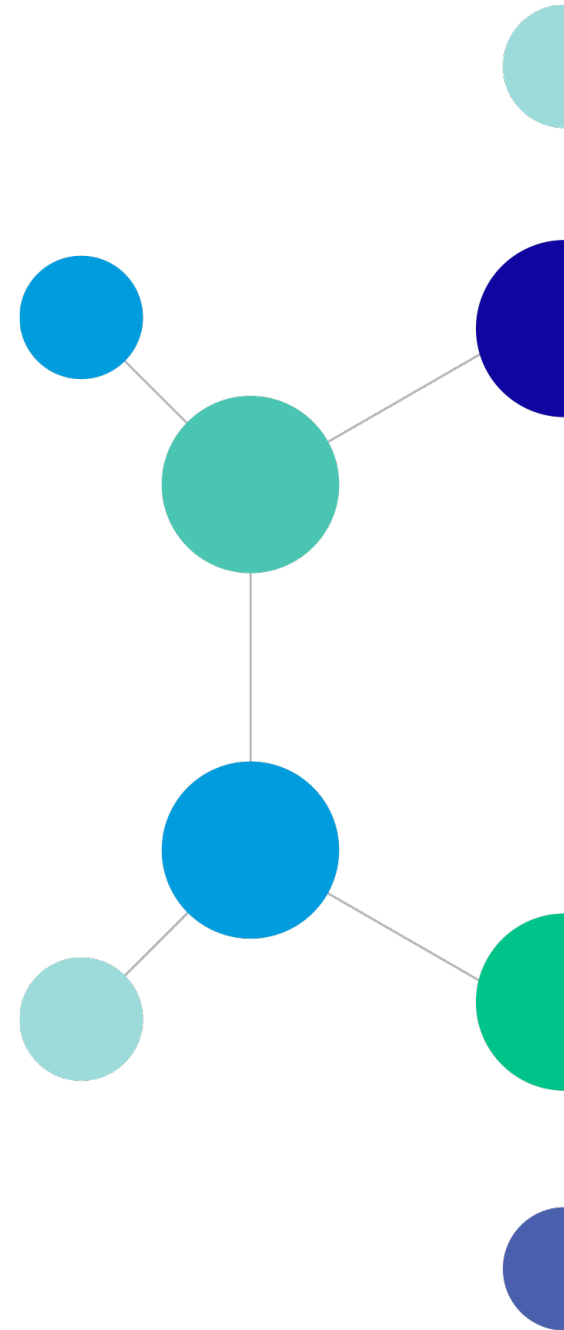


# socma

SOLUTIONS FOR SPECIALTIES

## Are You Ready? Emergency Preparedness & Response: Establishing Relations and Best Practices

May 11, 2023



# Agenda

- Welcome
- Antitrust Guidelines
- Introductions
- Emergency Response Best Practice Sharing
- Q&A

# Ways to Participate

If you would like to ask a question during the presentation:

- Type it in the Chat or
- **Raise Your Hand** and a moderator will give you the ability to unmute your microphone and share your video.



**Matt Manna**  
**Global EHS&S Manager**  
**EHSQS**  
**Ascensus Specialties**



**Sean Reynolds**  
**EHS Manager**  
**Sofix, LLC.**



**Chris Banach**  
**Director of**  
**VanDeMark**



ASCENSUS™

ASCENSUS  
**Specialties**

# Evans City, PA Facility

- Long history of industrial activity
- 100 (acre site and employees)
- Rural Western, PA
- Former owners/operators
  - Callery Chemical
  - Mine Safety Appliances (MSA)
  - BASF
- Specialize in highly reactive materials
  - Sodium
  - Potassium
  - Lithium
  - Boron chemistry
- Due to the hazardous nature of operations
  - Risk Management Plan
  - Process Safety Management
  - CFATS covered
  - Industrial Fire Brigade (ERT)



# Community Outreach

- The Evans City Site has three chemicals classified by the Environmental Protection Agency (EPA) as extremely hazardous substances that if released in sufficient quantity could impact the community
- Community alert system (CAS) to alert community to shelter in place
- Interact with the LEPC on at least an annual basis
- Annual fire department/county hazmat/LEPC facility tour
- Annual DHS audit
- Annual law enforcement walkthrough and training
- Monthly drills and CAS test
  - Shelter in place
  - Evacuation
  - Chemical spill/release
  - Fire
  - Medical emergency
  - Active shooter



# Emergency Response Team

- Why? Western, PA fire departments are largely volunteer organizations
- Internal knowledge of operations (chemists, engineers and safety professionals)
- Many members are local volunteer fire fighters
- Twenty volunteer members on the ERT
- Team members receive time off to train, attend monthly meetings and drills and receive an annual bonus
- Trained in industrial fire brigade (NFPA 1081), Hazmat Technician, Technical Rescue, and First Aid/CPR/AED
- Initial and annual training through a local community college
- Equipment: fire truck, Hazmat vehicle, ATV, SCBAs, level A suits, 5 gas meters, etc.
- Team members on call 24/7/365 through text message



# ERT Decision Making

- Does your facility need an internal team?
  - Fire response
  - Chemical Spills
  - Confined Spaces
  - High Angle Work
  - Live Electrical Work
- Facility hazards and community resources
  - Can your local fire department respond in a timely manner?
  - Can local resources provide response based on the hazards?
  - Is your LEPC active (think about joining or attending meetings)
- Investment
  - Equipment, training, medical surveillance, etc.

# Emergency Preparedness Plan

- Covers multiple regulatory requirements (PPC, SPCC, EPCRA, industrial fire brigade, fire prevention plan, and security)
- Plan is updated annually, as needed and reviewed by a professional engineer
- Annual plan review by LEPC
- Copies given to local agencies and maintained in several facility locations
- Emergency response agreements with professional hazmat team
- Plan also covers credible emergency scenarios (weather related emergencies, reactor shutdowns, etc.)
- Monthly drills and critiques



**SOFIX**®  
**SOTIX,**  
**LLC.**

# Who we are:

Sofix, a wholly owned subsidiary of NAGASE & CO. LTD., is an organic synthesis specialty chemical manufacturer, producing a range of color formers for the thermal paper industry. We offer Toll / Contract manufacturing services in order for clients to achieve:

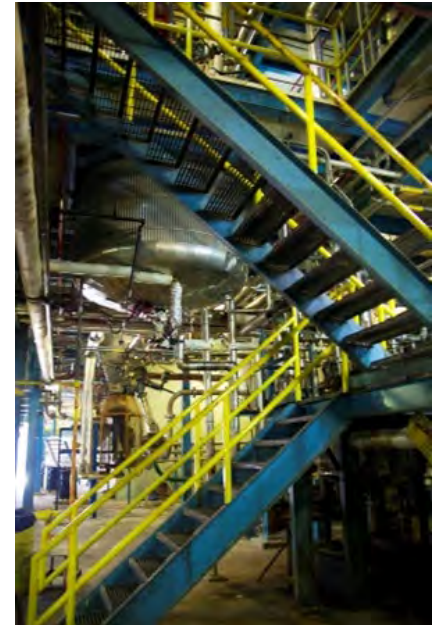
- Cost savings
- Relief of capacity constraints
- Speed to market
- Simplification of regulatory burden
- Operational excellence via ISO 9001, RC14001<sup>®</sup>:2015, and the Baldrige Criteria

We are located in Chattanooga, Tennessee, with easy access to major highway, rail, and air transportation. Sofix has 30 years of expertise with global procurement and shipments and is a US Customs Foreign Trade Zone, providing opportunities for savings on import tariffs.

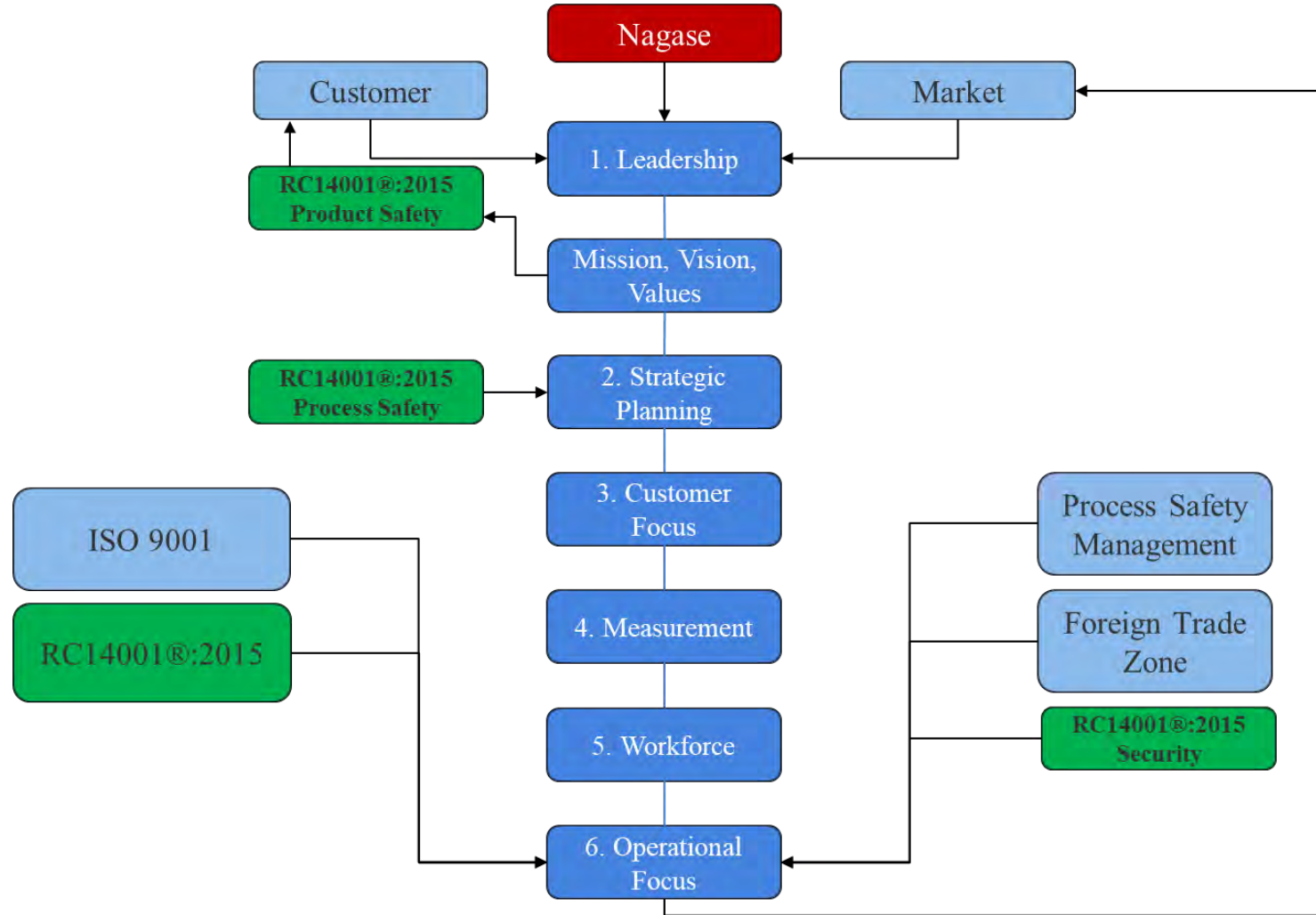


# Today

- Founded in 1990, joint venture
- 100% owned since 2011
- Organic synthesis, batch operation
- Number of employees: 30
- Business areas:
  - Color Formers for thermal paper
  - Toll and Custom manufacturing
- Regulatory:
  - Air emissions at 1/3 allowable
  - Wastewater to Publically Owned Treatment Works
  - FIFRA
  - Foreign Trade Zone
  - PSM Facility
- Registrations:
  - ISO 9001 (quality)
  - RC14001<sup>®</sup>:2015 (environmental, health, safety, security, transportation)



# Integrated Management System



# Plan

- Identification of Risk potential and magnitude:
  - Aspects and Impacts
    - Monthly assessment by process area of both significant, and non-significant aspects to discuss status and determine if any changes have occurred to impact the status (either up or down).
    - Aspects have corresponding Action Plans managed through our corrective and preventative actions application using multiple PDCA cycles to address them.
  - Management of Change
    - Utilized for processes and equipment that touch toluene, sulfuric acid and caustic
      - Integrated with work order system
    - Required for new toll or custom projects
      - Determine if HazOp / Process Hazard Analysis is also needed
  - Standard Operating Procedures
    - Training needs and requirements identified, assigned, and tracked through our training database
  - Emergency response plan addresses potential incidents
    - Plant personnel respond to small to medium spills or fire in incipient stage only. Trained to mitigate larger spills and wait for outside response company.
    - Submitted to local agencies as required
    - In addition to Tier II reporting, Chattanooga Fire Department (CFD) receives a detailed chemical inventory with corresponding location map

Total Breakdown <sup>i</sup>			
Type	Total	Dev	Non-Significant
Environmental	2	2	208
Health	2	2	6
Legal	0	0	47
Quality	5	5	97
Safety	6	6	101
Transportation	1	1	2
Security	3	3	8
<b>Total of Significants</b>	<b>19</b>	<b>19</b>	<b>469</b>

# Do

## •Training

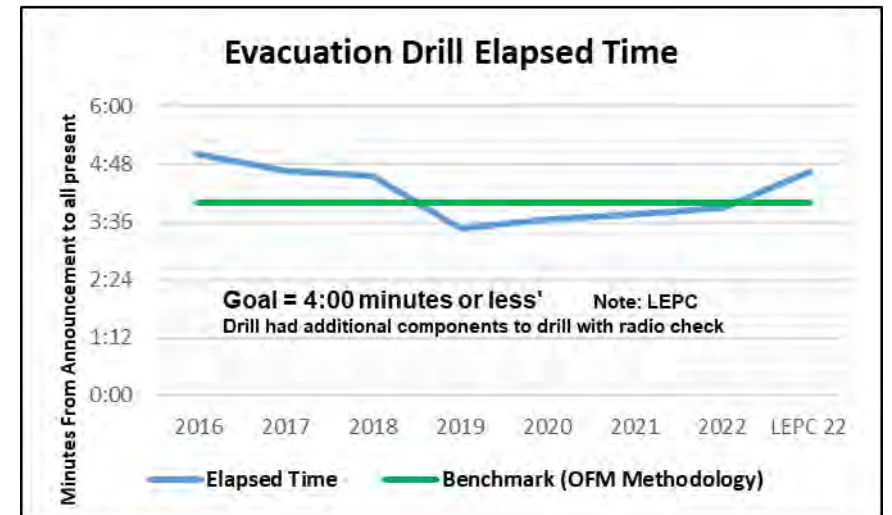
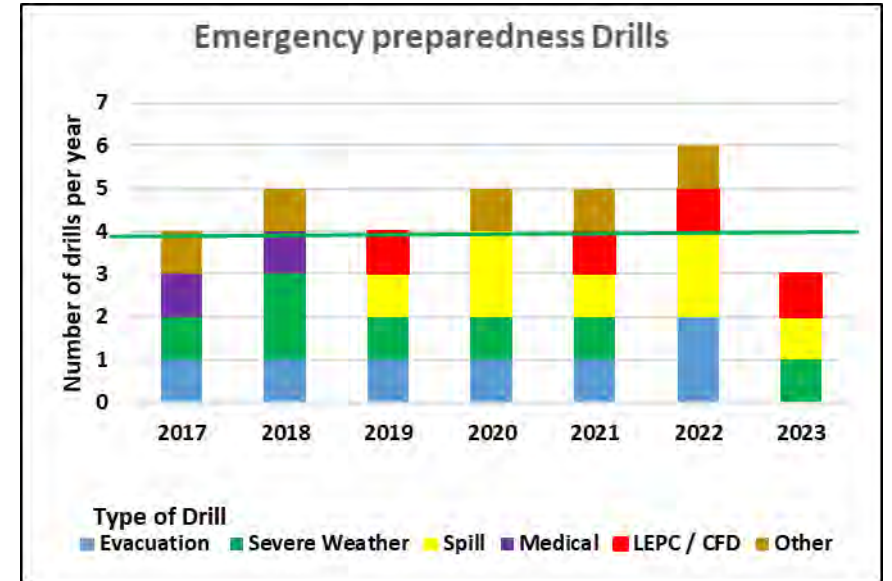
- Starts on day 1 for all new employees
- New operators learn 1 process area at a time usually proficient within 30 days to operate without direct supervision
- Operator certification program (all process areas + management systems 3-year program)
- All applicable regulatory training requirements

## •Drills

- One per quarter (1 evacuation and 1 severe weather drill required, the other 2 can be any other type of incident). All are documented.
- Evacuation drills are timed.
- Issues identified are addressed through issuance of a work order or entered in the corrective actions' application.
- All spills and subsequent responses are handled as a drill for additional training purposes, (suggestion by ISO auditor from Bsi).

## •Communication

- Daily shift change meeting (night and day shift overlap between 0700-0730)
  - Attended by Sofix Leadership (President, VP, Technical Services and EHS Manager)
  - Weekly Safety meeting as part of this meeting
  - Solicitation off issues, problems and near miss reporting in every meeting
- Document control
  - All SOPs, Forms, and Policies are managed through the “Changes database”
  - Personnel are notified by email and at the shift change meeting
  - Changes that require training are entered as “Formal Retraining” in the Changes database and distributed to the employees listed on the training document
- Active participation in quarterly Community Advisory Panel and Hamilton County LEPC (recently merged with the CAP).
  - CAP member companies present facility/company information twice a year





# Do

- **Community Participation**

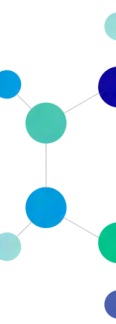
- August 2022, Hosted an exercise for Sofix, CFD, and Hamilton County Haz-Mat involving a tanker roll over and fire. There were a couple of “Firsts” in this exercise:
  1. First time an actual drill call was placed directly to 911 call center (usually routed to a separate number)
  2. First time an open flame was allowed in a Chattanooga Chemical facility hosting this type of drill.
- Sofix drill objectives were initial spill response, make the actual 911 call, and plant evacuation
- The drill was also open to any CAP and LEPC member that wished to observe.



# Do

- **Community Participation**

- April 28 & May 1-2, 2023 during our annual maintenance shut down Sofix had process tanks available for CFD to practice setting up for confined space rescue drills. Over the course of 3 days approximately 60 firefighters from 5 squads took part in the exercise.



# Check

How do we know risk management and emergency preparedness systems work?

- 3<sup>rd</sup> Party Audits
  - ISO 9001 & RC14001 surveillance and certification audits by Bsi twice each year
  - Environmental Compliance Audit every 3-5 years (outside consulting firm) last performed in 2021
  - TOSHA consultation service every 3-5 years. Last performed in 2022 for IH, safety, (including response), and PSM compliance
- Internal Audits 5 total per year
  - 4 for ISO 9001 / RC 14001
  - 1 PSM
- Regulatory Agency's – planned and unplanned inspections
  - TOSHA, Tennessee Department of Environmental Conservation (TDEC), and DOT all have emergency preparedness and response criteria.
- Analysis of our own incidents to determine what worked as intended, and what lessons were learned for continual improvement of our systems and methods.
- Review and analysis of new projects or processes (i.e.-did we miss anything in the MOC, HazOp, or PSSR?)

# Act

## **Non-conformance, opportunities for improvement, notice of violation, internal audit findings**

- Entered in our corrective and preventative actions application for analysis, action plan, correction, and follow up (additional PDCA cycles if needed).



# VanDeMark

Phosgene Chemistry – Custom Chemicals

# Who, what, why?

- VanDeMark Chemical Inc founded in 1951 is located just north of the City of Lockport, New York.
- 97 employees. 15 are trained members of our Hazmat Team
- We produce phosgene and manufacture chemical intermediates supporting the agrochemical, pharmaceutical, coatings, adhesives and various other industries.
- We have a number of PSM/RMP chemicals above threshold quantities.
- As a result, we proactively work with our community to help educate them about our operations, chemistry and hazards to help them understand how we manage risk, and to ensure our emergency response resources are properly prepared should a response situation develop.
- We are very active in our LEPC as well as the Lockport City Emergency Planning Committee
- VanDeMark holds the area's only Annual Coordinated Emergency Preparedness Drill/Training Exercise that draws in ER resources from across the Region

# Community Outreach

- Each year starts with a Community Advisory Panel Meeting (CAP) in the spring.
  - Includes City Officials, Fire, Police, County Hazmat, Federal Airbase, Local Hospital, area Chemical businesses, Utilities and hazmat transporters.
- Review old business items, anything new business related and (more importantly) any new chemistry or operations.
- Key outcome helps determine how we are doing and what our drill scenario should be for the fall. Focus on what the Community wants to learn more about so they can be better educated; better prepared.
- The emphasis of past drills has been on responding to Phosgene, Chlorine, CO, Flammable Solvents and Isocyanate simulated events.

# Planning



- After CAP meeting, we typically have 2 -3 subsequent planning meetings for the drill/training event.
- Focus on realistic scenarios that involve full incident command structure which helps satisfy our training requirements for IC trained employees.
- Drills are scheduled in September as we usually have slightly cooler weather for enduring the PPE requirement throughout the event.
- Make most of the drill day; have training sessions planned, tours for new personnel. We often have the opportunity to run through drill response with several differing responders for instance.



# Debrief, Corrective Actions and Report

- Hold debriefing and learn from the Community what they gained from event, what gaps may need to be addressed.
- Capture these opportunities for improvement and track to completion.
- Issue a timely report to key individuals. (May need two versions to help protect sensitive information for be disseminated to the Public)
- Never underestimate the value of a decent lunch in gaining support of responders and keeping them for the debrief.



# Our Hazmat Team

- Primarily Engineers, Shift Supervisors, Lead Operators and Maintenance Mechanics. All have good process acumen.
- We send our Hazmat Team members to the NY State's Emergency Responses Technician level training. This is typically free if you do your research.
- Each year we have quarterly training sessions (2 hours each) and the coordinated drill (4 - 5 hours).
- Two separate response locations; one on the south and the other on the north side of the plant to prevent isolation from our equipment during an event. The north location is a mobile unit.



# Questions

# Upcoming Safety Emphasis Programs



**Tuesday, May 16**  
**11:00am ET**  
Material Transfer



**Tuesday, May 23**  
**11:00am ET**  
Process Safety Management



**Thursday, June 1**  
**11:00am ET**  
Incident & Crisis  
Communications



# Contact Us



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