

Pollution Prevention Planning under CEPA 1999 – Measuring Results to Date

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Outline of Presentation

- P2 Planning and CEPA 1999
- P2 Planning Notices to Date
- Measuring the Results
- Results for 3 P2 Planning Notices
 - Dichloromethane (DCM)
 - Nonylphenols (NP) in Product
 - Textile (TME) & Nonylphenols in Wet Processing
- Challenges of Measuring Results



P2 Planning Under CEPA 1999

- Part 4 of CEPA 1999 provides authority for the Minister to require the preparation and implementation of P2 plans (section 56)
- Other authority to require P2 Plans under CEPA 1999 include
 - Part 7: International Air and Water Pollution
 - Part 9: Federal Government Operations
 - Part 10: Court Orders (violations of CEPA 1999)



Content of P2 Planning Notices

- Key elements of a P2 Planning notice:
 - Substance(s) for which a P2 plan is to be prepared and implemented
 - Description of industry sector or name of specific company
 - Activity for which plan is to be prepared
 - Factors to be considered in preparing a P2 plan
 - Timeline for preparing/implementing a P2 plan
 - Administrative matters (i.e. format for declarations, progress reports)
 - Intention of Minister to publish information submitted

Information Collected

- Declaration of Preparation, Interim Progress Reports & Declaration of Implementation contain:
 - Facility background information
 - Baseline data – uses, releases, transfers
 - Anticipated actions, results, timelines
 - Actual results and dates achieved
 - How factors to consider were taken into account
 - Monitoring and reporting actions
 - How risk management objective will be/has been achieved
 - Senior level authorization



P2 Planning Database & Website

- Webpage created for each P2 Planning Notice
- Features online reporting forms tailored for each P2 Planning Notice
- Help/instruction guide
- Search Declarations & Interim Progress Reports
 - Notice
 - Substance
 - Location
 - Facility Name
- Links to support material (i.e. handbook, model plans, fact sheets, frequently asked questions)

www.ec.gc.ca/cepap2

P2 Planning Notices Published

Seven P2 Planning Notices Published:

- Acrylonitrile:
 - RMO – reduce releases from synthetic rubber sources to lowest achievable levels by Dec 31 2005
- ❖ Dichloromethane (DCM):
 - Targets 5 different industry sectors/activities,
 - RMO – 85% reduction use & release by 2007
- ❖ Nonylphenol and its Ethoxylates in Products (NPE):
 - Importing and manufacturing activities,
 - RMO – 2 phases, 50% use reduction by 2007 and 95% reduction by 2010



P2 Planning Notices Published

- ❖ Textile Mill Effluent (TME):
 - RMO – NPE reduce release by 97%; TME achieve & maintain max acute toxicity of 13 percent IC₅₀
- Municipal Wastewater Effluent:
 - RMO - maintain concentration of total residual chlorine ≤ 0.02 mg/L in effluent by Dec 15/09
- Wood Preservation:
 - 5 named specific companies
 - RMO – implement BMP of voluntary program
- Base Metal Smelting
 - Published with Code of Practice
 - RMO - Release targets per facility & substance



Measuring the Results to Date

- Current P2 Notices target:
 - 12 industry sectors & 19 Schedule 1 substances
- Administrative indicators:
 - % on time, % amendments required
 - Used to improve guidance, compliance promotion
- Notice Specific indicators:
 - quantities (released, used), anticipated vs. actual actions, P2 technique selected
 - used to evaluate effectiveness, identify successes
- **NOTE** – the following results are limited to info in Declaration of Preparations for 3 P2 Notices



Administrative Metrics

Notice	Potential Subject	Sch 1 Rec'd	Amendment Req'd	Time Ext Requests	Confidential Requests
Acrylonitrile	1	1	1	0	0
DCM	109	35	17	2	1
NP in Product	349	71	40	5	12
Textile/NPE	176	54	30	5	4
Chlorinated wastewater	146	Due July 15/07	n/a	n/a	n/a
Wood Pres.	5	3	3	1	0
Base Metal Smelting	11	Due Nov 28/06	n/a	n/a	n/a
Totals	797	168	91	13	17

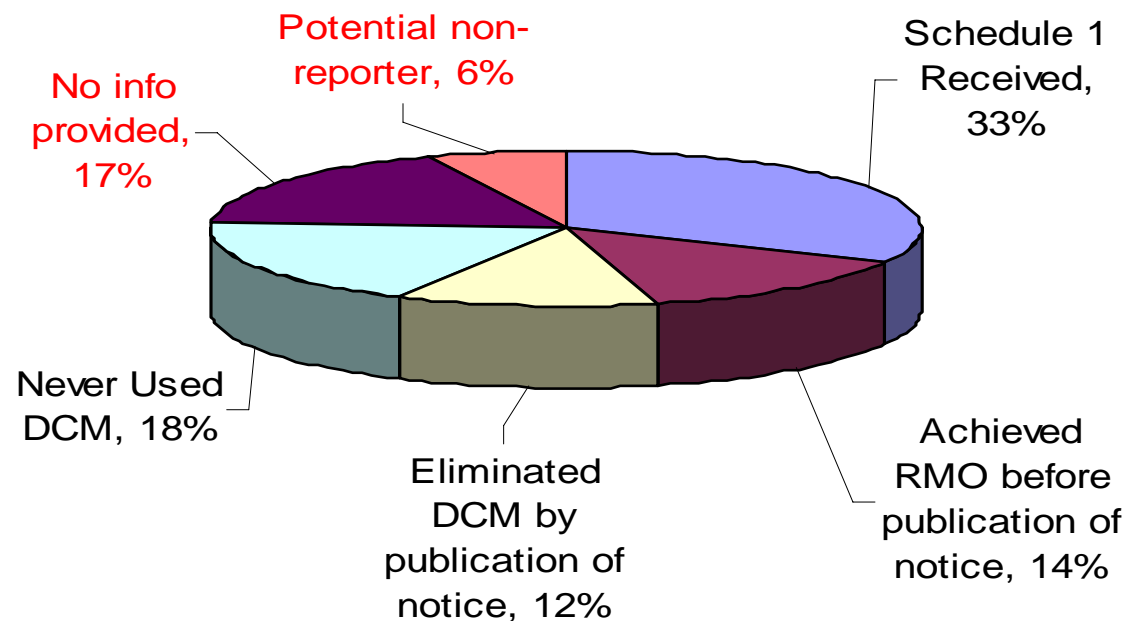


Dichloromethane – Intro Metrics

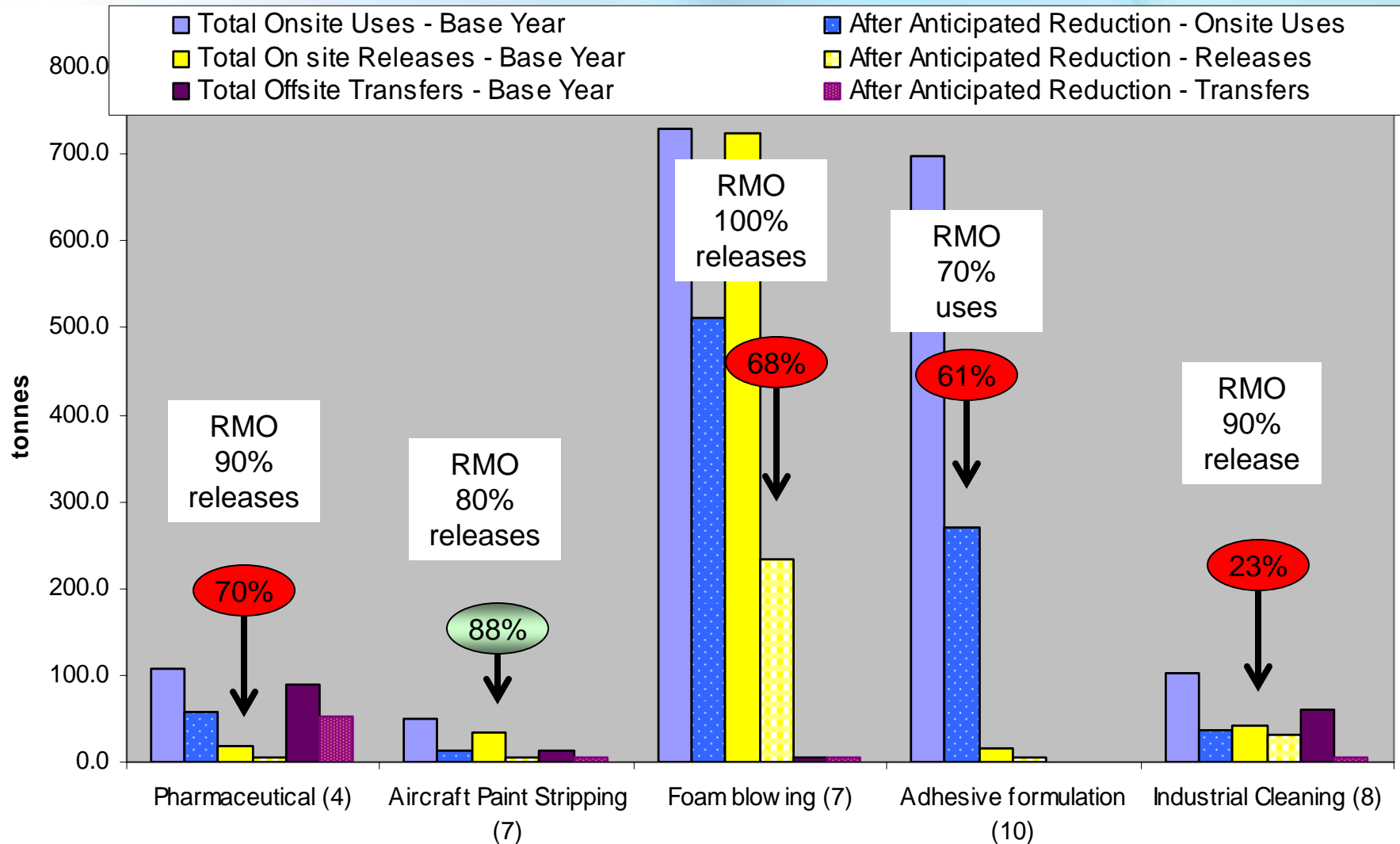
Baseline Numbers

- 1688 tonnes of DCM used, 834 tonnes of DCM released, 170 tonnes of DCM transferred off site

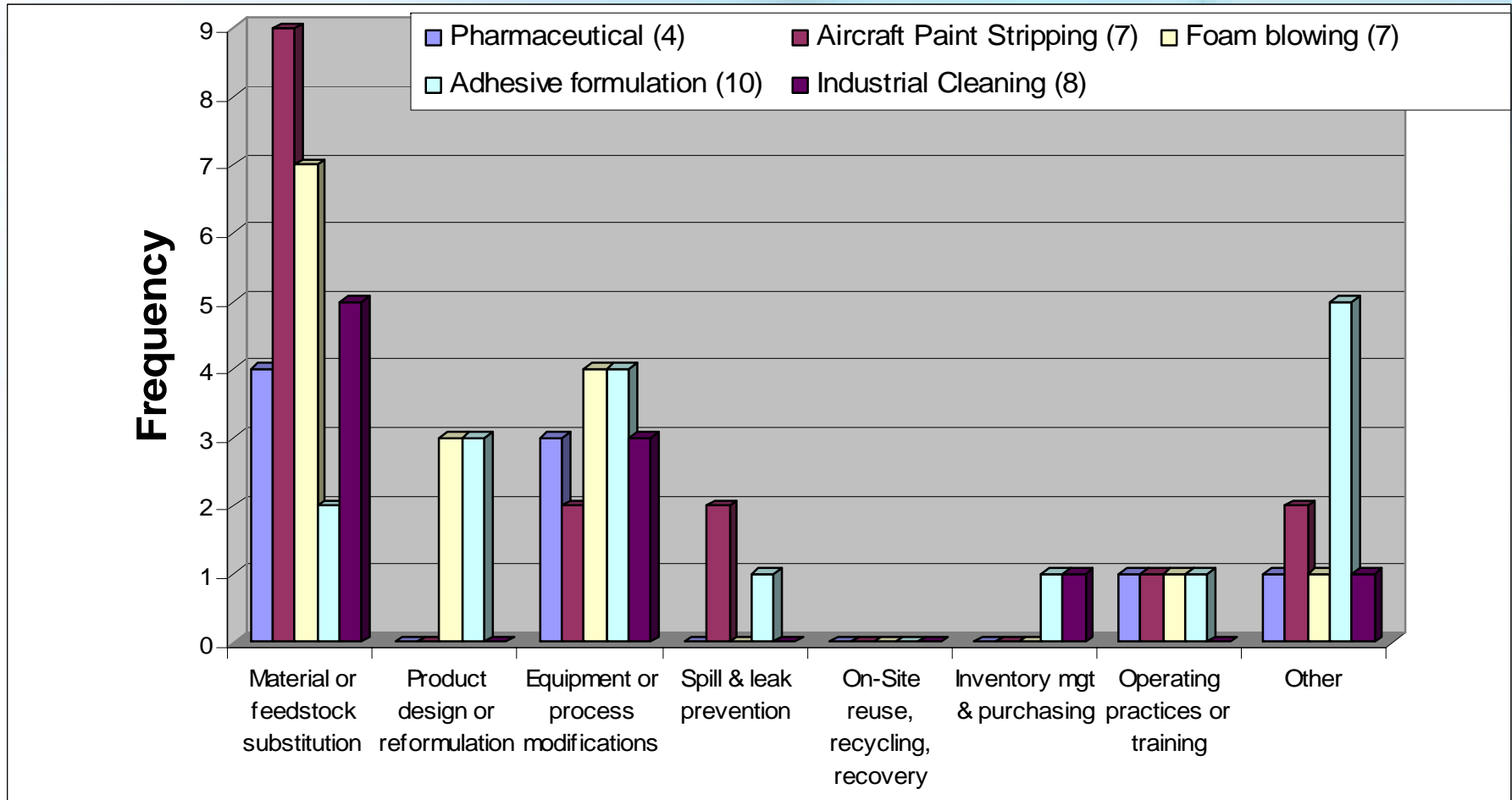
Original Regulated (P2ee) list targeted 109 Facilities



DCM - Anticipated Reductions



DCM – P2 Techniques

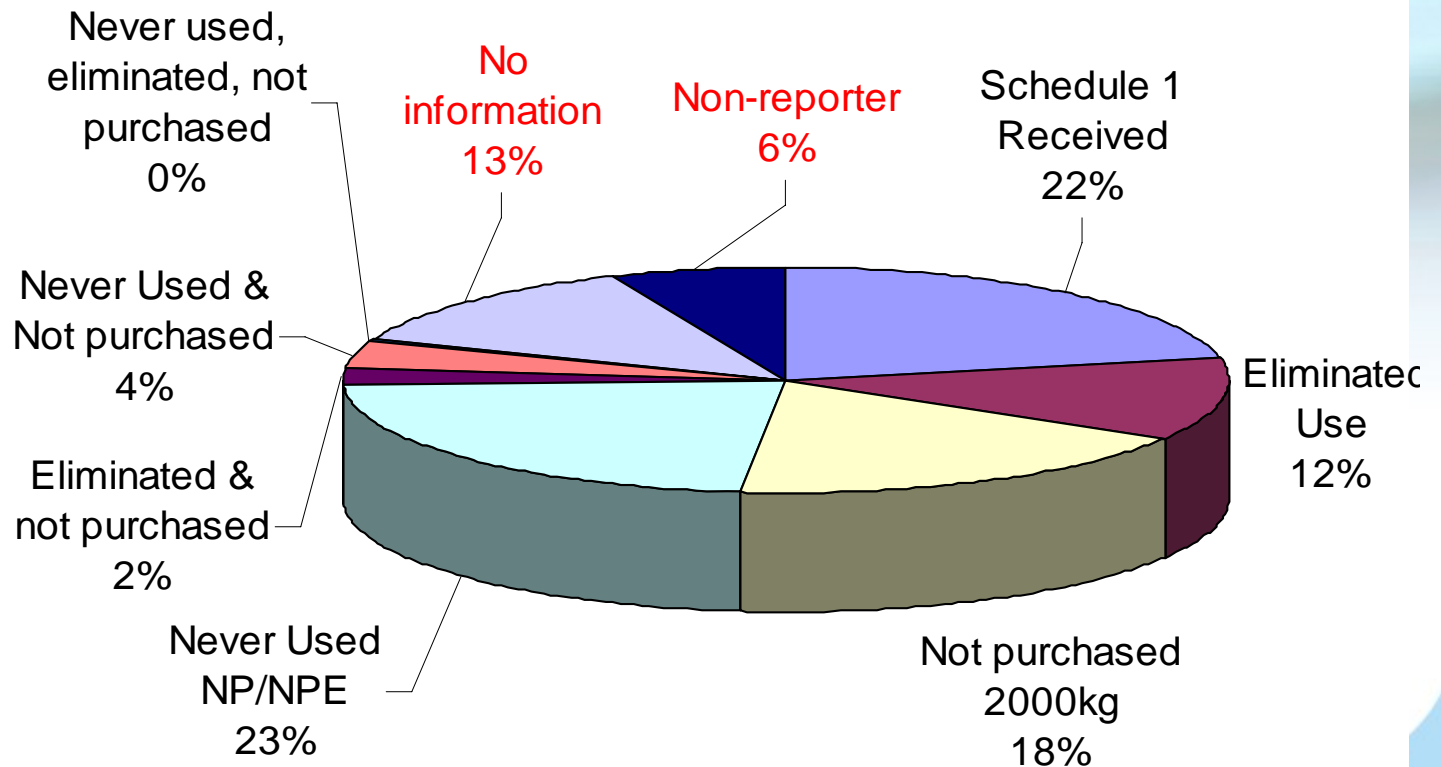


NP/NPE in Products – Intro Metrics

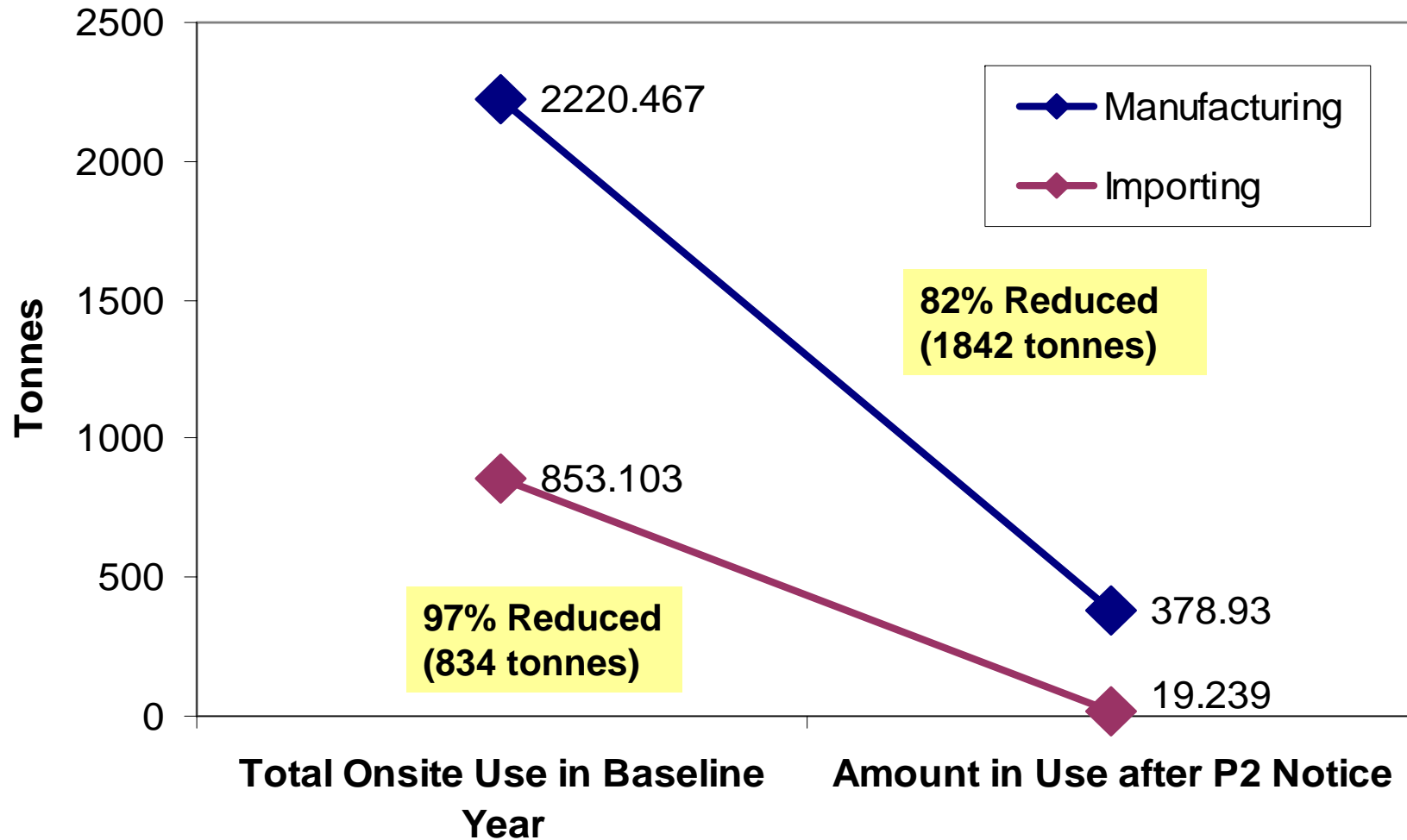
Baseline Numbers:

- 55 manufacturers, 27 importers – 3074 tonnes of NP/NPE

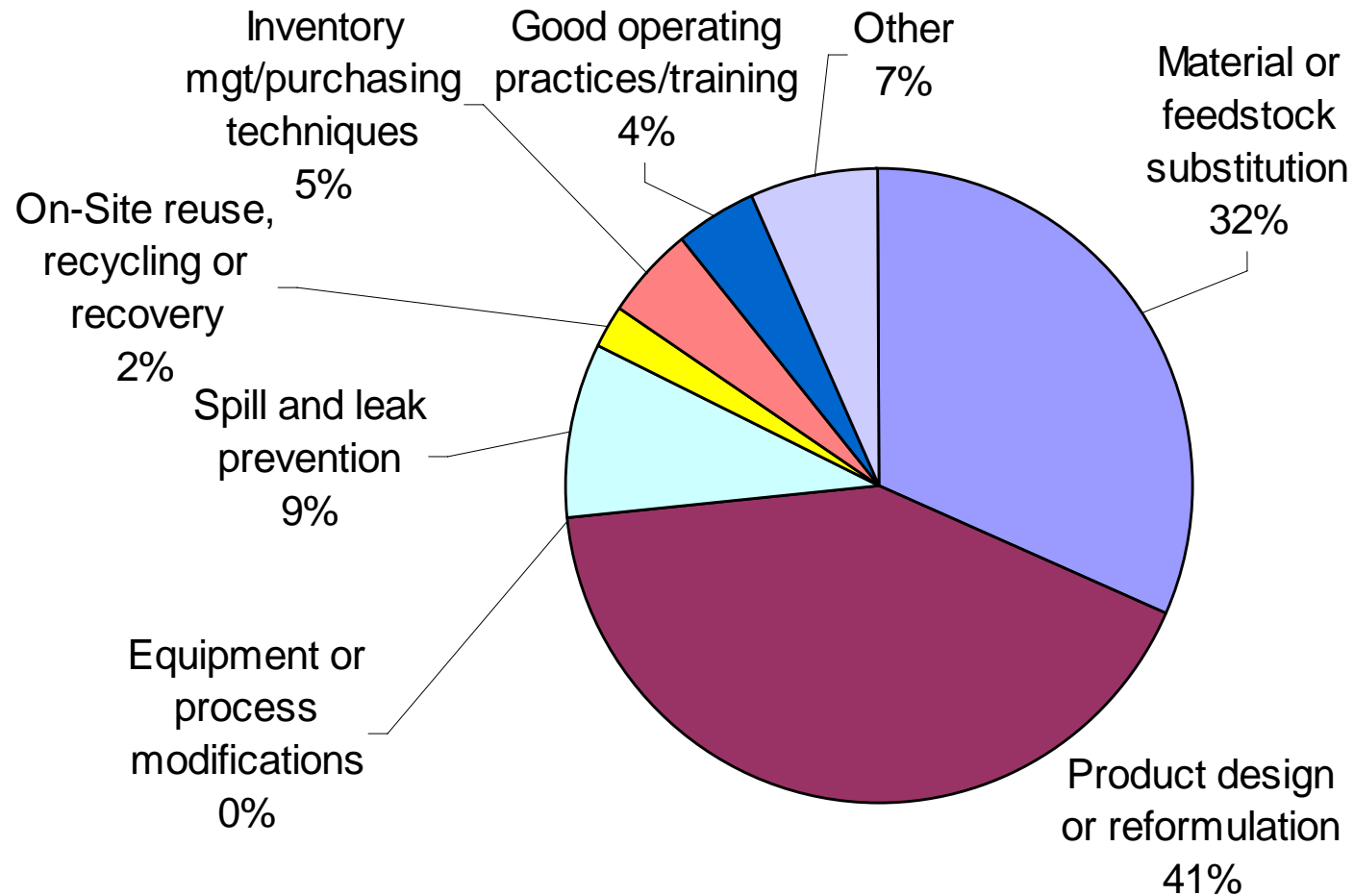
Original regulated (P2ee) list targeted 349 facilities



NP/NPE – Anticipated Changes



NP/NPE – P2 Technique

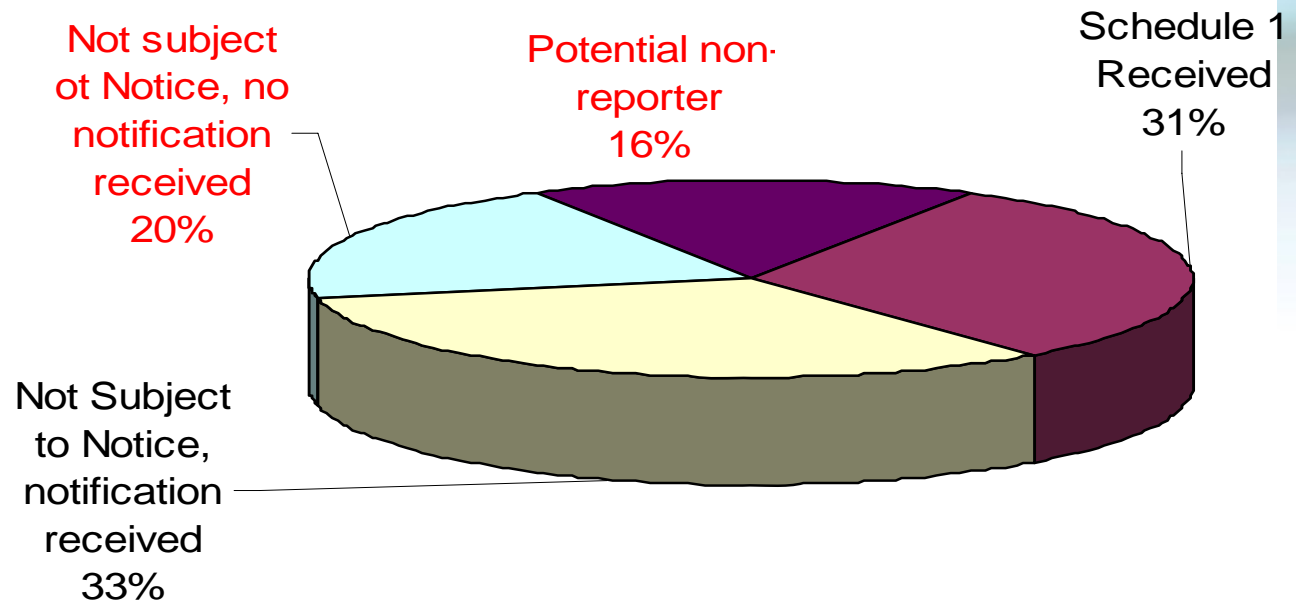


Textile Mill Effluents – Intro Metrics

Baseline Numbers:

- 54 facilities, 11 types of wet processing activities, 139 tonnes of NPE used

Original regulated (P2ee) list targeted 176 facilities

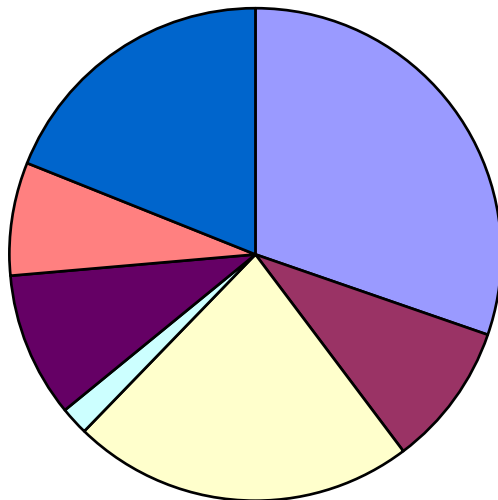


Textile Mill Effluents; Mills and Activities

- Targeted mills vary by both textile manufacture and process

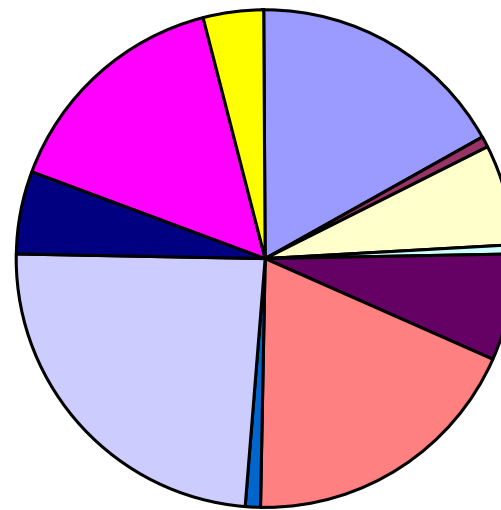
Type of Mill Activity

- Knit fabric finishing
- Carpet finishing
- Woven fabric finishing
- Wool finishing
- Stock yarn finishing
- Non-woven fabric finishing
- Other

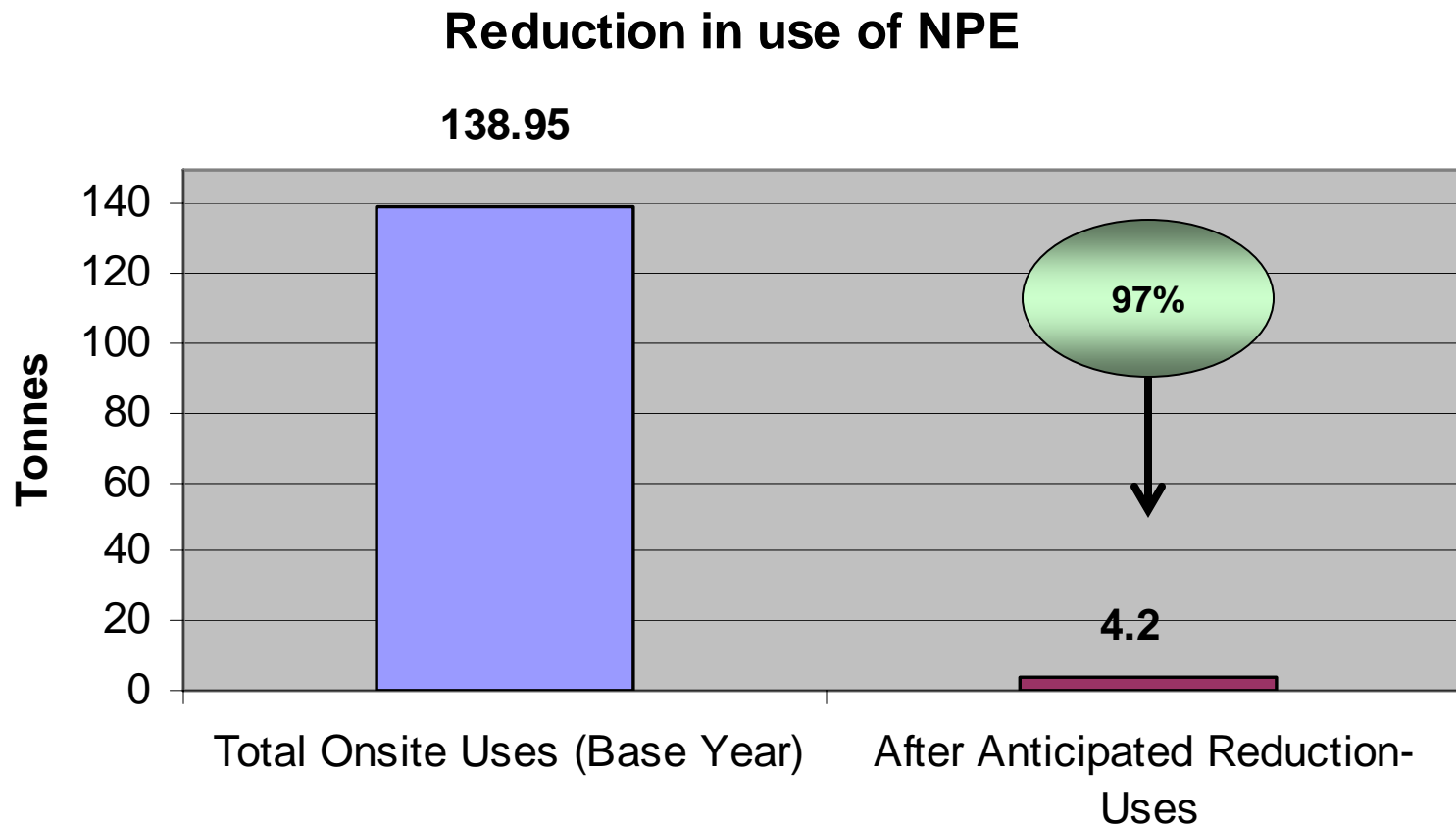


Type of wet processing activity

- Scouring
- Carbonizing
- Neutralizing
- Fulling
- Desizing
- Bleaching
- Mercerizing
- Dyeing
- Printing
- Wet Finishing
- Other

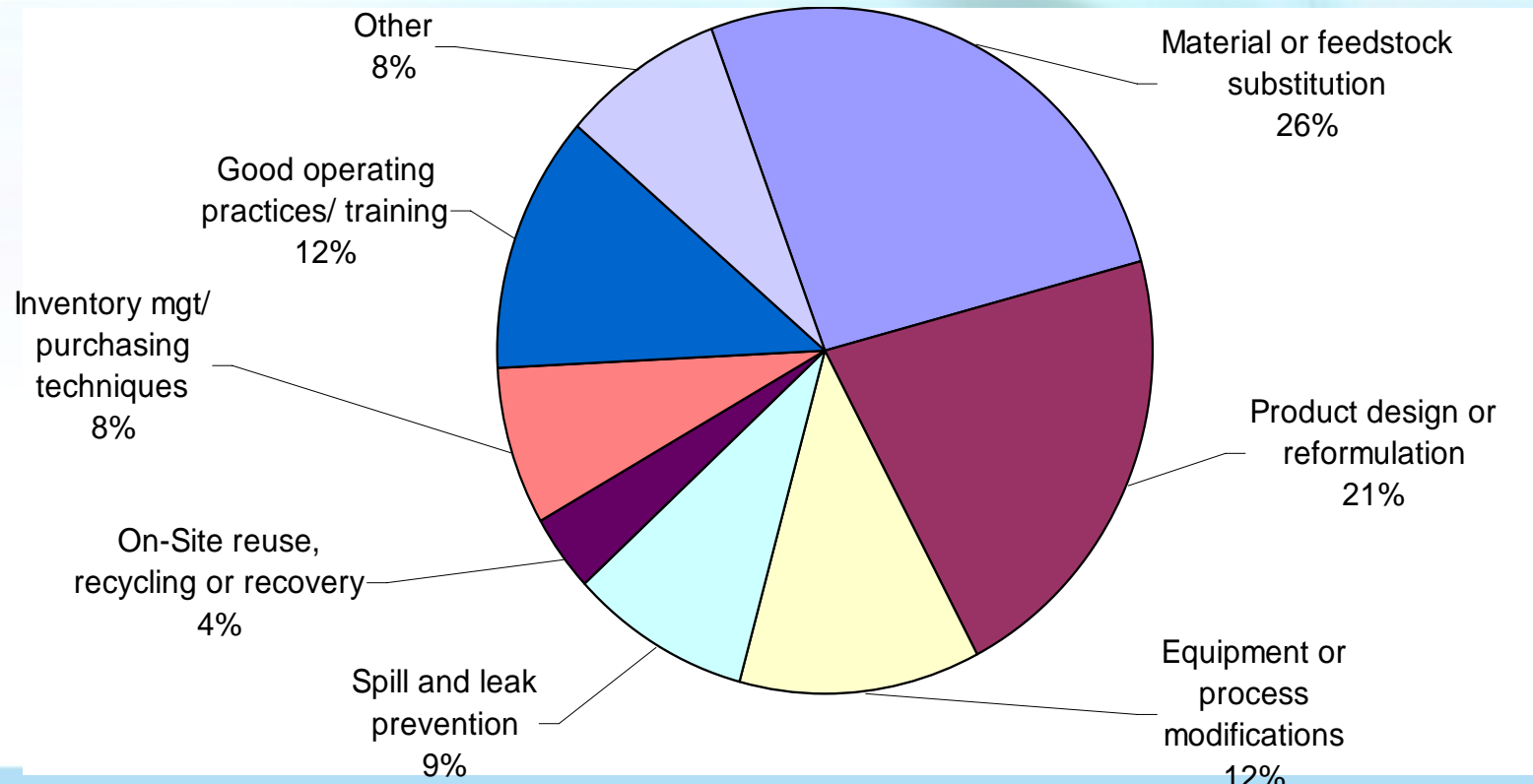


Textile Mill Effluents – NPEs used



Overall Trends – Future Opportunities

- P2 techniques reported to date for DCM, NPE and TME Notices



Challenges of Measuring Results

- Determining what information should be reported & analyzed to evaluate effectiveness
- Inconsistent reporting (i.e. incomplete declarations, different units)
- Qualitative data – requires more interpretation
- Amendments need to be submitted on paper & manually entered by EC staff
- Confidential information not entered into database



Future Directions/Opportunities

- Continue to develop new P2 Planning Notices
- Improve online reporting and guidance material to reduce # of amendments
- Strengthen internal verification and QA/QC procedures
- Enhance database & website to provide information in more user friendly format
- Use measurement results to improve & target compliance promotion activities
- Survey – do P2 Plans go beyond the Notice requirements?



P2 Planning Resources

- Resources developed by the National Office of Pollution Prevention (NOPP)
 - P2 Planning website and database
 - Guidelines for Implementation of P2 Plans
 - Frequently Asked Questions
 - Pollution Prevention Planning Handbook
 - P2 Fact sheets
 - Model P2 Plan
 - Online P2 Planning Tutorial
 - Canadian P2 Information Clearinghouse

Useful P2 Planning Websites

- P2 Planning Website & Database (www.ec.gc.ca/cepap2)
- National Office of Pollution Prevention (www.ec.gc.ca/nopp)
- Canadian Pollution Prevention Information Clearinghouse (www.ec.gc.ca/cppic)
- CEPA Registry (www.ec.gc.ca/ceparegistry)

For more information email:

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