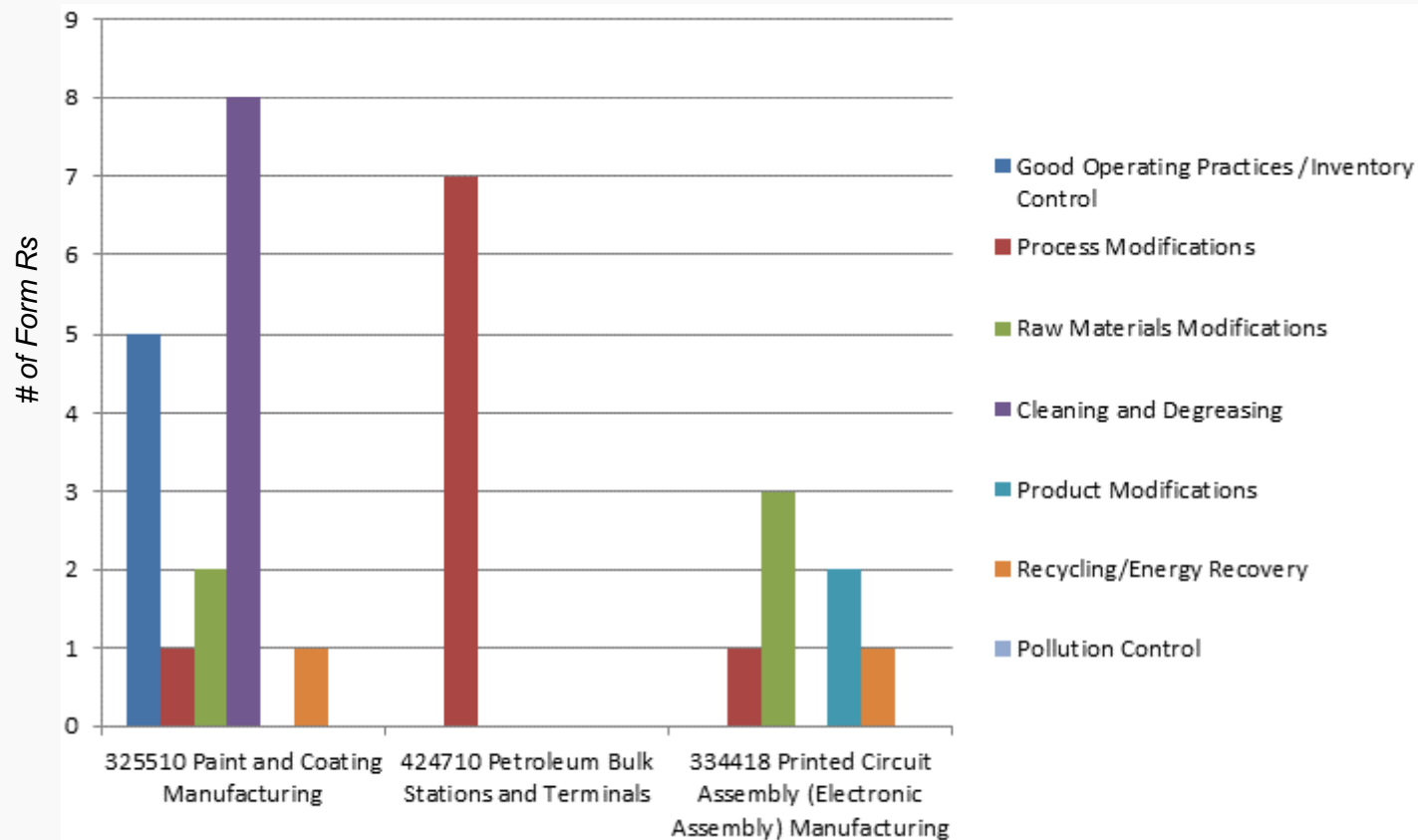
Top 3 Chemicals by Pollution Prevention Activity Category, RY 2009, R1 and R2





Findings by Sector: Regions 1 and 2

Top 3 Sectors by Pollution Prevention Activity Category, RY 2009, R1 and R2





Potential Applications

- National Analysis
 - Add Pollution Prevention information to the annual TRI National Analysis
- Community Engagement and Outreach
- Technology Transfer
 - Possibly develop a tool to search for P2 opportunities by sector, by chemical, by geographic location, or by Pollution Prevention category
 - Tool could be used by industry and communities



Next Steps

- Conduct additional years' data into the analysis
 - Include RY2010 data this summer
- Correlate 8.11 analyses with 8.10 data
 - Standardized selections from a dropdown menu of Pollution Prevention choices
- Correlate 8.11 analyses with production ratio
- Correlate 8.11 analyses with parent company
- Investigate value of linking
 - MA and NJ Pollution Prevention info
 - PRTR data
- Investigate Pollution Prevention motivation
 - Regulatory motivation (e.g., SEPs, RoHS, REACH)



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