



RESOURCE MANAGEMENT: Expanding your CMS Program

“We do it well...because we care!”



Presentation Agenda

This presentation will cover:

- Brief introduction to Rinchem
- Definition of Resource Management (RM)
- Drivers for RM
- Key components of robust program
- Challenges of RM startup
- Compensation mechanisms
- Case studies

Rinchem CMS Capabilities

An asset-based chemical management company

- Rinchem has been in business for over three decades
- Clientele in Americas, Europe, the Middle East and Asia
- Neutral, asset-based supplier focused on four lines of business:
 - Public Chemical and Gas Warehousing
 - Transportation Services
 - Waste Stream Management
 - Supply Chain Consulting & Regulatory Training
- “Flexible CMS” model, allowing customers to select preferred configuration of Rinchem services for their unique needs



What is Resource Management?

Resource Management is:

- ◆ A strategic alternative to traditional waste contracting and recycling
- ◆ RM contracts emphasize/reward resource efficiency (such as prevention, reuse, recycling, composting) throughout material life cycle rather than disposal - Examples
- ◆ Pays single contractor for quality of service and continuous improvement in resource efficiency, rather than the quantity of waste disposed of



How Are RM Contracts Different?

Features	Traditional Hauling & Disposal Contracts	RM Contracts
Contractor Compensation	Unit price based on waste volume or number of pick-ups.	Capped fee for waste hauling/disposal service. Performance bonuses based on value of resource efficiency savings.
Incentive Structure	Contractor has profit incentive to maximize waste service and volume.	Contractor seeks profitable resource efficiency innovation.
Waste Generator-Contractor Relationship	Minimal generator-contractor interface.	Waste generator and contractor work together to derive value from resource efficiency.
Scope of Service	Container rental and maintenance, hauling, and disposal or processing. Contractor responsibilities begin at the Dumpster and end at landfill or processing site.	Services addressed in hauling and disposal contracts plus services that influence waste generation (i.e., product/process design, material purchase, internal storage, material use, material handling, reporting.)

Resources: <http://www.epa.gov/wastewise/wrr/rm.htm>

Drivers for Resource Management

Aside from Resource management being beneficial to the environment and our children's future, what incentives does a corporation have to reduce waste?

▪Green Culture

Increasing numbers of citizens are demanding a reduction in waste and increase in environmentally friendly waste management procedures.

▪Tax incentives by state

New Mexico:

- Recycling equipment income tax credit equal to 5 percent of equipment costs.
- Tax credit is limited to recycling equipment that creates jobs, rather than reducing the workforce.

Florida:

- Recycling investment tax credit totaling \$500 for each \$100,000 invested.
- Recycling employment income tax credit of \$500 for each new employee added as a result of incorporating recycled products into the process.

▪Cost reductions

A major waste generator produced up to 120,000 drums a year. The cost to dispose of those drums was up to \$30 a drum, or \$3.6M a year in waste cost. Approximately 75% of the drums are now recycled, significantly reducing the manufacturer's cost.

▪Reduced risk

- Of chemicals or waste being mishandled or misplaced
- Of spills or accidents because the material has monetary value
- From traditional programs because the risk is transferred to a trained professional
- By transitioning to waste disposal to recycle or reuse from disposal

Key Components of RM Program

Some important elements to success include:

- ◆ An understanding of baseline costs and recycling rates
- ◆ Jointly developed goals and timelines for improvement
- ◆ Management support and a supportive corporate culture
- ◆ The willingness to embrace change and try new things
- ◆ Recognition of external contractor expertise and capabilities
- ◆ Willingness to share sensitive process and resource information



“At-Risk” Inventory Program

Managing products at risk of becoming hazardous or non-hazardous waste.

At Risk Inventory Management™ material is defined as product that is:

- Short-dated material, based on shelf life (i.e. within 90 days of expiration)
- Out-of-specification
- Out of FIFO (first in, first out) lots
- Not purchased or accepted by customer for which it was manufactured
- Material from warehouse damage



This material is then targeted for use before expiration date, resale into another market, rework back into raw material feed stock, recycling for use in other processes or environmentally friendly disposal.

Using the At Risk Inventory Management™ program and collaborating with other entities within the supply chain, Rinchem helped waste customers achieved a 73.3 percent recycling rate in 2005 for universal waste, non-regulated and regulated chemicals.

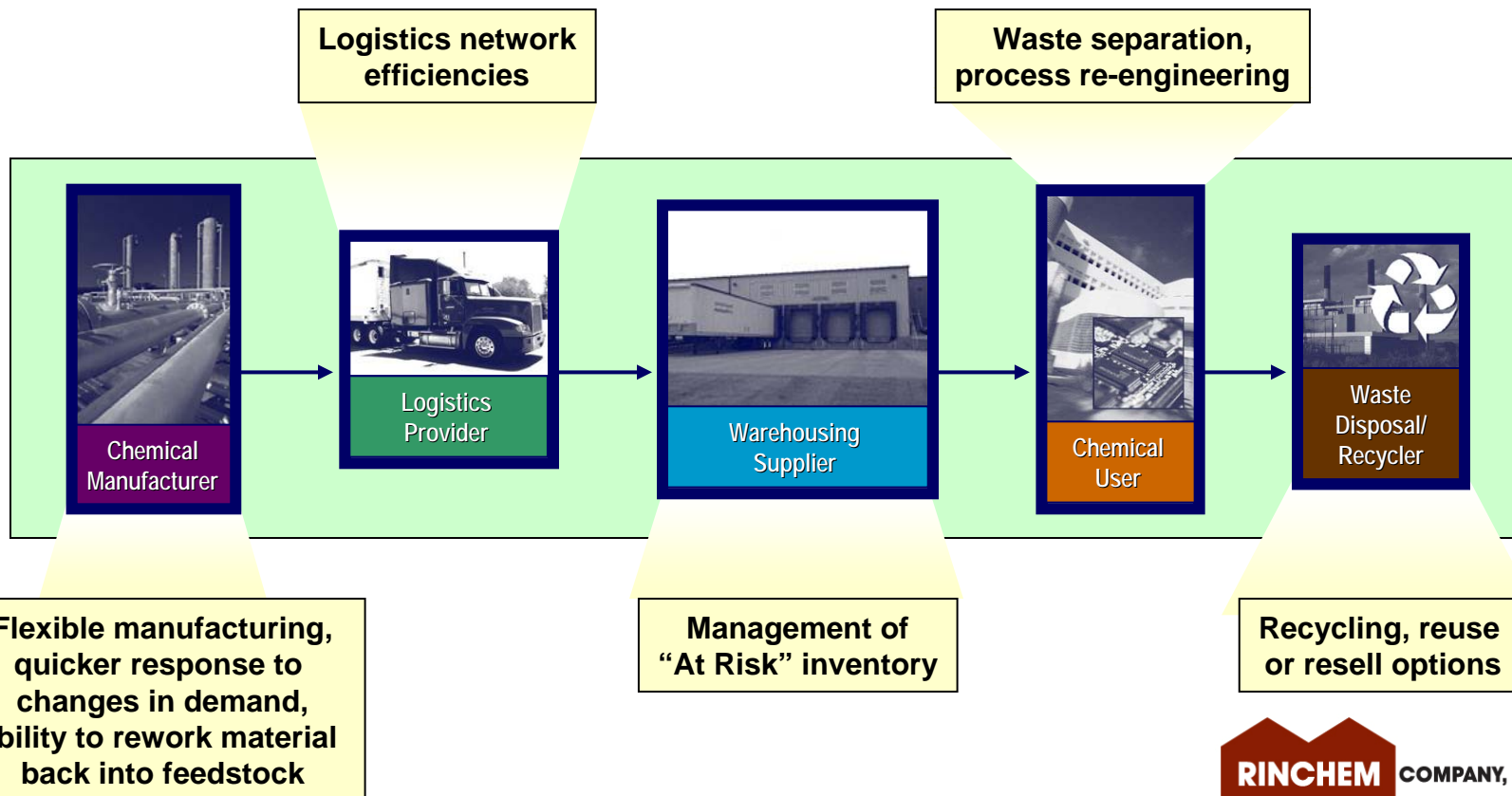


Challenges of Starting up RM

1. Achieving buy-in and cooperation at all levels
2. Building trust needed to share sensitive data
3. Adhering to regulations governing transfer of material
4. Developing tools to track performance and costs
5. Coordinating across multiple sites and entities
6. Developing simple, equitable pricing structure
7. Dealing with price fluctuations in reused materials markets
8. Buy-in to explore change of processes or materials used
9. Showing ROI and/or non-monetary benefits of program
10. Moving RM up the supply chain for maximum benefit

CRMS: Linking RM and CMS

Waste can be found at all levels of the supply chain. Maximum efficiency, recycling and reuse is achieved when one entity oversees RM, enabling visibility and coordination throughout the entire supply chain.



Compensation Mechanisms

Waste Generator

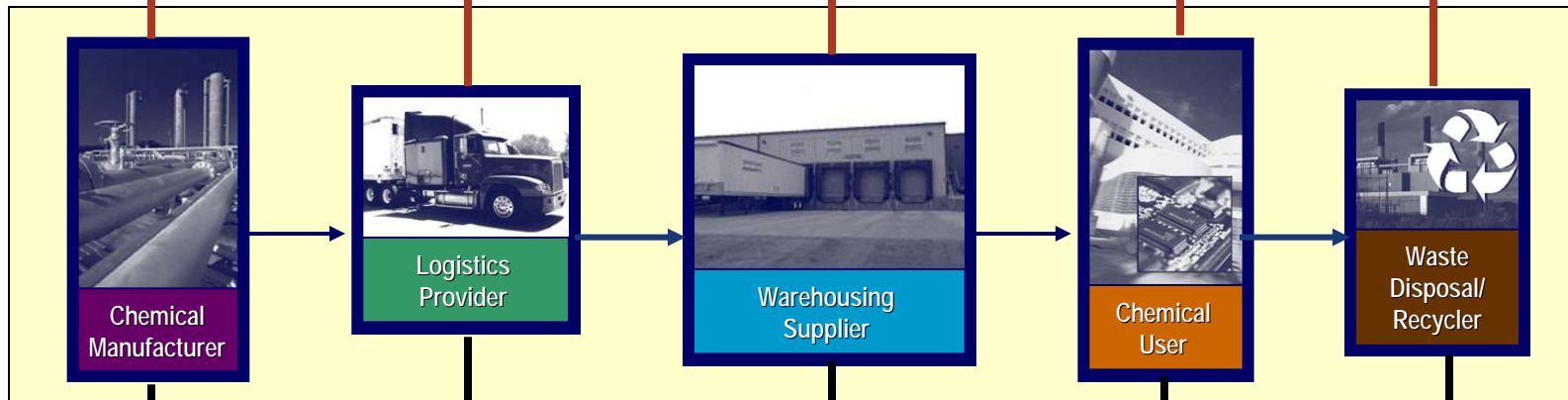
Evaluated process for areas where waste and cost can be reduced or altered early in the supply chain lifecycle

Reduced transport and storage

Reduced inventory and risk of waste decreases warehousing costs

Increase efficiencies of materials and processes

Reduced cost through recycling, reusing, reworking



Evaluate for increased revenue-generating alternatives while decreasing impact to generator

Utilize efficient transport and storage while maintaining pricing and safety

Reduced waste increases warehouse capacity for other customers

Resale or reuse of waste to other industries, "cradle to cradle"

Resale or reuse of waste to other industries, "cradle to cradle"

Waste Contractor



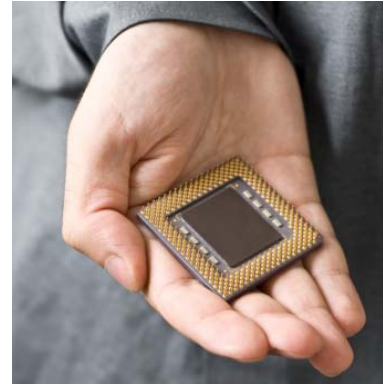
Case Studies

“We do it well...because we care!”

A Fortune 100 Semiconductor Manufacturer Reduces Environmental Impact

The Challenge: A Fortune 100 semiconductor manufacturer wanted to reduce its environmental impact and waste management costs.

The Solution: Rinchem and its partners designed a program called “At Risk”, and other programs, to promote reuse of chemicals. Now the company’s discarded waste is reused in other industries.



The Results: In 2006, this company recycled 98% of its chemical waste in New Mexico, and 68% worldwide. It recycled 74% of its solid waste in New Mexico and worldwide.

A D.O.E. Site Consolidates Waste

The Challenge: The U.S. Department of Energy needed to consolidate its waste and reduce costs of waste management.

The Solution: Rinchem, Veolia, and others collaborated to custom-design a solution for the D.O.E. which addressed both risk and cost. Specifically services provided included:

- **Hazardous and/or prohibited waste screening**
- **Waste characterization, pickups, separation, packaging, sampling, profiling, manifesting and shipping**
- **90-day accumulation area for hazardous waste**
 - Certified Solid Waste Transfer Station Operations
 - Certified Recycling Center Operations
- **100 percent hazardous waste transportation**
 - Hazardous materials customized fleet and roll-off truck support
- **Relocation of chemical laboratories**
- **Performance of recycle/reuse audits**

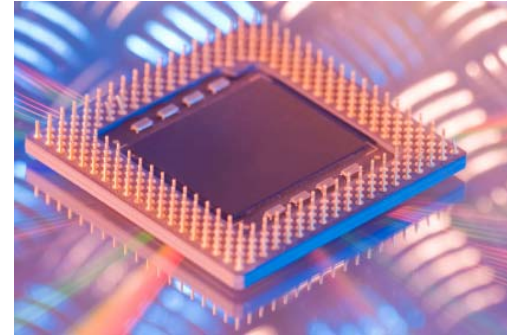


The Results: The D.O.E. successfully reached its goal with the RM solution. In 2005, Rinchem managed 7.5M pounds of waste, with 71.1% recycled, yielding a significant cost benefit.

A Leading Semiconductor Manufacturer Improves Operations Three Ways with RM

The Challenge: A major semiconductor manufacturer turned to Rinchem for help with innovative ways to reduce waste and cut costs, including reducing their chemical inventory.

The Solution: Rinchem evaluated the company's manufacturing process and recommended three things. 1) A three-part plastic cup could be cleaned with acetone instead of discarded each time. Cleaning the cups saved the company \$300-400 per cup. Rinchem cleaned 30-40 a month, resulting in a total cost savings of \$192,000 annually at one site. The environmental impact was the reduction of up to 40 cups per month. 2) Reduction of chemical inventory on-hand from \$350-400K a month to \$60-120K a month reduced the risk and cost, as well as opened space in the warehouse for other, more lucrative endeavors. 3) Waste recycling using a third party logistics (3PL) provider, which frees employees to do their jobs while the 3PL sorts and picks up waste.



The Results: The company met its goal of reducing waste and cost. Rinchem's RM services provided three things: cleaned cups, saving \$192K annually at one site, reduced chemical inventory from \$350-400K to \$60-125K, and implemented processes that allow the company's employees to focus on their jobs and not on waste management.