### Chemical Strategies Partnership

#### Case Study: General Motors

<table>
<thead>
<tr>
<th>Company</th>
<th>General Motors Truck and Bus Plant, Janesville, WI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact</td>
<td>Mike Merrick, Senior Environmental Engineer and CMP Coordinator for Janesville Plant; (608) 756-7686</td>
</tr>
<tr>
<td>Industry</td>
<td>Automotive</td>
</tr>
<tr>
<td>Supplier</td>
<td>BetzDearborn</td>
</tr>
<tr>
<td>Name of Program</td>
<td>Chemicals Management Program (CMP)</td>
</tr>
<tr>
<td>Program Start Date</td>
<td>1992</td>
</tr>
<tr>
<td>Chemical Footprint</td>
<td>Water treatment chemicals (powerhouse, cooling towers, wastewater treatment, air houses), paint detackification and booth maintenance, lubricants, maintenance paints, commodity chemicals, purge solvents.</td>
</tr>
</tbody>
</table>

#### Summary

General Motors and BetzDearborn have had a Shared Savings partnership since 1991. BetzDearborn serves as a Tier 1 supplier for wastewater treatment, paint detackification, power house, maintenance paints, and solvents chemical services at the GM plant. With services based on a fixed fee per unit of production, the Chemical Management Program has produced substantial savings through reductions in chemical use and improved chemical management.

#### Contract Structure

- Fixed fee-per-vehicle ("unit pricing") based on historical chemical usage and production
- Management fees for selected services

#### Performance Expectations

Unit prices to be steady or declining. Targets for overall plant savings, including annual savings equal to 5% of the value of the contract.

#### Supplier Services

- Acquisition and inventory control
- Monitor and coordinate chemical usage
- Research and improve chemical performance
- Maintain laboratory for chemical and regulatory testing
- Ongoing reporting and communication
- Product and process engineering development
- EHS compliance and training
- Continuous waste minimization

#### Benefits

- Over $1 million in savings
- 8% decrease in chemical costs per vehicle (first 3 years) with significant expanded services
- Improved inventory control and reduced inventory costs
- 78% reduction in paint inventory, 50% reduction in paint use
- Training and other programs to improve health and safety protection
- Chemical tracking for easier compliance reporting (simplified TRI)

 Revised 03/02/00
CHEMICAL STRATEGIES PARTNERSHIP

CASE STUDY: GENERAL MOTORS

- Reduced VOC emissions and sludge disposal
- Reduced downtime and labor cost for sludge cleanout
- Improved paint quality
- Many other improvements which reduce labor overtime, improve process efficiency, improve product quality, and reduce rework

Revised 03/02/00