

Purchasing Greener Chemicals

Dolphin Safe Source

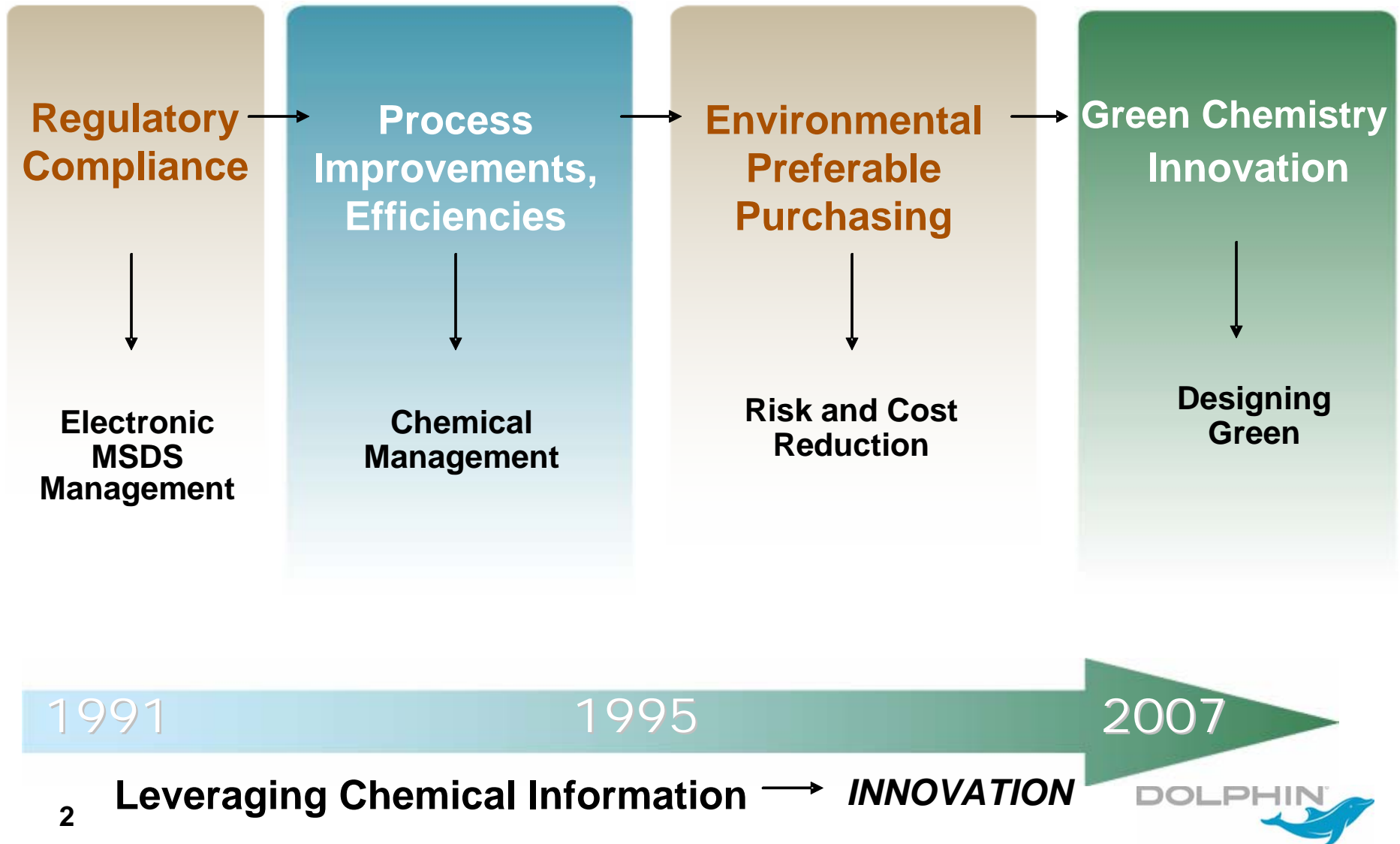
*Chemical Strategies Partnership Forum
October 24, 2007*

Marilyn Johnson
Director, New Initiatives
mjohnson@dolphinmsds.com

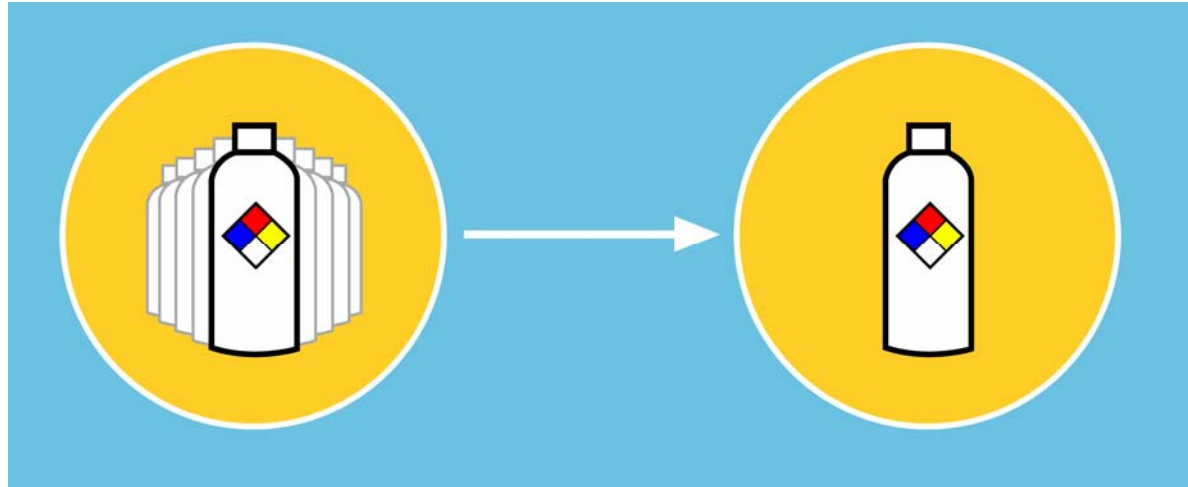


Protecting people, planet and profits

Dolphin Overview

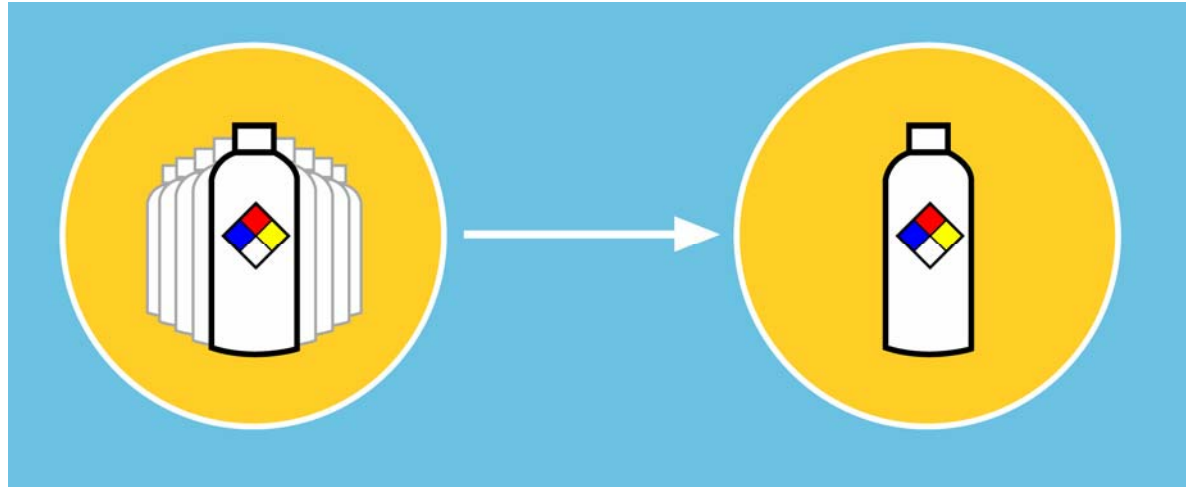


Dolphin Safe Source Goal™ is Simple



***Choose fewer products
that are safer and lower cost!***

Chemical Management Opportunity

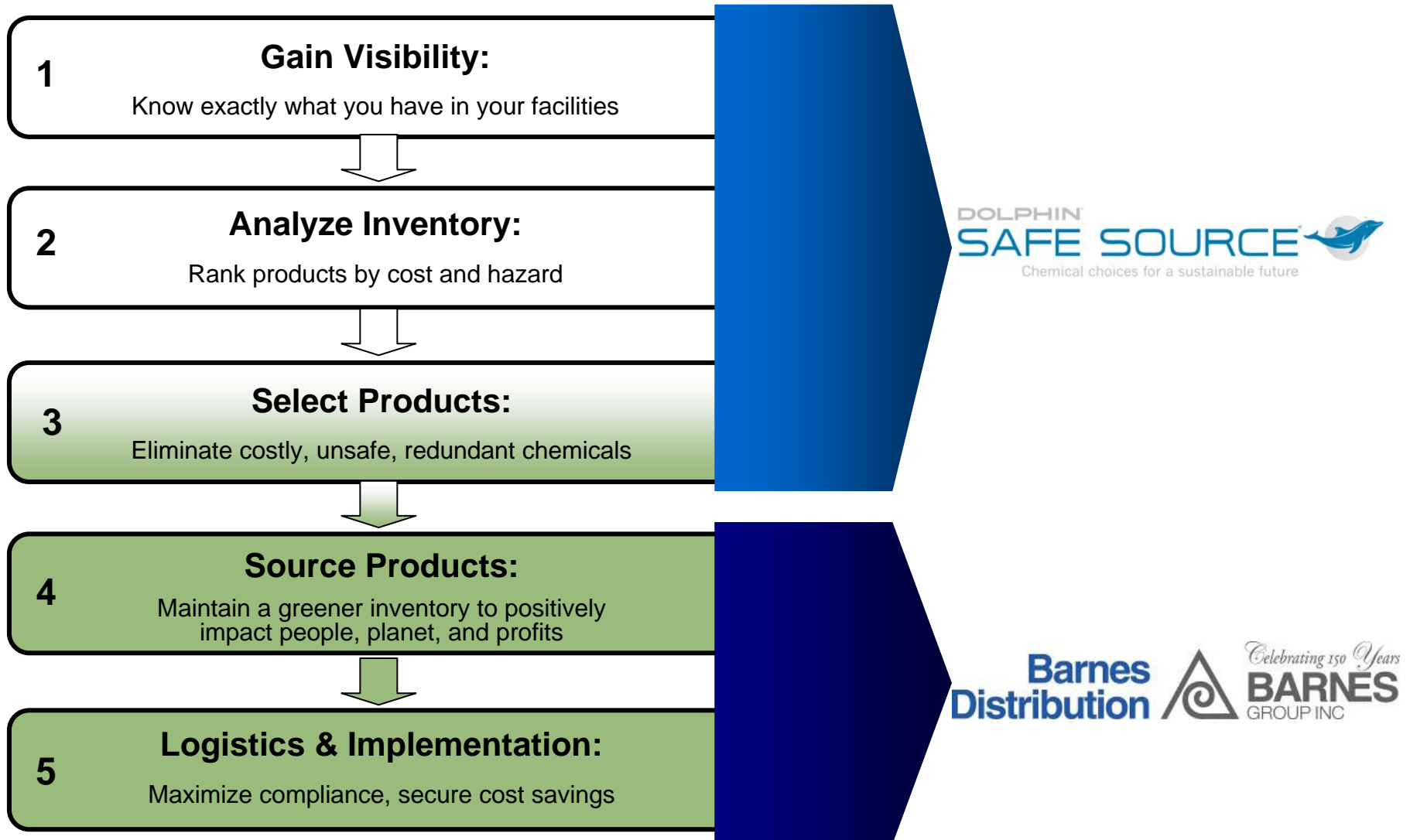


USE OF COMPLIANCE DATA TO MAKE BETTER CHEMICAL USE DECISIONS

1. Reduce organizational toxicity
2. Reduce employee exposure
3. Reduce toxic footprint
4. Reduce chemical inventory count
5. Reduce annual chemical spend

***Choose fewer products
that are safer and lower cost!***

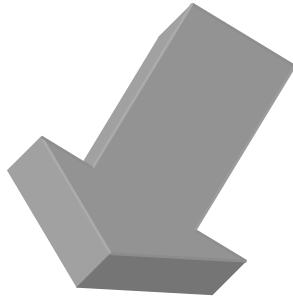
Steps to Optimizing the Chemical Supply Chain



1

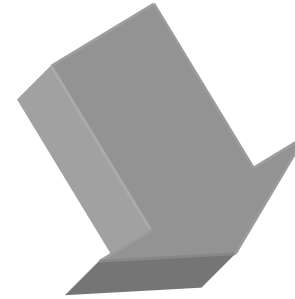
Gain Visibility

Know exactly what you have in your facilities



Existing Database Conversion

- Leveraging existing MSDS and ingredient information
- MSDS acts as purchasing / use record



Physical Inventory

- On site inventory of products and quantities
- Most accurate source data

2

Analyze Inventory

Rank Products by Price and Hazard

Dolphin Safe Source[®] Tool



- Decision-making software tool
- Ranks human and environmental hazards
 - Maintenance, Repair, Operation (MRO) chemicals (indirect)
 - Process and raw chemicals
- Ranks price point for MRO chemicals

2

Analyze Inventory

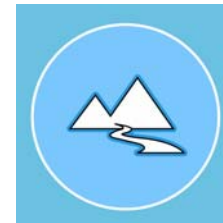
Rank Products by Price and Hazard

How to Evaluate Products



Health Hazard Points

Impacts Human Health



Environmental Hazard Points

Impacts Land/Air/Water Health

Higher points = More hazardous

Scientifically-based, public regulatory lists used to create ranking algorithm

3 Select Products

Eliminate costly, unsafe, redundant chemicals

Gasket: Gasket Maker

49 products in this category

Hide products with

- No Ingredients
 Estimated Scores
 No Cost

Sort by

Product Name

Search for

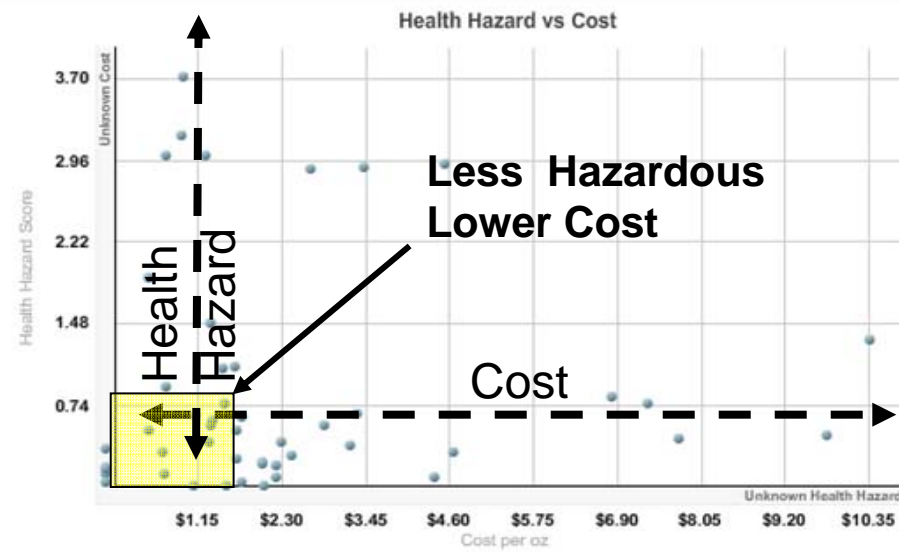
| | | | |
|--|---|---|---------------------|
| | 101BR ULTRA COPPER RTV 3OZ TB CG, 81878 Manufactured by: PERMATEX | Health Hazard: 1.06 Environmental Hazard: 0 | Cost: \$1.46 per oz |
| | 1286 MECHANICS HELPER Manufactured by: PRO CHEM | Health Hazard: 0.17 Environmental Hazard: 0 | Cost: n/a |
| | 26C HI TEMP RED RTV 11OZ CQ, 81409 Manufactured by: PERMATEX | Health Hazard: 0.25 Environmental Hazard: 0 | Cost: \$1.66 per oz |
| | 2AR FORM A GASKET 2 1.5OZ, 80015 Manufactured by: PERMATEX | Health Hazard: 0.4 Environmental Hazard: 0.6 | Cost: \$2.26 per oz |
| | 2B FORM-A-GASKET 2 3OZ, 80010 Manufactured by: PERMATEX | Health Hazard: 0.4 Environmental Hazard: 0.6 | Cost: \$1.28 per oz |
| | 3D AVIATION FORM-A-GASKET 3 1PT. 80017 | Health Hazard: 3 | Cost: \$0.69 per oz |

Products listed above are compared in the grid to the right. The grid can be used to select products by clicking individual points or by drawing a box around points of interest. Categories with enough reference information will also display a "Green Zone" for certain methods of scoring that will show you the recommended area of consideration for product selection. If you wish to compare how another mixture would rank, you can use the [CAS Calculator](#).

Method of scoring for grid

Health Hazard vs. Cost

- Health Hazard Score



Logout

Copyright Dolphin Software, Inc.

Good idea,

...but can it work?

Case Studies

Dolphin Safe Source Opportunity

\$4.5 billion North American mining company, will:

- Increase compliance accuracy by 30%
- Reduce their product count by 50%
- Reduce chemical hazards by 50 to 60%
- Reduce their annual MRO chemical spend by 30 to 40%...\$3-5 Million Dollars Per Year

Case Studies

Initial Chemical Inventory Analysis

- 12,000 Active MSDS Count
- 22 Geographic Sites in North America
- Product Selection: 80% chance that a chemical purchased at one site is not used at any other facility

Case Studies

Human and Environmental Hazards

Examples:

- 250 chemical products contain Mercury/Lead
- 5000 known Extremely Hazardous Substances for the Environment
- 2100 known Human Carcinogens, Reproductive Toxins, or Mutagens

Initial Chemical Inventory Analysis

- 10,000 Active MSDS Count
- 36 Geographic Sites in North America
- Product Selection: 80% chance that a chemical purchased at one site is not used at any other facility
- \$4.5 Million Annual MRO Chemical Spend

Human and Environmental Hazards

Examples:

- 150 chemical products contain Mercury/Lead
- 2700 products contain known Extremely Hazardous Substances for the Environment
- 1000 products contain known Human Carcinogens, Reproductive Toxins, or Mutagens

Dolphin Safe Source Opportunity

Full Dolphin Safe Source Roll-Out at all 36 Blood Regions

- Reduce their product count by 6,000 products
- Reduce chemical hazards by 50 to 60%
- Reduce their annual MRO chemical spend by \$1,250,000
- “Red Goes Green” marketing opportunity

Program Benefits

Environmental, Health & Safety

- Fewer MSDS to Manage and Update
- Reduction in Regulatory Reporting
- Improved workplace safety
- Reduction in potential environmental impact

Operations / Maintenance

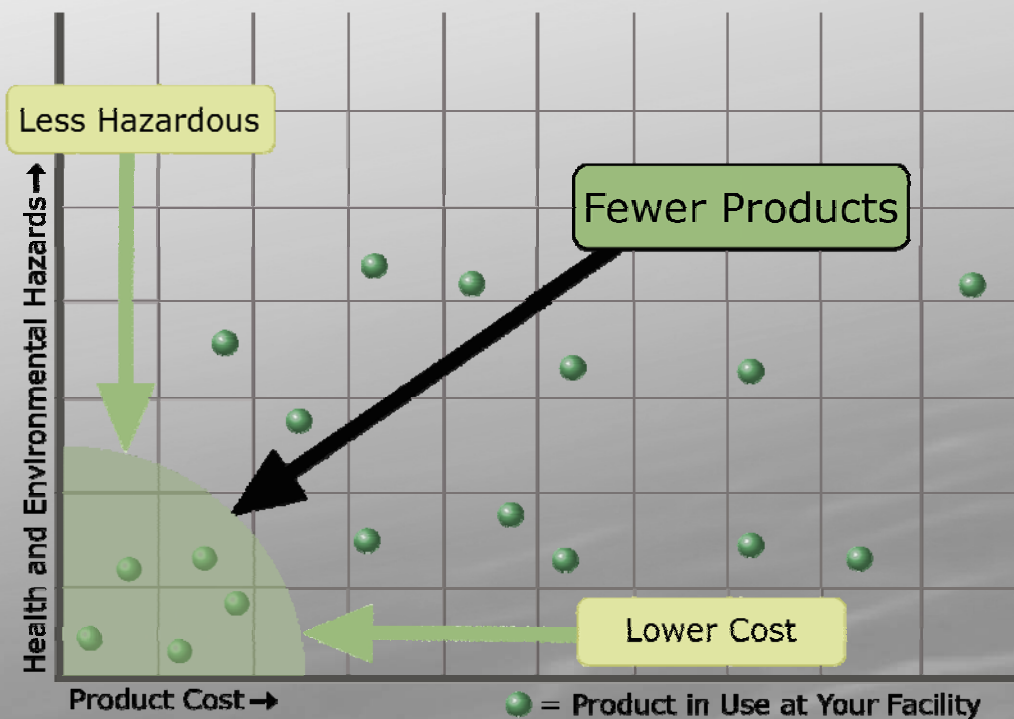
- Barnes manages organization & replenishment of products
- Eliminates the need for ad hoc sourcing activities
- Consistent performance of products throughout organization

Procurement / Supply Chain

- Reduction in Product Count
- Reduction in Chemical Spend
- Decreased On-hand Inventory
- Vendor Consolidation
- Reduced Insurance Premiums
- Lifecycle Cost Reduction

Dolphin Safe Source

Dolphin Value Drivers



Protecting people, planet and profits