

# Measuring Performance in Chemical Management

*Partnering for Efficiency –  
The Chiron/Novartis model*

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# About Chemical Safety

- **EMIS provider**
  - Environmental Management Information Systems
- **Related Chemical & Waste Management Technologies**
- **Systems Integrator**
- **Implementation & Support Services**
- **Consulting**





# Definition

- **How is Performance Defined?**
  - Within the organization
  - With regulators
  - With the public
  - With customers
  - With suppliers





# EMIS Expectations

- useful, up-to-date chemical data
- data dictionaries
- links to purchasing and inventory systems
- regulatory agency links and info
- electronic transfers
- online, real-time access





# EH&S and Corporate Goals

- **Reduced Chemical inventory**
- **Waste Minimization**
- **Faster Chemical Delivery**
- **Increased Safety**
- **Verifiable Regulatory Compliance**
- **Accurate Reporting at all Levels**
- **Providing Financial Benefits**





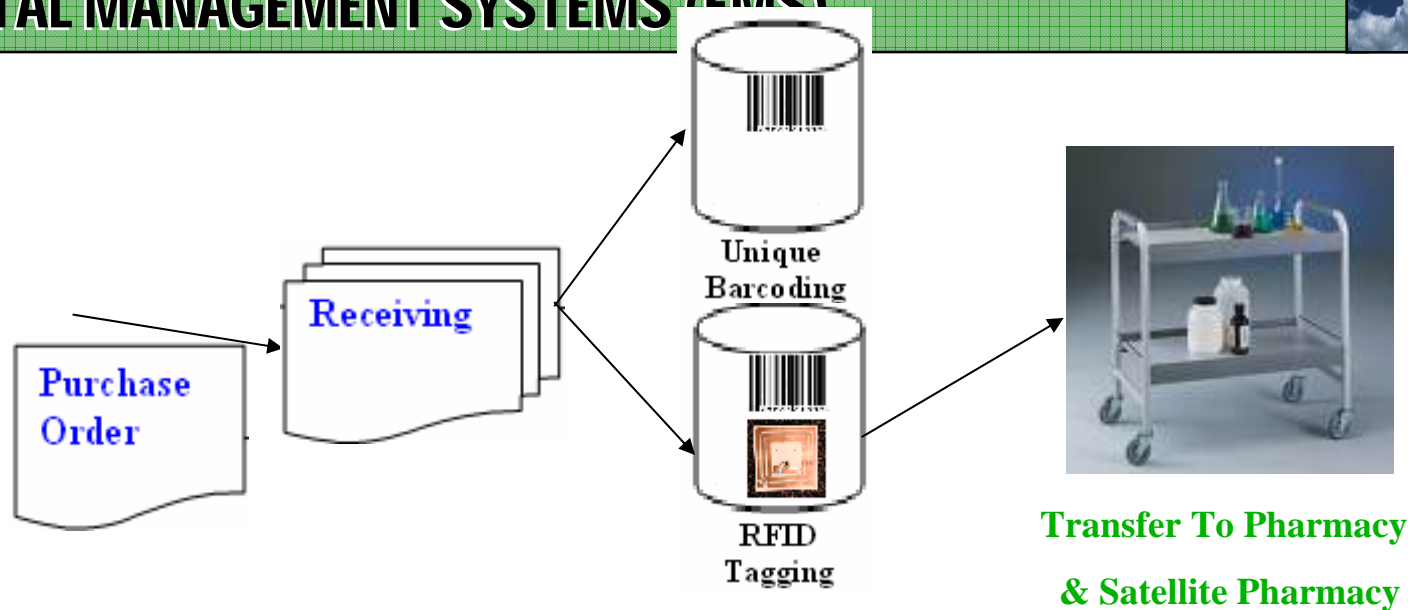
# Corporate Drivers

- **Drivers (for RFID)**
  - **Chemical Safety**
  - **Compliance with UBC - UFC**
  - **Immediate Chemical Availability**
  - **Real-Time Inventory**
  - **(Chemical Reduction)**
  - **(Waste Reduction)**
  - **(Cost Reduction)**



# CHEMICAL SAFETY SOFTWARE

## ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)



**Storage**

**RFID**



**Use**



**Disposal**







# Implementation / Deliverables

- Purchasing Interface with EMS database
- Receiving Interface
- RFID Interface
- HR Interface
- EMS Chemical Inventory
- EMS Pharmacy System (Check-in/Check out)
- Reporting
  - Tier II
  - UFC
  - Corporate (AdHoc)





# UBC/UFC Reports

- Manage limits by building or control area
- Forecast lab building needs
- Generate UBC/UFC reports

## UNIFORM FIRE CODE CLASSIFICATIONS BY HAZARD CLASS

NAME	CAS #	UNIFORM FIRE CODE	QTY ON HAND	UNIT OF MEASURE
<b>UNIFORM FIRE CODE C,CL2,HT,UR2,</b>				
HYDRAZINE DEMO	302-01-2	C,CL2,HT,UR2,	10	G GALLONS
HYDRAZINE DEMO	302-01-2	C,CL2,HT,UR2,	40	GALLONS
HYDRAZINE DEMO	302-01-2	C,CL2,HT,UR2,	1000	GALLONS
<b>UNIFORM FIRE CODE CAR,</b>				
BENZENE	71-43-2	CAR,	70	G GALLONS
<b>UNIFORM FIRE CODE FL1B, IR</b>				
2-PROPANOL	67-63-0	FL1B, IR	52	GALLONS
2-PROPANOL	67-63-0	FL1B, IR	56	GALLONS
2-PROPANOL	67-63-0	FL1B, IR	192	LITERS
2-PROPANOL	67-63-0	FL1B, IR	564	GALLONS
2-PROPANOL	67-63-0	FL1B, IR	4096	LITERS
2-PROPANOL	67-63-0	FL1B, IR	29952	LITERS
ACETONE	67-64-1	FL1B, IR	1	LITERS
ACETONE	67-64-1	FL1B, IR	2	LITERS
ACETONE	67-64-1	FL1B, IR	4	GALLONS
ACETONE	67-64-1	FL1B, IR	5	CUFT
ACETONE	67-64-1	FL1B, IR	5	P POUNDS
ACETONE	67-64-1	FL1B, IR	5	POUNDS
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# Task Automation

- Manage Projects and Tasks based on any EMS data
- Schedule tasks as required w/Calendar
- Monitor permits, dates, compatibilities, deadlines, etc
- Link to email, word processing, other programs

**Task Item**

Task ID: 20122 Reference: [ ]

Task: UPDATE EMPLOYEE DATABASE

Facility: AMERICAN CHEMICAL - USA

Who: EMS,EMS

Task Type: DATA ENTRY

Cost: 0

Include Files:  Advance Condition:

Action Recurrence... Condition... Execute

Dependency: [ ]

Start: 5/1/2004

Last Run: [ ]

Due Date: [ ]

Completed: [ ]

Note:

As a part of our 2004 Safety Campaign, we will be generating our OSHA 300 log which shows all injuries this year. For further info, please see the attached reference file, or the web link below.

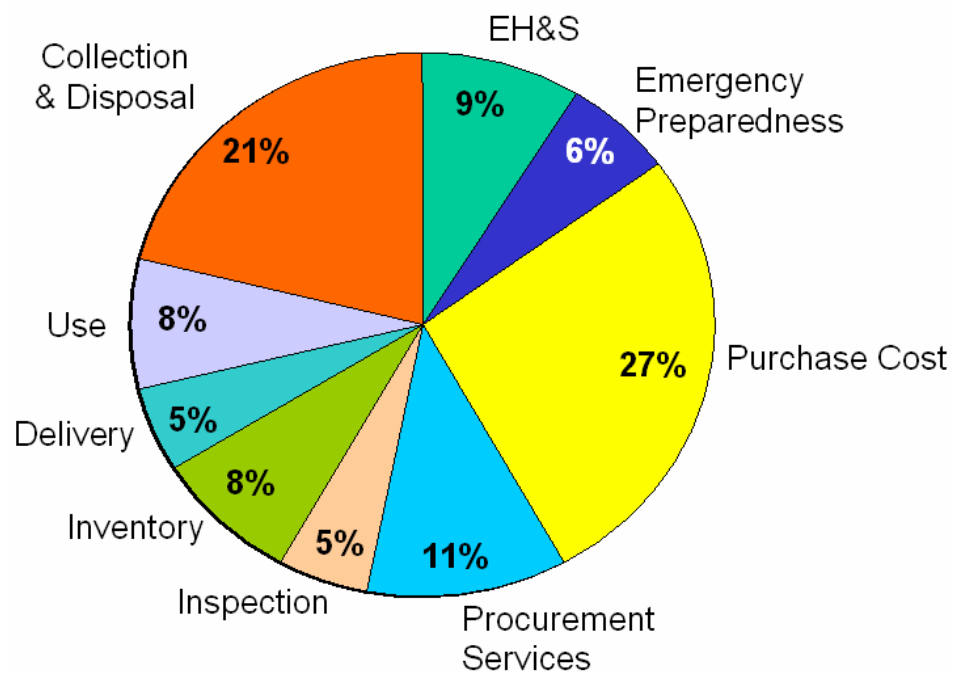
Task Manager Reference Items

	Reference	URL
1	R:\WORK\SUPPORT\OSHA\NEW-OSHA300F	
2		<a href="http://www.osha.gov/recordkeeping/index">http://www.osha.gov/recordkeeping/index</a>
3		

OK Cancel

OSHA Safety

# Measuring Chemical Lifecycle Costs - CMS



# Measurable Benefits

<b>COST CATEGORY</b>	<b>SAVINGS THROUGH...</b>
Inventory	• Less inventory on hand
Use	• Chemical sharing
Collection & disposal	• Less waste, electronic pickup request
EH&S, inspections, emergency preparedness	• Electronically gather, manage & distribute data and reports
Delivery	• Consolidated ordering
Purchase cost	• Preferred vendor
Procurement services	• Less time spent & lower transaction cost



# Conclusion

- *Environmental Management Information Systems have evolved into the vehicle through which a company can build, maintain, measure and draw from to achieve performance goals.*





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*Questions ???*

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