# Enabling innovation in automotive supply chain products through a common chemical assessment and management strategy

**June 24, 2009**

Dr. Patricia Beattie, General Motors Corporation

Ms. Barbara Boroughf, Lear Corporation

**Suppliers Partnership for the Environment**

# Suppliers Partnership Overview

- 2002---Formation of the Suppliers  Partnership for the Environment (SP)
  - Bring auto manufacturers (OEMs) and suppliers together, in partnership with the US EPA to focus on environmental opportunities
- 2007---SP launches the development of a Material Health and Environmental Risk Assessment Strategy (MAS)
  - Goal  - to develop a common screening process for assessing and prioritizing potential health and environmental impacts of chemicals in parts

# SP MAS Development Team

# Unmet Need

Companies have a growing need to make proactive decisions about the materials in their products based on better chemical assessment information.

**Key Requirements**

(1) Address chemicals in vehicle materials
(2) Reliable, understandable and actionable output
(3) Cost-effective
(4) Solid science using accepted methodologies
(5) Protect proprietary business information

# Drivers of the Need

**Regulations**
UNEP/CEPA/REACH/
RoHS/TSCA/States

**Stakeholders**
Advocacy groups, investor groups, etc.

**Globalization**
Distributed supplier networks
Complex ingredient info

**Customers**
Concerns about chemicals in products

**Competition**
Stewardship, innovation, "green" product lines

- New pressures toward chemical risk assessment
- Ongoing trends that underscore business risk
- Urgent need for robust chemical tracking
- Clearer metrics and communication
- Unified framework for efficiency of review

# Importance of MAS to GM

It is all about improving Product Stewardship and Sustainability of our vehicles, increasing customer satisfaction.

If the MAS process and SciVera Lens™ is expanded to all of our suppliers, it will:

- Level the playing field thru-out the supply base
- Allow for a more proactive and comprehensive assessment of chemicals
- Provide much more valuable assessment information to supplement basic lists of constituent chemicals

# Current Chemical Assessment Options

Existing manual and automated services do not meet needs for affordability, scalability or flexibility.

**MANUAL - In-house Staff or Consultants**

- Skilled labor-intensive
- Inconsistent
- Expensive
- Inefficient

**SOFTWARE - Compliance-based Applications**

- List-driven
- Compliance derived
- Less-flexible
- Hazard-based (not in context of use)
- Worker safety orientation (vs. consumer orientation)

# Current Status

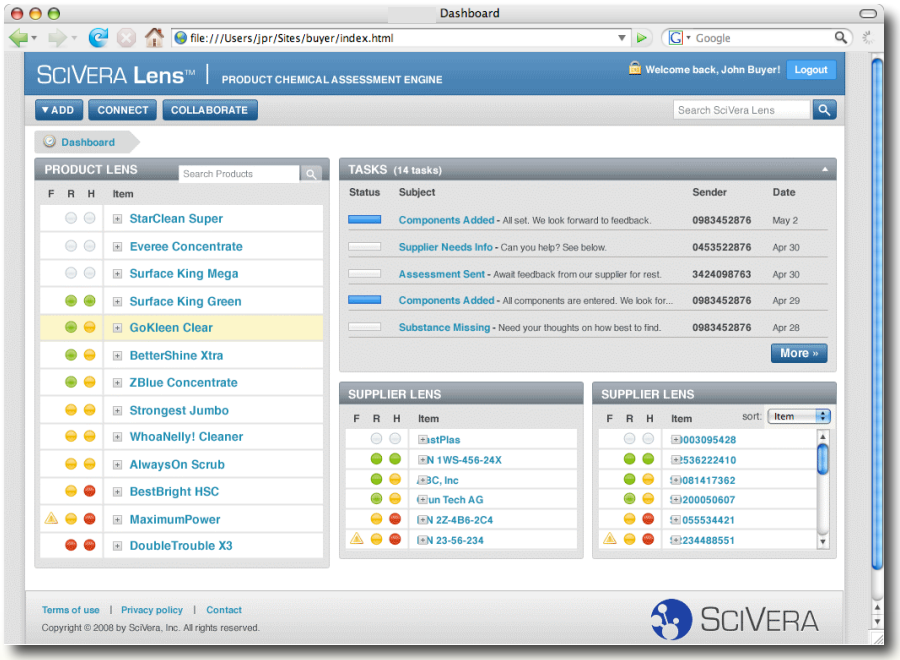
- MAS Program Guidelines complete
  - Hazard & Dose Response Assessment Guidelines
  - Exposure Assessment Guidelines
  - Risk Assessment Guidelines
  - Business Process Management Guidelines
- Separate effort underway to automate process
  - Subset of companies working with Science Strategies, LLC & SciVera, Inc.
  - Piloting and optimization
- Implementation
  - Voluntary - company-specific approach
- www.supplierspartnership.org

# Risk Assessment Automation

Automated product chemical risk assessment changes the landscape of how and when companies can review product chemical toxicology for prioritizing action.

**Key Functions**

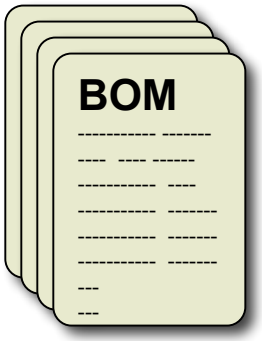
- Web-based, cost-effective, actionable review of product ingredients
- Scaled access to expert judgment on chemical data
- Automated risk assessment prioritizes product action



# SciVera Lens™ Information Flow

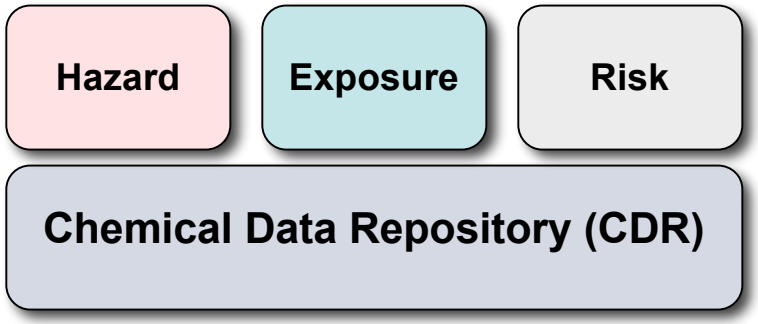
SciVera Lens™ processes an innovative combination of subscriber product data, aggregated chemical knowledge and assessment algorithms.

**Subscriber Product Data**



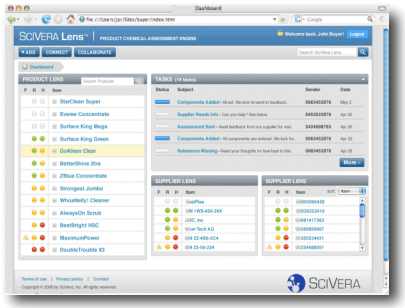

- Secure FTP import
- Supplier connectivity
- Proprietary info protection

**SciVera Lens™ Data Integration and Algorithm Processing**




- Product ingredients matched w/CDR data
- Risk assessment processed via SciVera exposure scenarios
- Unique and valuable product insight

**SciVera Lens™ Dashboard**



- Hazard score
- Risk score
- Supplier/Product Map
- “What if” planning

# Importance of MAS Program to Lear

- **INNOVATION** -- We are interested in innovative ways to identify opportunity to improve the health, safety and ecological impact of our products.
- **INFORMATION PROTECTION** -- The MAS process and SciVera tool provides a means to engage our supply base more effectively in an assessment of chemicals in a format that is revealing yet protects formulation propriety.
- **COLLABORATION** -- The process creates an improved environment for collaborative efforts to minimize or eliminate potential hazards and contribute to market-driven competitive momentum toward environmentally friendly material implementation.

# Summary & Proposal

(1) Sector approach to Sound Management of Chemicals is possible and critical
(2) North American auto industry is well-positioned for innovation in chemicals management
(3) Work can build on existing achievement (SP MAS)
(4) Support from CEC is critical to broad implementation of MAS

# Thank you

**For More Information, please contact:**
**Steve Hellem**
**Executive Director**
**Suppliers Partnership for the Environment**
**1155 15th Street, NW  Suite 500**
**Washington, DC  20005**
**(202) 530-0096**
**www.supplierspartnership.org**