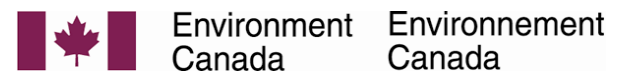




A Voluntary Industry Government Partnership: Screen Printer Initiative

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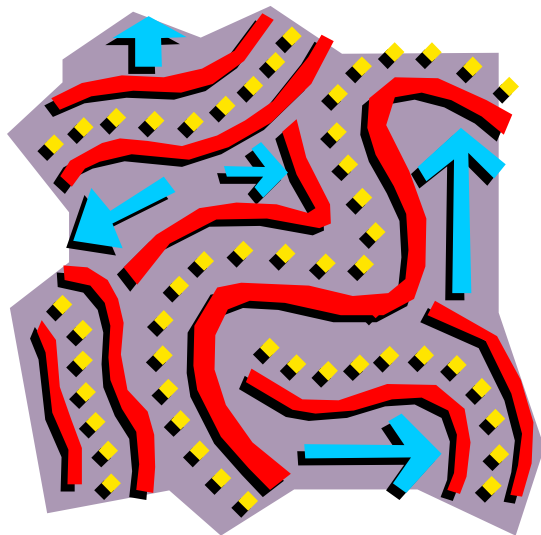
Canadian Pollution Prevention Roundtable
Halifax, N.S. - June 2006





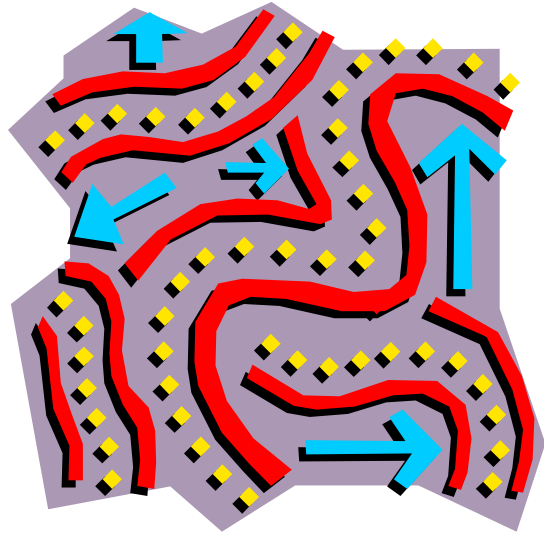
- ✓ Progressive Screen Printers in Ontario have sought EC guidance on improving their environmental performance
- ✓ As a first step, EC with the Specialty Graphics Imaging Association solicited stakeholder participation of member companies

Objective:



- ✓ Voluntary agreement to meet principles and criteria of the Federal Government's Environmental Performance Agreement (EPA) policy
- ✓ Voluntary agreement that will be meaningful and show positive results for targeted substances
- ✓ Voluntary agreement that supports potential regulatory requirements

VOC emissions in Canada:



- ✓ Solvent sector is 2nd largest source of VOCs after transportation sector
- ✓ Printing represents 28% of solvent sector emissions
- ✓ It is anticipated that by 2010, solvent sector will be the largest source of VOC emissions with 32% of emissions

The Specialty Graphics Imaging Association (SGIA): A Perspective

- ✓ SGIA is United States based and represents screen and digital printers in USA, Canada, Europe and Australia
- ✓ Of the 4,000 facilities in Canada, 80% have sale volumes of approximately \$4M
- ✓ Companies/government set objectives and targets to reduce pollutants that meet facility goals and priorities
- ✓ Companies experience financial savings by implementing pollution prevention/energy efficiency and waste reduction programs



Environmental Performance Agreement Highlights:



- ✓ EPA signed in February 2003 by President of the SGIA, Regional Director of Environment Canada
- ✓ SGIA commits to reduce emissions of VOCs and CO₂ by 20% and 6% respectively by 2008 from a year 2000 baseline
- ✓ Third party verification of results based on environmental management system principles

Meeting the EPA Policy



- ✓ Clear Objectives & Measurable Results
- ✓ Defined Roles - SGIA provides support to companies to help achieve targets; government provides \$ to support project director, fund workshops and verification protocol
- ✓ Consultation - stakeholders have input to agreement, access to case studies and results

Meeting the EPA Policy



✓Public Reporting - Government & SGIA facilitate publishing of annual reports on websites

✓Incentives & Consequences - SGIA support companies to meet agreement objectives. Government may not target companies in possible regulatory requirements; provide financial resources to support initiative. Free riders can be removed from program & subject to regulatory requirements

Meeting the EPA Policy



- ✓ Results Verification - Partners have developed a verification protocol. Procedures are built upon EMS principles
- ✓ Regulatory Backstop - Can be used to target free riders or if environmental objectives not met. This voluntary program supports language in "The Federal Agenda on the Reduction Emissions of VOCs from Consumer & Commercial Products"
- ✓ Continuous Improvement - Through verification process companies ensure continuous improvement

Lessons Learned:



- ✓ Choosing Partners - partner with association - provides access to member companies
- ✓ Market Drivers - Where possible use drivers such as supply chain influences, health & safety issues, insurance & risk liability reductions, cleaner technologies
- ✓ Address Mutual Interests - Environmental goals should be addressed in terms of improved environmental, social & financial performance instead of output measures

Lessons Learned:



- ✓ Consensus Approach - all parties in the agreement negotiate & agree on targets & outcomes
- ✓ Regulatory Flexibility - this industry sector prefers voluntary programs to regulatory alternatives, but a regulatory tool can help create a level playing field
- ✓ Incentives - develop incentives that are meaningful / beneficial to industry for participation in a voluntary program

Challenges/Barriers:



- ✓ Senior Level Commitment - Decision makers not at the table and possibly not informed/misinformed of issues
- ✓ Public Recognition - some companies do not wish public recognition. Perception that company pollutes
- ✓ Ease of Participation - this agreement not time consuming. Sign commitment form, report yearly on progress towards targets

Challenges/Barriers:



- ✓ Minimize Voluntary Programs - Industry is approached by many potential partners for voluntary program participation. Leads to confusion and strain on resources
- ✓ Economy - some companies not able to participate in programs, citing poor economic times

Case Study: North American Decal



- ✓ Produces decals for large OEMs using screen & digital technologies
- ✓ Less than 50 employees, sales of \$5 M
- ✓ Innovation - objectives of EPA coincided with company's desire to upgrade to UV ink technology
- ✓ One OEM (\$12 B US in sales) had strict decal production controls

Case Study: North American Decal



- ✓ Permission from OEM was needed to change to UV technology
- ✓ 1 year negotiation period to secure approval - 2 year test period to ensure quality of product
- ✓ Field test successful and permission granted in 2004 to print decals with UV technology
- ✓ Converted plant to UV technology
- ✓ Reduced VOC emissions by 67% and CO₂ emissions by 6%
- ✓ Received SGIA Environmental Award in 2005



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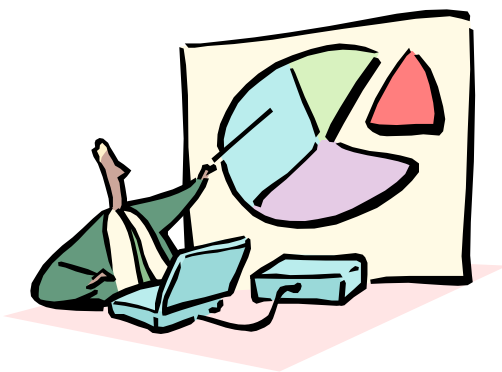
Progress:



- ✓ VOC Reductions - 8 companies have achieved 53% VOC reductions, there are 4 new companies now participating in the agreement
- ✓ Baseline Year 2000, 3.18 grams of VOCs emitted for each ft² substrate printed; emission rates have reduced to 1.67 grams of VOCs
- ✓ VOC Sources - adhesives, on-press solvents, inks & screen reclaim systems
- ✓ Technology/Product Changes - typical screen print inks have 60% VOC content
UV inks contain < 1% VOC content

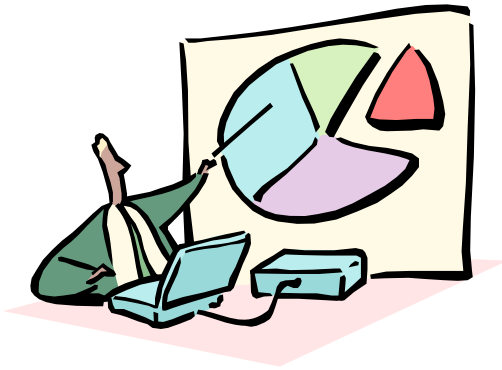
Next Steps:

- ✓ Access to Company Decision Makers - reach this target audience in order to increase participation
- ✓ Minimize Voluntary Programs - Harmonize multi-government voluntary programs. "Divide & Conquer" tactics are confusing & negatively impact all voluntary programs
- ✓ Develop Regulatory Backstops - can "prompt" companies to participate & create level playing field. Regulatory programs will be more intrusive to companies
- ✓ Incentives - Continue to develop incentives that attract company participation in program



Next Steps:

- ✓ Develop Green Supply/Business Network for Screen Print Agreement - Tailor a "reverse" style GSN program that builds on success of North American Decal - have more suppliers influence OEMs
- ✓ Provide funding to support participating companies. If structured properly could be an incentive for participation
- ✓ Increase Participation - continue current activities to bring companies into the program with workshops, company specific audits & opportunities



Thank You

- ✓ View Agreement at Environment Canada's Environmental Performance Agreement web site ec.gc.ca/epa-epe/en/agr.cfm or at www.sgia.org
- ✓ Case Studies at www.sgia.org/govt/ga_Canadafocus.cfm
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