SAND2011-4589 C
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Chemical Supply Chain and Resilience Project
FY 2010 Workshop

Documentation, Use Cases, and Caveats

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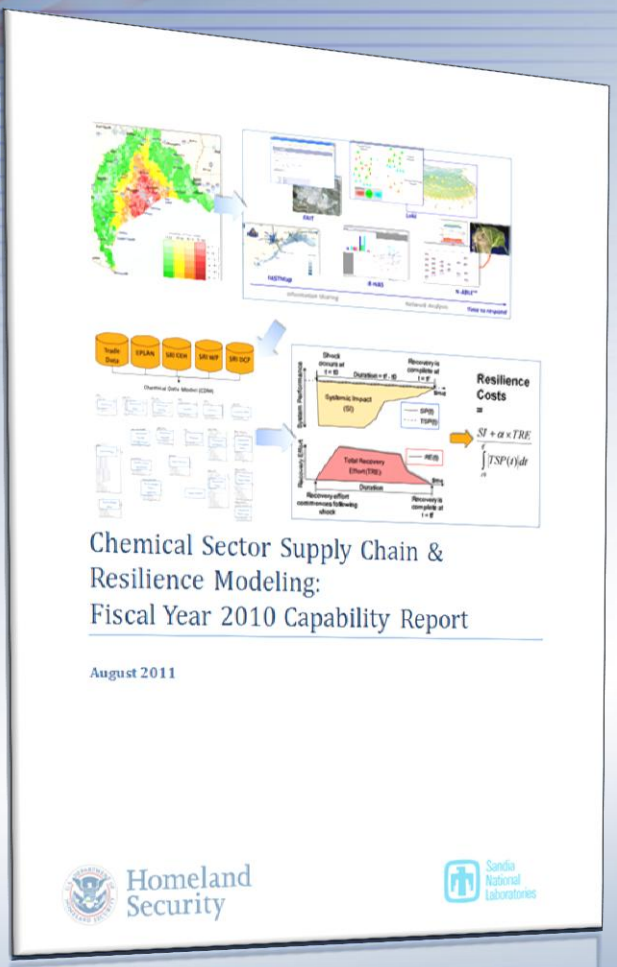
Overview

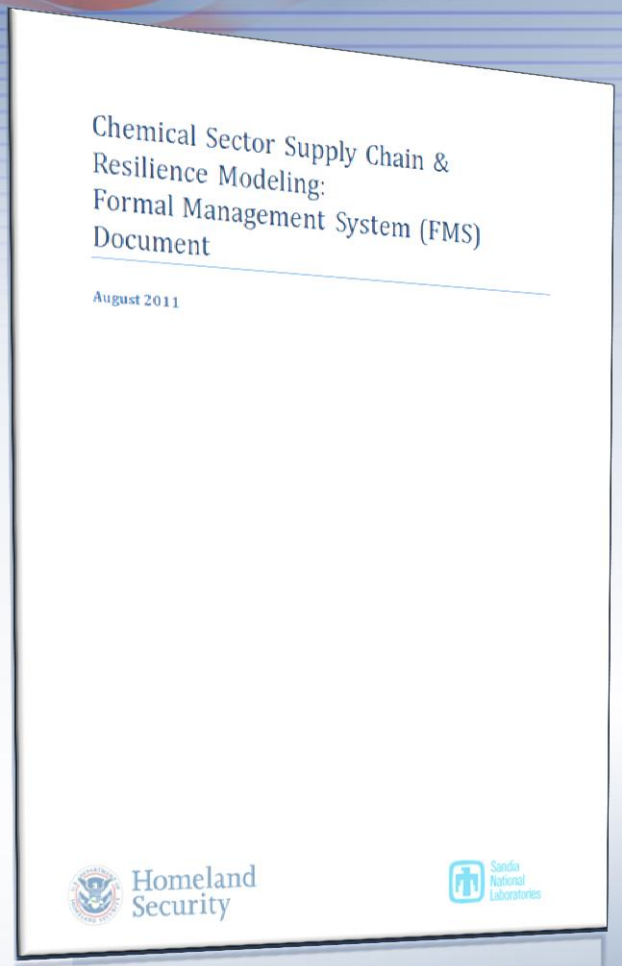
- Documentation
- Use Cases
- Gaps
- Caveats

Documentation



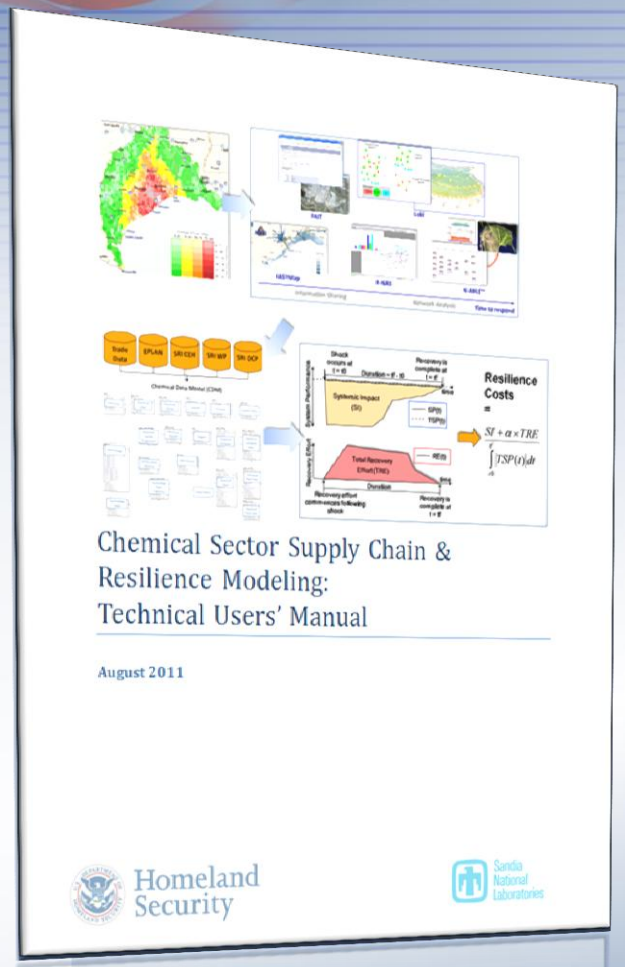
- **FY 2010 Capability Document**
  - Describes advancements of the capability under this year's project plan
  - Uses today's example to highlight the capability set

Documentation



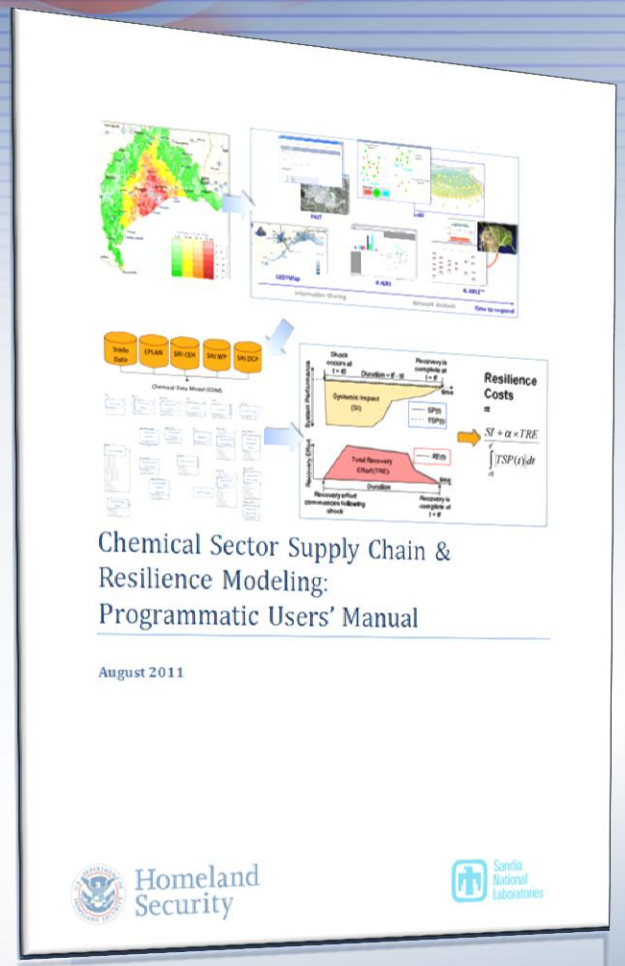
- **Formal Management System document**
  - Identify capabilities developed/enhanced
  - Identify requirements for deliverables using capabilities
  - Identify requirements among these capabilities needed to meet deliverable requirements.
  - Highlight roles and responsibilities for ongoing execution of capabilities

Documentation



- **Technical Users' Manual**
  - Description of tools and data development
  - Walkthrough of the analysis process including explanation of use of data/tools in process
  - Walkthrough of O&M for data/tools
  - Designed to provide NISAC analysts with the means to answer questions using the capability

Documentation



- **Programmatic Users' Manual**
  - Summary of the analysis process
    - Basis
    - Limitations
  - High-level descriptions of data/tools used in the analysis process
  - Designed to provide RDMB-NISAC and external entities with understanding of what the capability is, how it should (and should not) be used

Use Cases

- **Consequence Analysis**
  - Real-world incidents
  - Hypothetical scenarios
- **Resilience Analysis**
- **Policy Analysis**
  - Transportation
  - Import/Export
  - Technology

Gaps

- **Chemical Families**
  - Semiconductor Chemicals
  - Pharmaceuticals Chemicals
  - Necessary Organics
  - Explosives
  - Food Chemicals
  - Inks, Paints & Dyes
  - Bio-derived Chemicals
  - Non-Chlorine Water Treatment Chemicals
  - Minerals
  - Outstanding Industrial Gases
- **OCONUS Geographic Modeling Scope**

Caveats

- **Spatial Resolution**
  - scope of problem too small (i.e., inside plant)
  - Scope of problem too large ('the rest of the world')
- **Temporal Resolution**
  - Seasonality
  - Disruption duration
- **Business Decisions**
  - Enterprise decision-making

Caveats

- **Transportation Assumptions**
  - Shortest path vs rail corridors
- **Information Vintage**
  - Enterprise decision-making
- **Market Assumptions**
  - Captive vs market production
  - ‘end of network’ assumptions (supply, demand)
  - Market price fluctuations and determination

Questions?