TRINSEO™

INSURE

Strategic management methods for contaminated sites

April 16, 2019

- Frida Nilson
- EH&S Delivery Leader
- Trinseo Sverige AB

Quick Facts

- Trinseo is a global chemicals company
- More than 2,200 employees, based in 24 countries
- 60 manufacturing plants around the world
- Part of Dow Chemical until 2010
- Leader in our key products: plastics, latex binders and synthetic rubber

Trinseo Portfolio Overview

TRINSEO

	Performance Materials Division	Basic Plastics and Feedstocks Division
Businesses and Key Products	**Latex** Styrene Butadiene (SB) Latex Styrene Acrylate (SA) Latex **Rubber** Solution Styrene Butadiene Rubber (SSBR) Lithium Polybutadiene Rubber (Li-PBR) Emulsion Styrene Butadiene Rubber (ESBR) Nickel Polybutadiene Rubber (Ni-PBR) **Performance Plastics** Consumer Essential Markets Automotive Plastics	Polystyrene (PS) Acrylonitrile Butadiene Styrene (ABS) Styrene Acrylonitrile (SAN) Polycarbonate (PC) Feedstocks
Brands	LOMAX™ FOUNDATIONS™ HPL™ ENVERSA™ SPRINTAN™ MaxCoat™ MaxFoS™ MaxForte™ ProForte™ EVEREST™ ProWeb EMERGE™ INSPIRE™ VELVEX™ CELEX™ PULSE™	CALIBRE™ STYRON™ TYRIL™ MAGNUM™ STYRON A-TECH™ STYRON™ C-TECH
End Uses		

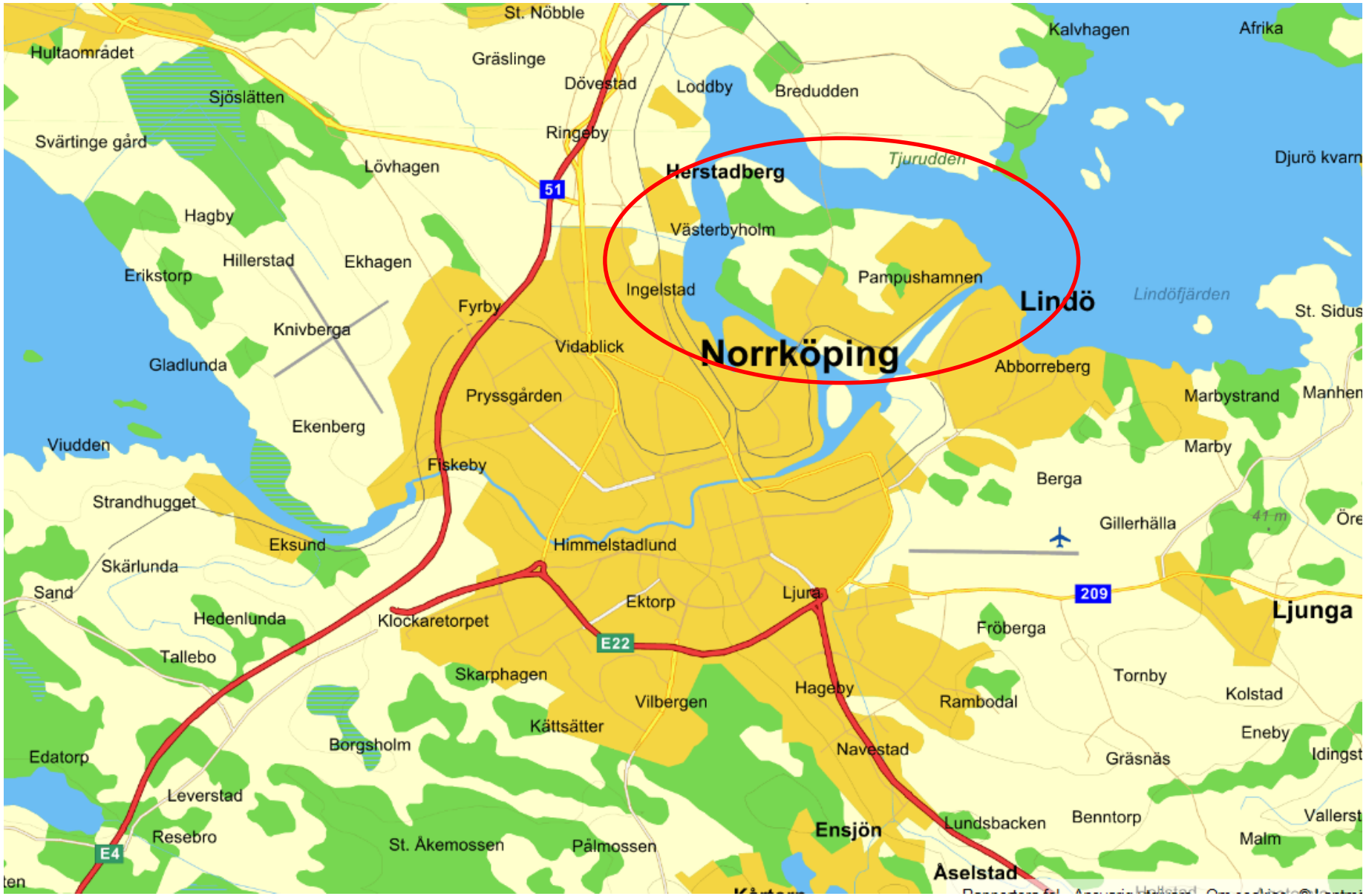
Global Manufacturing Locations

Trinseo delivers an unmatched combination of global reach, operational excellence, expertise, leading intellectual property, world-scale assets, and global R&D presence.

Trinseo Norrköping Site

- Site established in 1974
- Two Production Plants – Latex (Trinseo) and Styrofoam® (Ravago)
- Number of employees – 32 Trinseo (23 Ravago, 2-5 Contractors)
- Storage of major raw materials
  - Styrene, Butadiene, Acrylonitrile, Acrylate
- Plant closed to the environment
  - Recycling of water
  - Incineration of process oil, vent gases (bi-products)
- Steam production

Location Norrköping



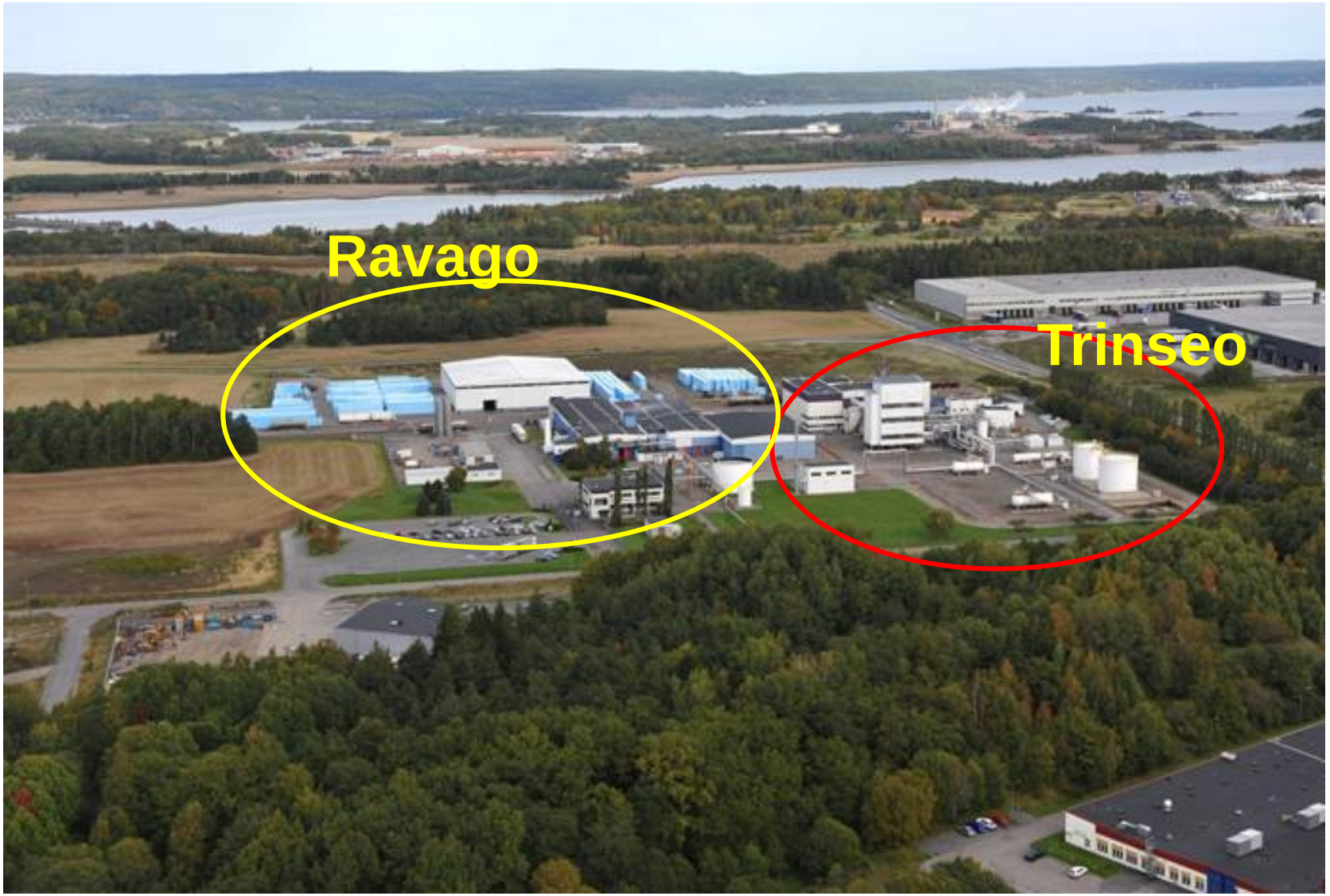
Norrköping site

Norrköping site

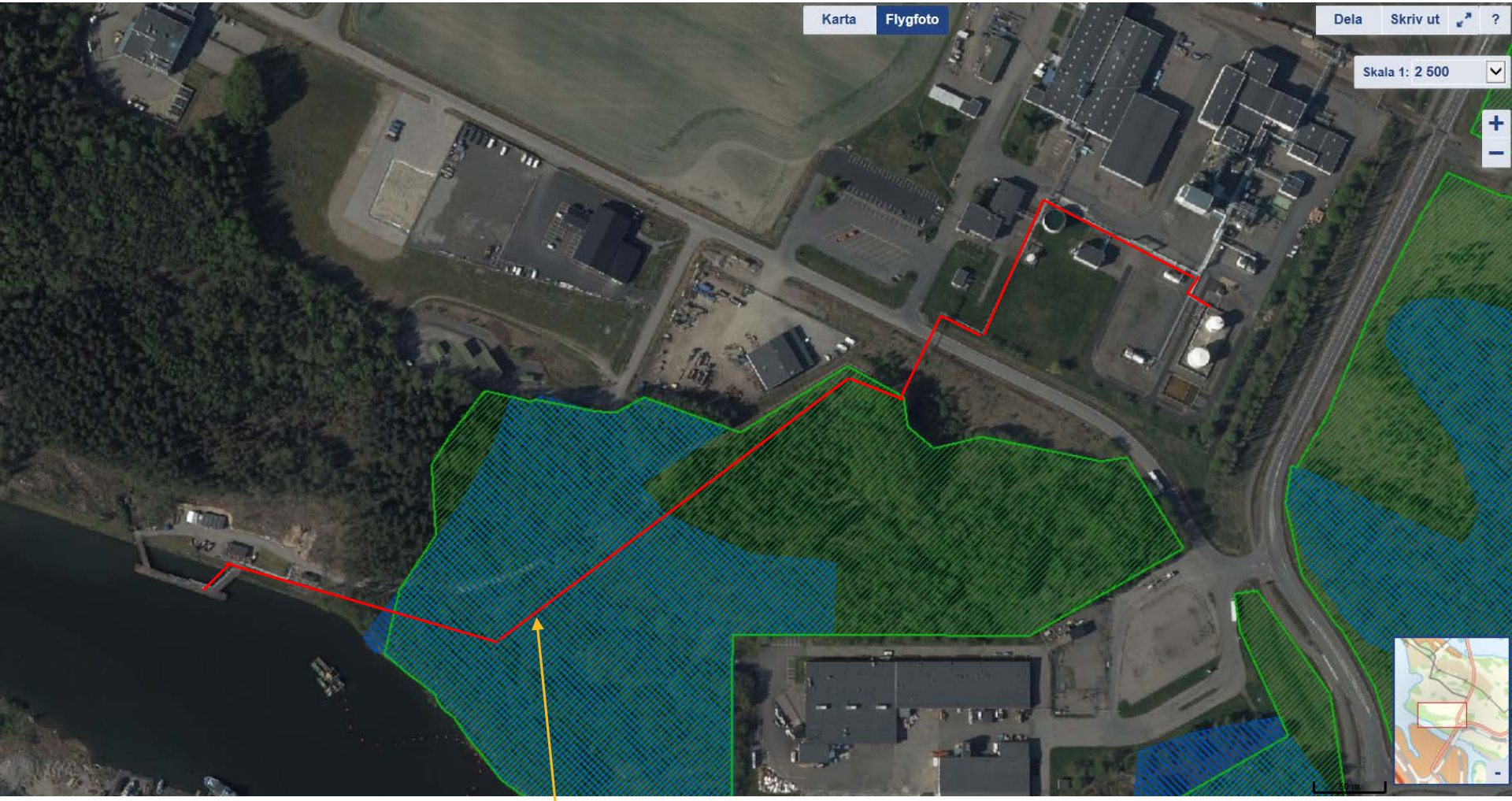
Natura 2000

Nature reserve

Scope Insure



Scope Insure



Styrene unloading line

History

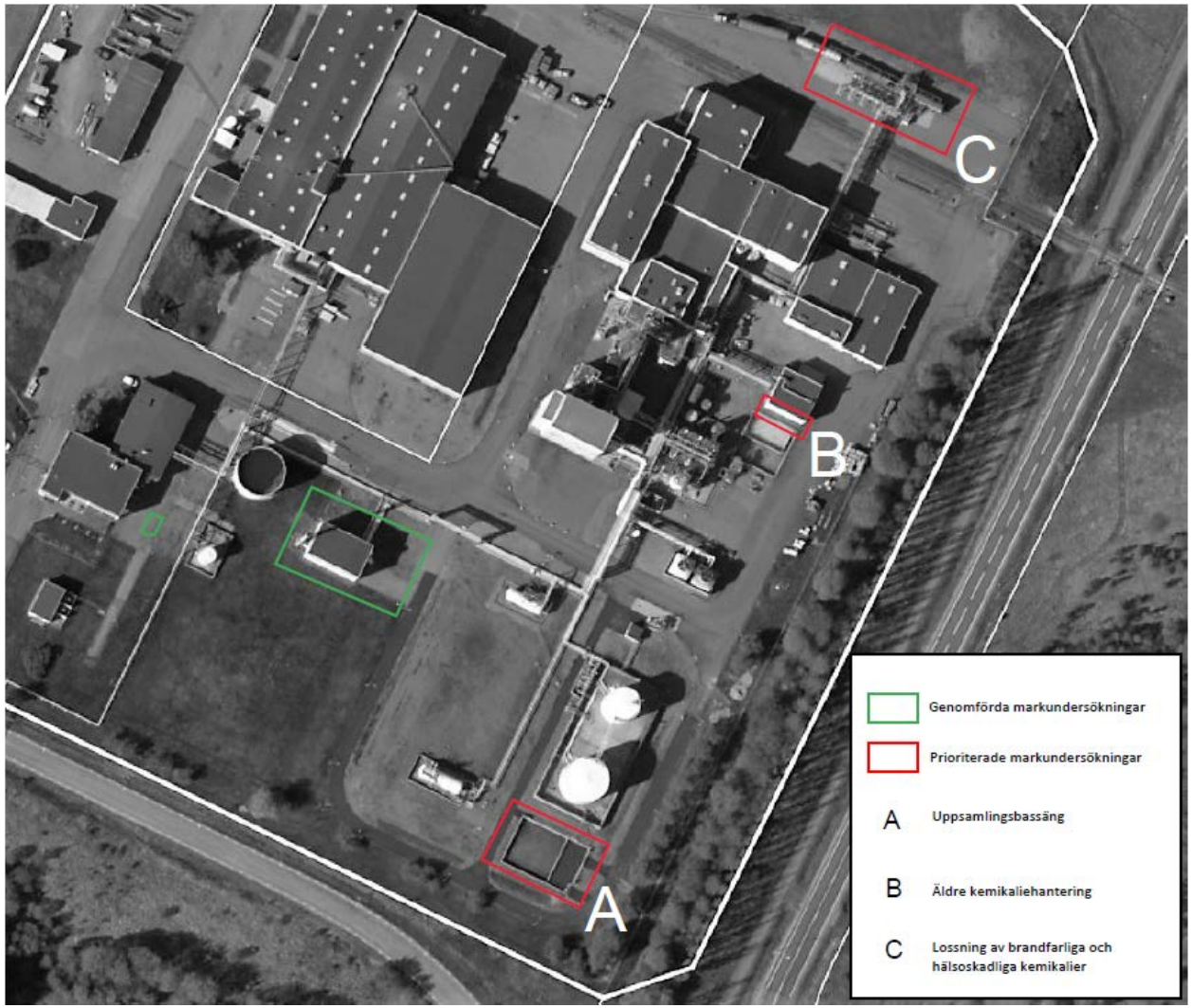
- Hazardous chemicals used over the years:
- - carbon tetra chloride (CTC)
  - sodium hypochlorite
  - hydroxy ethylacrylate (HEA)
  - acryl amide
  - fire fighting foam containing perfluorinated substances (PFAS)
  - formalin (formaldehyde in water)
  - acrylonitrile
  - styrene
  - butyl acrylate

- Contaminations with following remediation:
- - 1975; overfilling of styrene storage tanks
  - 1983; latex underground pipe damaged during construction work
  - 2005; unloading station for fuel oil, insufficient embankment

Project Insure – Action plan

1. Document current information regarding hazardous chemicals.
2. Assessment regarding risk of contamination.
3. Determine which chemicals are relevant, based on step 2)
4. Collect historical data from completed inventory of contaminations.
5. Description of the area and surroundings.
6. Determine if all gathered information is sufficient to describe the status of the site regarding contaminations.
7. Perform sample analysis if needed depending on outcome in step 6)
8. Create a remediation plan for the areas on site where needed, methods to be discussed with Länsstyrelsen.

Areas of interest



Follow up

- Contaminated soil and groundwater added to self-monitoring program
- Reporting yearly to Swedish authorities in environmental report, completed and coming activities

Thank you