



Society of Chemical Manufacturers & Affiliates



Joe Dettinger, CSP

- Senior Director, Compliance & Stewardship, SOCMA
- Education/Certification
 - Environmental Engineer
 - MBA
 - BCSP - CSP
- Relevant, multi-level experience with more than 16 years in the chemical industry





Our Members

- **SOCMA members:**
 - *110 Manufacturers /International*
 - *18 Distributors*
 - *37 Affiliates*
- *Washington-based trade association*
 - 20+ staff, including technical, lobbying, and communications expertise*
- *AMS: 106 companies*

SOCMA is part of a \$300 billion industry that's fueling the U.S. economy. Our members play an indispensable role in the global chemical supply chain, providing specialty chemicals to companies in markets ranging from aerospace and electronics to pharmaceuticals and agriculture.



AMS Groups

SOCMA currently manages the following associations:

- The Center for Baby and Adult Hygiene Products ([BAHP](#))
- Bio-Process Systems Alliance ([BPSA](#))
- Bulk Pharmaceuticals Task Force ([BPTF](#))
- Color Pigments Manufacturers Association ([CPMA](#))
- Flexible Vinyl Alliance ([FVA](#))
- Institute for Polyacrylate Absorbents ([IPA](#))



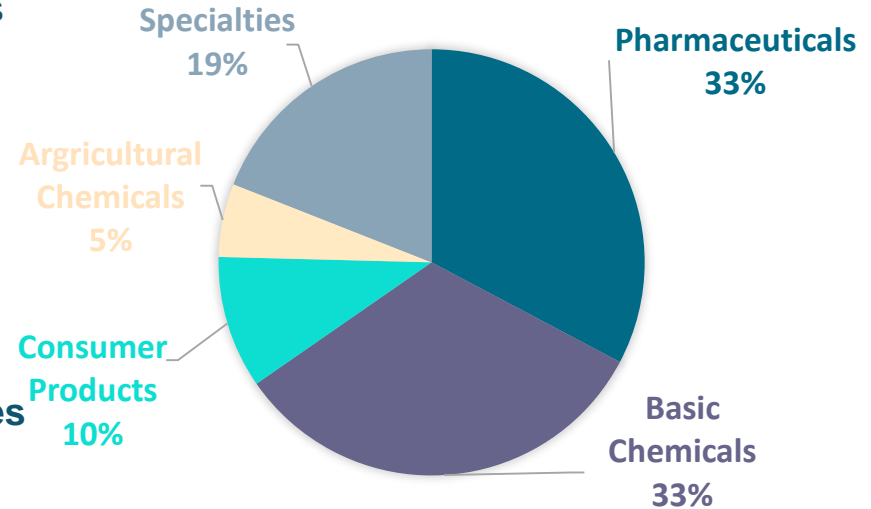


Specialty & Fine Chemicals

BY THE NUMBERS

- **30 Specialty Chemical Segments** (ranging from adhesives & sealants to consumer products to additives for paints, paper and plastics)
- **4 percent growth** in specialty chemicals for 2017 and forecast to grow by 2.3 percent in 2018
- Leading end-use markets include **light vehicles and housing** (by percentage of chemicals in end product)
- By 2022 U.S. chemical industry (including pharma) **sales \$1 trillion**

U.S. CHEMICAL SHIPMENTS 2016 \$766B



NOTE: economic data provided by ACC; 2017 Elements of the Business of Chemistry; and, Year-End 2017 Chemical Industry Situation and Outlook



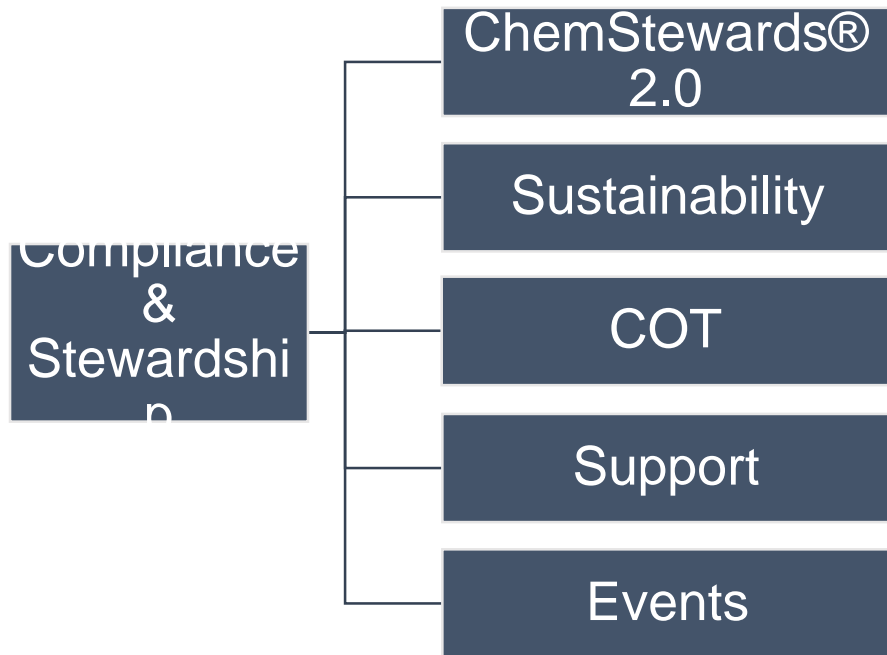
What's New at SOCMA

- Modernizing our pathway forward
- Enhancing Expertise
 - Staff
 - Partnerships
- Evolving ChemStewards to Compliance and Stewardship
- Strengthening Team Building Efforts





Compliance & Stewardship





C&S Support to member companies

- Who do you call when you need help?
- We Are Here To Help!
- We will visit your site and help with any struggles you are facing.





What is ChemStewards®?

- An industry-developed Environmental, Health, Safety & Security (EHS&S) program
- Designed to meet the needs of the Batch, Custom and Specialty Chemical Industry
- Mandatory for SOCMA Active Members
 - Each active member agrees as a condition of membership to implement a performance improvement program with respect to operations and activities in the U.S.
- Third party verification program
- Members commit to the program through Core Principles signed by the CEO or President





ChemStewards® Core Principles Overview

Members commit to principles covering:

- Stakeholder communications and transparency
- Product stewardship
- EHS&S in operating and planning
- Employee training, awareness and involvement
- Sustainability



ChemStewards® Management System Overview

- *Facility based program* that utilizes corporate support functions
- Checklist approach, not a technical specification
- Utilizes the Plan/Do/Check/Act model for continual improvement





ChemStewards® Program Summary

Three Tiered Program With Key Performance Requirements Per

Components	Fundamentals Tier [Tier 1]	Enhanced Performance Tier [Tier 2]	Excellence Tier [Voluntary]
Core Principles	Signed by CEO or President		
Management System	Focus on 6 Core and Regulatory Based Elements Plus Completion of a Third-Party EHS&S Management System	Full MS Implementation Plus Completion of a Third-Party EHS&S Management System Verification	Full MS Implementation, Completion of a Third-Party EHS&S Management System Verification Plus Tier 3 Application
Security	Verification Security Vulnerability Analysis, Countermeasures, Verification or Comply with DHS		
Metrics	Annual Report of: <ul style="list-style-type: none"> • Toxic Release Inventory (TRI) • OSHA Recordable Rate • Number of Process Safety Incidents • Greenhouse Gas Emissions • Production 	Annual Report of Tier 1 Metrics plus <ul style="list-style-type: none"> • Energy Usage • Hazardous Waste Generation • Employee Training • Product Stewardship 	Annual Report of Tier 2 Metrics + Tier III Application
Verification	Year 1 - Self Assessment (PEV) Year 2 - Document Review Year 3 - Onsite Audit; Certification Granted		

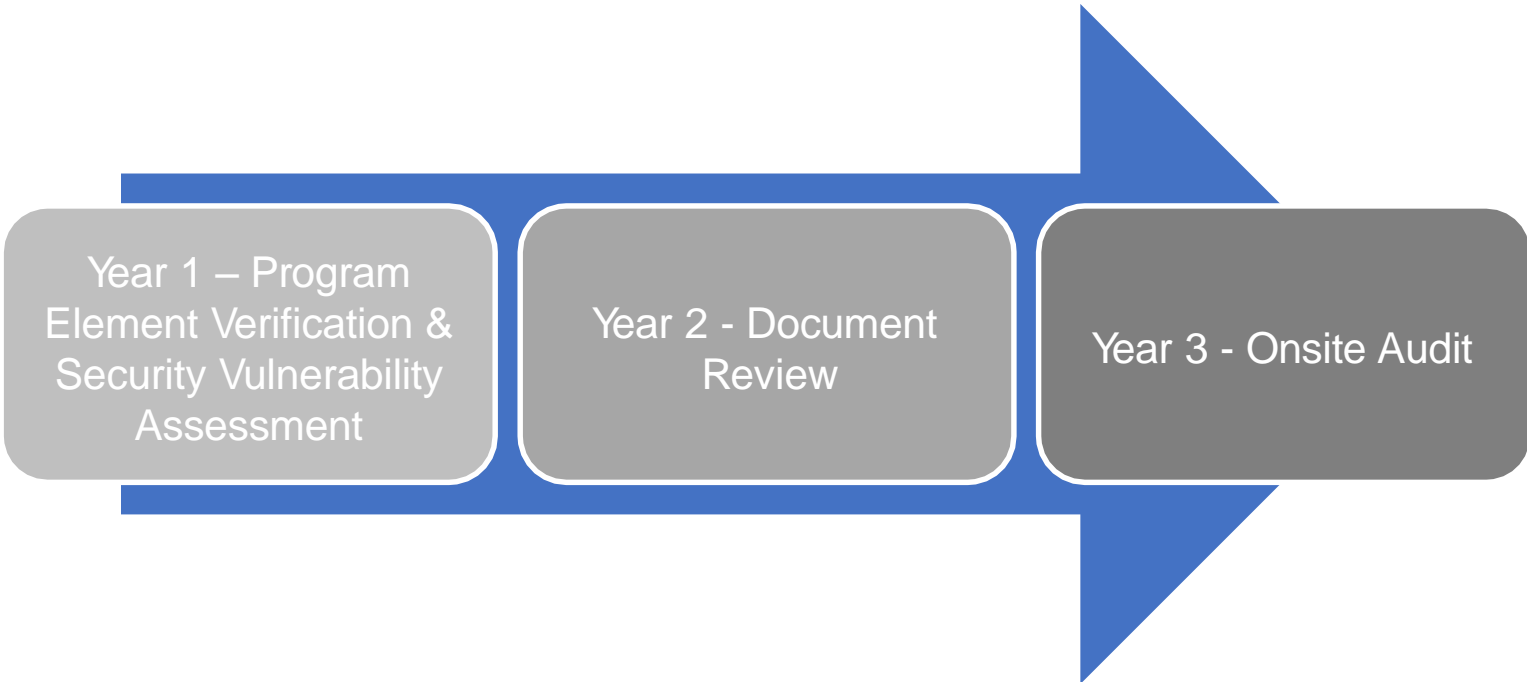


ChemStewards® Element by Tier

FUNDAMENTALS Tier 1 Elements	ENHANCED PERFORMANCE Tier 2 Elements	EXCELLENCE Tier 3 Elements
<ul style="list-style-type: none">• Hazards & Risks• Legal & Other EHS&S Requirements• Objectives & Targets• Training, Awareness & Competency• Non-conformance & Corrective/ Preventive Actions• Internal Management System Audits	<ul style="list-style-type: none">• Fundamental Level Elements [PLUS]• Policy• Action Plan• Responsibilities and Accountabilities• Communications• Management System Documentation• Operational Control• Emergency Preparedness and Response• Monitoring & Measurement• Records• Management System Review	<ul style="list-style-type: none">• Enhanced Performance Level Elements



Path to ChemStewards® Certification



Year 1 – Program
Element Verification &
Security Vulnerability
Assessment

Year 2 - Document
Review

Year 3 - Onsite Audit



Year 1: CSMS Verification – Program Element Verification (PEV)

- A self assessment of a facility's EHS&S Management System
- Used by a member as a “gap analysis” to determine what is required for acceptable implementation
- Reported to SOCMA as “yes” or “no,” not pass or fail
- Required for each facility
- One time event completed in the first year



Year 2: CSMS Verification

– Document Review

- Off-Site review of a member's CSMS by ChemStewards certified third party auditor
- Member submits a completed checklist along with documentation to the verifying auditor
- Audit will result in a "Pass", "Pass Conditionally" or "Fail" for each element question
- 4-6 hour limit based on tier level; one time event
- Non-conformances [Pass-Conditionally and Fail] are to be addressed within 6 months of the audit



Year 3: CSMS Verification

– Onsite Verification

- Onsite audit performed by an ChemStewards certified third party auditor
- Limited to 8 hours onsite
- Will result in a “Pass,” “Pass Conditionally” or “Fail”
- Non-conformances [Pass-Conditionally or Fail] are to be addressed within 6 months of the audit.
- Certificate issued to facility following verification of CSMS status–
Good for 3 years



Verification Arrangements

Contractual Arrangements

- Initiated between member facility and CSMS auditor
- Coordinators communicate with the auditor about logistics
- Cost is based on audit hours plus travel expenses for the onsite audit

Quality Assurance Of Audits

- Periodic witnessed audits
- Member facility evaluates audits and auditor
- Auditor approval can be rescinded, if deemed necessary
- BEAC certified with industry experience





Resources Available

- ChemStewards 101 Training
- CSMS Implementation Manual
- SOCMA's EHS&S Management System Guide and Template
- CSMS Verification Guidance Document
- CSMS Metrics Guidance Document
- Onsite Mock Audit Materials
- Committees focusing on specific areas of EHS&S interest
- CSMS Facility and Auditor Checklist with Reference for each Tiers





Resources Available

- Training & awareness through webinars, teleconferences, seminars such as Global Chem, Security Summit, Regional Roundtables/National Conference
- Regulatory tools such as TSCA manual, Security Vulnerability Assessment manual
- Member networking at annual regional meetings & awards dinner
- Press assistance
- Compliance & Stewardship onsite support when needed





ChemStewards® Tools

- **ChemStewards Portal** portal.chemstewards.com
 - Primary online repository for all ChemStewards related information
- **CS White Paper** www.SOCMA.com
 - Available on the SOCMA web site
- **ChemStewards Help Videos**
 - Compilation of quick videos that will assist members in working through the CS portal
- **ChemStewards Q&A Page**
 - A great tool to share best practices and discuss new topics within SOCMA members



ChemStewards® Tools

- **ChemStewards Scorecards and Certification**
 - A great tool that will aid a member company in building a strong EHS&S management system. It will also assist members in establishing community stakeholders
- **Performance Improvement Awards Program**
 - Annual recognition program focusing on the 5 core principles of ChemStewards. A great opportunity to promote company's commitment to continuous improvement
- **Chemical Operator Training Manual**
 - Provides extensive material to help your employees to become informed, knowledgeable and safety-conscious chemical operators

ChemStewards® 2017 Performance Improvement Awards





SOCMA's Operator Training Manual

Interested?

PDF Version:

SOCMA Members: FREE to download chapters online
(www.socma.com) FREE annual updates.
Can be downloaded on SOCMA site or ChemStewards

Portal

Non-members: \$1995 for the first year

“SOCMA's Operator's Training Manual is a valuable resource that can be used to provide a high, consistent level of training for operators and will result in improved operations at the plant.”

- SOCMA Member



Training Content

Chapter Titles

- Basic Safety
- Basic Skills:
Mathematics/Chemistry/Energy
Conversion
- Process Safety Management
- Basic Skills II: Property,
Pressure, Temperature,
Vapor/Liquid
- Unit Operations
- Plant Economics
- Environmental Operations
- Reactor Systems
- Reactor Operations
- Plant Equipment
- Utilities
- Reactor Auxiliary Equipment
- Control Systems
- OSHA Safety Compliance
- Formulation

**Each chapter includes lesson plans, testing materials and PowerPoint Presentations*

**Great way to improve a facility's operations*



Events

- **2018 Regional Roundtable Meeting**
 - *A gathering of EHS&S professionals in the industry sharing best practices on Process safety and other issues around the chemical industry [Pittsburgh, Houston and Atlanta]*
 - <https://chemweek.com/CW/Document/95178/CW-Blog-Building-a-strong-safety-culture-is-important-to-success>
- **Specialty Chemical Industry FLY-IN**
 - *A unique and exciting opportunity for SOCMA members to promote the interest of the specialty chemical industry*
- **Specialties Forum 2018**
 - *A convention of decision makers and thought leaders in the specialty chemical industry to discuss industry trends, gather economic intelligence and provide networking opportunities within the supply chain*
- **14th Annual SOCMA Golf Tournament & Dinner**
 - *Grab your clubs and join us at the [Dunes West Golf & River Club](#) for a day of networking, while raising money for the [American Chemical Society Scholars Program](#)*



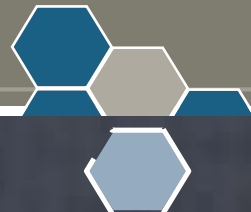
Compliance & Stewardship Team

Joe Dettinger, CSP

- Senior Director, (571) 348-5111
- dettingerj@socma.com

Emylyn Noma

- Manager, (571) 348-5119
- nomae@socma.com



Questions?