

Strem Chemicals, Inc.



Chemical Safety and Climate Change Preparedness Resources for Businesses



Northern Essex Community College
March 2018

Strem Chemicals, Inc. - Background

Strem Chemicals, Inc. was established by Dr. Michael E. Strem in 1964, today it is an employee-owned and privately-held company. Strem Chemicals, Inc. manufactures and markets specialty chemicals of high-purity throughout the world. Strem's key products include catalysts, ligands, organometallics, metal carbonyls and nanomaterials. Its products are used for research and development and commercial scale applications, especially in the pharmaceutical, microelectronics, chemicals and petrochemicals industries. Strem Chemicals also provides custom synthesis, process development and cGMP manufacturing services. For more information, visit www.strem.com, or email: info@strem.com

Executive Leadership



Strem Chemicals, Inc.

EHS&S Policy

STR-101



The Strem Chemicals, Inc. Environmental, Health, Safety & Security policy is to:

- Identify and meet all the applicable federal, state and local Environmental, Health, Safety & Security laws and regulations.
- Meet the Core Principles of SOCMA's ChemStewards Program.
- Promote openness with employees and stakeholders.
- Strive to continually improve its Environmental, Health, Safety & Security performance by setting improvement goals, developing action plans and monitoring and communicating progress.
- Operate in a manner that protects the environment and the health and safety of employees and the public.
- Communicate, train and involve all employees in Environmental, Health, Safety & Security activities and coordinate the activities through the Committee of Safety and Security.

Committee on Safety & Security,



Shiang Cai, Laboratory Manager


Susan Crooks, Technical Data Support


Ephraim Honig, Chief Operations Officer


Babu Patel, Technical Director


Charles Selicki, Facilities Manager


Jason Stevens, Warehouse Manager


Michael Strem, President


Frank Wagner, Senior Technical Specialist


R.J. Wolcik, Environmental Health & Safety

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Emergency Response Plan

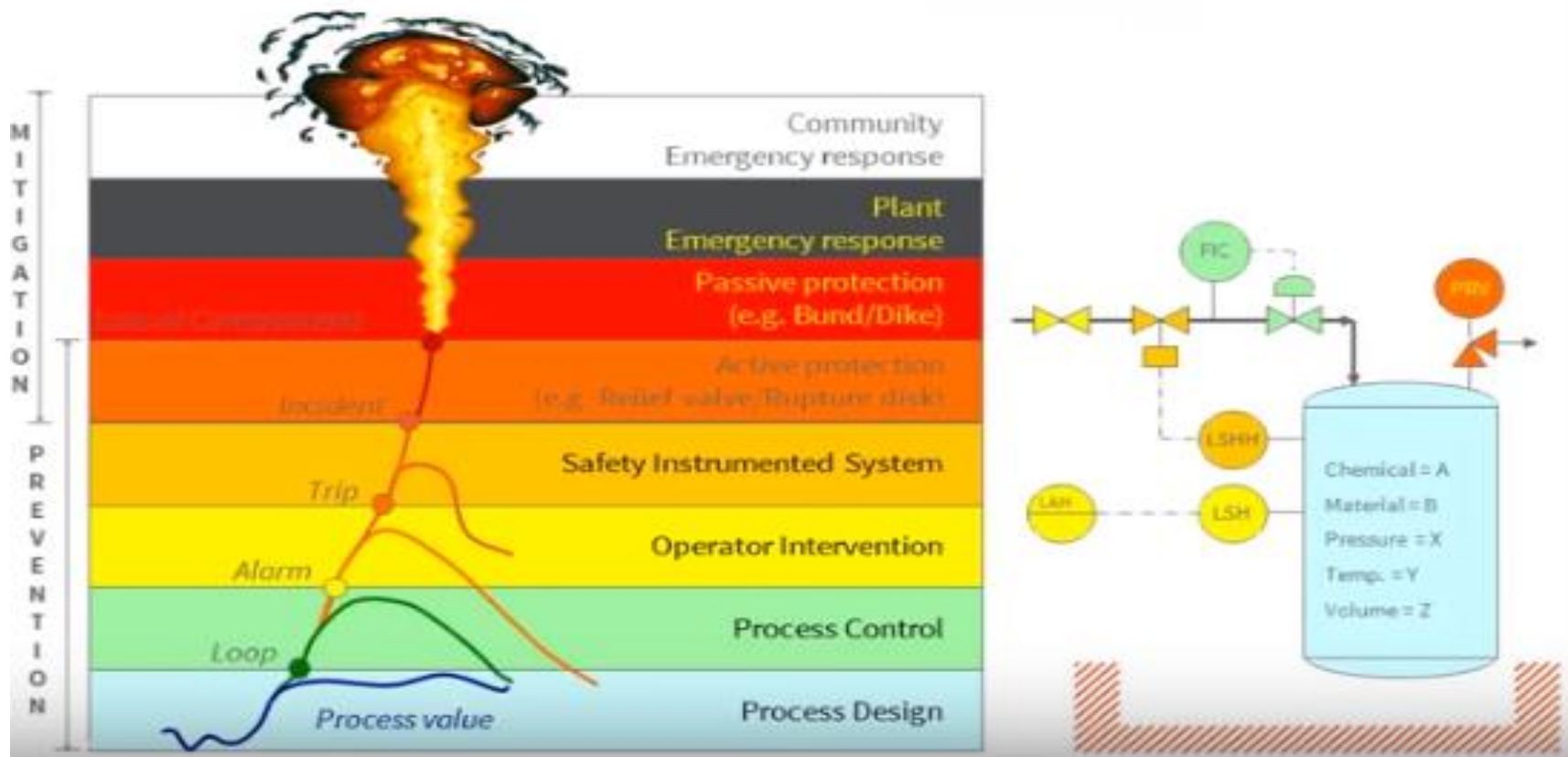
A contingency plan must include:

(40 CFR Part 265, Subparts C & D)

- A description of the actions facility personnel will take to minimize hazards;
- A description of arrangements with local and State emergency responders;
- At least one person designated as emergency coordinator;
- A list of the names, addresses, and phone numbers of the emergency coordinators;
- A list of all required emergency response and cleanup equipment;
- A description of the location and physical description of each item of equipment and an outline of its capabilities; and
- An evacuation plan for facility personnel.

Emergency Response Plan - LOPA

Typical Layers of Protection

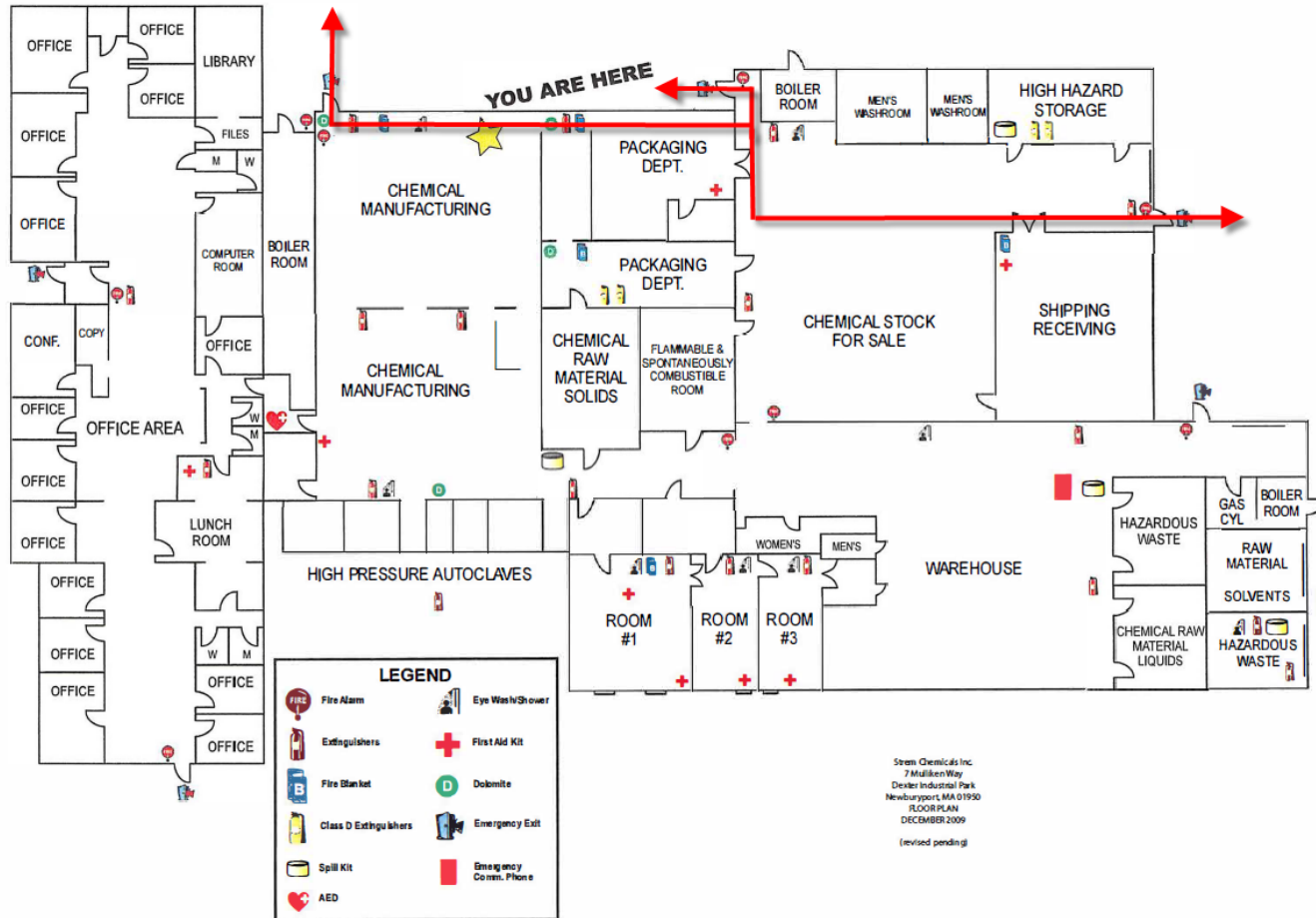


Emergency Response Plan - Inspections

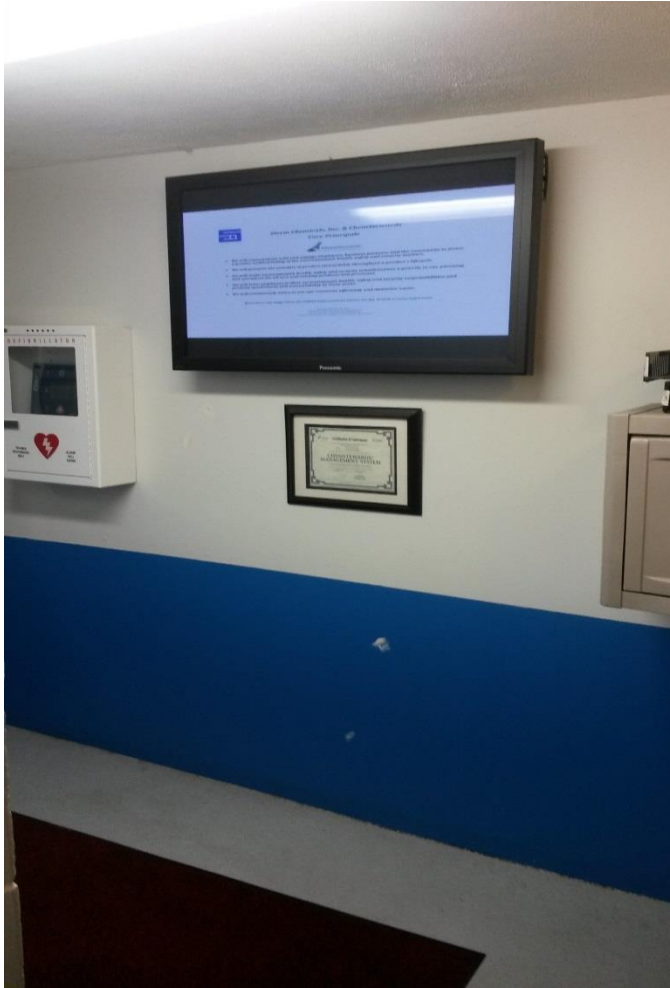


Quarterly prior to a company-wide EH&S Meetings, two Auditors, each from different departments, are chosen by EH&S to complete a company-wide EH&S Inspection. The Auditors are provided with an EH&S checklist, which consists of a written description of every area in the facility. Spaces are provided to write evaluations of each area on the EH&S checklist. The list is organized in a manner that the inspectors can walk through the facility on a predetermined path, ensuring that every area of the facility is covered.

Emergency Evacuation Plan

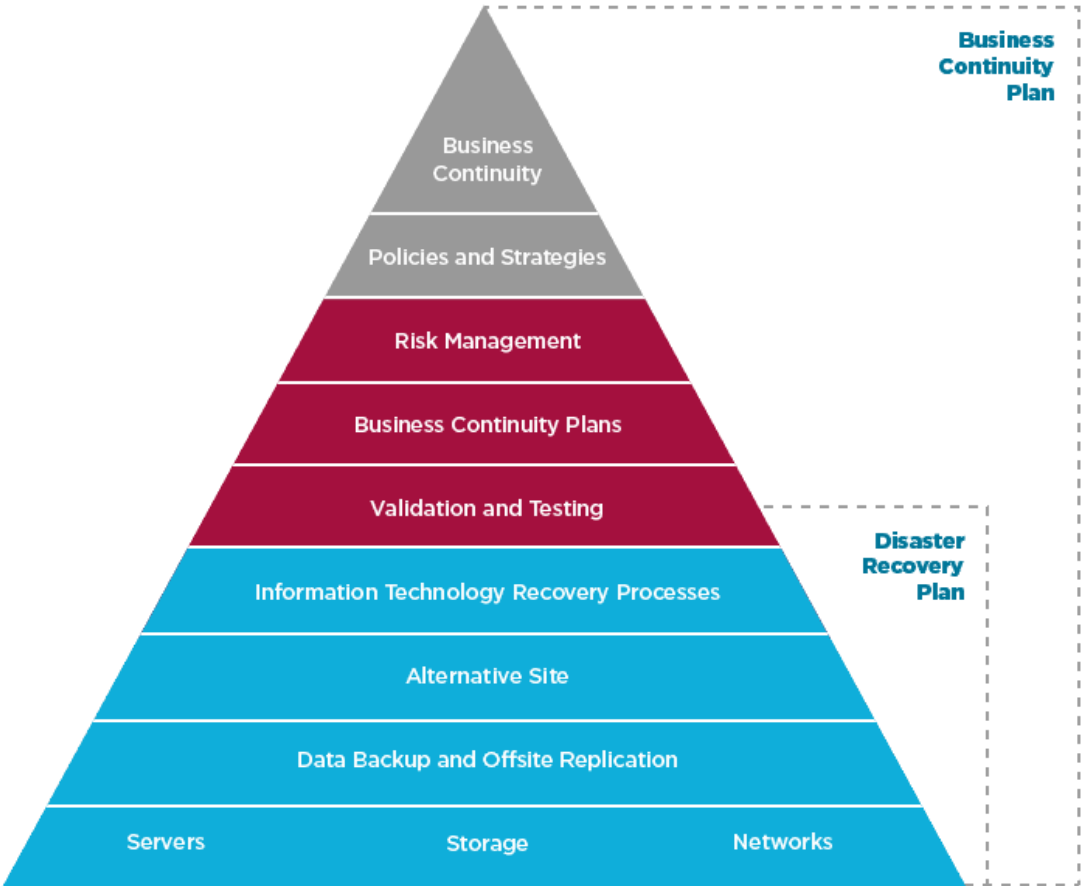


Communication with Employees



We have mounted an electronic (TV) compliance and goal calendar in the walkway between our office and laboratory which rotates through a slide show of all compliance reports we are required to complete. This shows all the EHS&S reports that have to be completed and also the regulatory requirement dates. The TV also displays all the EH&S goals for the current year.

Business Continuity Planning



Tier II

- Under Section 311 of the Emergency Planning and Community Right-to-Know Act (EPCRA), facilities must submit the MSDSs (or SDSs) of hazardous chemicals present on-site at or above the reporting threshold to their SERC, LEPC, and local fire department. Facilities may choose to submit a list of the hazardous chemicals grouped into hazard categories instead. This is a one-time submittal. New facilities have three months after becoming subject to the OSHA regulations to submit their MSDSs (or SDSs) or the list of the hazardous chemicals to their SERC, LEPC, and the fire department.
- Facilities that need to submit SDSs or the list of Hazardous chemicals under Section 311, also need to submit an annual inventory report for the same chemicals (EPCRA Section 312). This inventory report must be submitted to the SERC, LEPC and local fire department by March 1st of each year.

Northern Essex REPC



NORTHERN ESSEX *Regional Emergency Planning Committee*

The Northern Essex Regional Emergency Planning Committee [REPC] is mandated under the Environmental Protection Agency's [US EPA] Emergency Planning and Community Right-to-Know Act [EPCRA] under Section 301-303 (42 USC 166) or 40 CFR part 355. The Northern Essex REPC is designed to help our nine communities prepare to respond to emergencies involving hazardous substances. Every community in the United States must be part of a comprehensive plan. The Northern Essex REPC's comprehensive plan covers the communities of: Amesbury, Boxford, Georgetown, Merrimac, Newbury, Newburyport, Rowley, Salisbury, and West Newbury in the Commonwealth of Massachusetts.

Northern Essex REPC

- Identification of facilities and transportation routes of extremely hazardous substances
- Description of emergency response procedures, on and off site
- Designation of a community coordinator and facility emergency coordinator(s) to implement the plan
- Outline of emergency notification procedures
- Description of how to determine the probable affected area and population by releases
- Description of local emergency equipment and facilities and the persons responsible for them
- Outline of evacuation plans
- A training program for emergency responders (including schedules)
- Methods and schedules for exercising emergency response plans

Lessons Learned

Pre Plan – I cannot stress this one enough! Your pre plan should include meetings with your local Public Service (Police, Fire, REPC, Health Department, etc.) employees.

Start Early – Do not wait until the last minute to start the planning process. Be proactive not reactive. Give yourself adequate time and prepare for all possibilities.

<https://vimeo.com/188688975>

Outcome

Strem Chemicals, Inc. made a commitment to the entire EH&S Program. This involved: time, effort, funds, and communication. The commitment is not just a policy written down in a handbook; it has a complete backing from Upper Management with Employee buy-in. This is evident by Strem's Emergency Response Planning Awards from 2012-2017.



Questions

R.J. Wolcik

Environmental Health & Safety

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