



SAFER products allow Emergency Managers to prepare for and respond to, mitigate and recover from release events in the most efficient and effective ways possible. **SAFER One® RT** now packages that capability in a browser based platform with a new more intuitive interface with industry leading enhancements.

## SAFER One® RT Enhancements

### FEATURES

- Lower cost, annual subscription, SaaS licensing
- Browser-based, anywhere, anytime access
- Login from anywhere to check on plant conditions
- System database admin console
- Automatic / on-demand patches, fixes and system updates
- Greater ease and flexibility for training installs
- Customizable, Google-based, satellite map imagery, GIS and receptor databases
- Intuitive "click on map" event management interface
- Live meteorological, sensor and traffic data
- Run multiple scenarios simultaneously in different browser windows
- ERG based HazMat, BLEVE and IED initial hazard assessment add-on
- Built in collaboration, event sharing and reporting tools
- Functionality customized to your site's specific risk profile

### FEATURES

- Live Met & Sensor Data Acquisition
- Real-Time Plume Modeling
- Always-On Monitoring & Logging
- Source Area Locator™ (SAL)
- Advanced Back Calculation™ (ABC)
- Combustion Analysis Model™ (CAM)
- High Resolution Facility Imagery
- Custom Scenario Management
- Custom Receptor Lists
- Lightning Detection & Warning
- Personnel Tracking & Reporting
- Database 700+ Chemicals

### FULL SUITE OF MODELS

- Puddle and Pool
- Tank and Pipe
- Stack and Jet
- Multi-Component Evaporation
- Dispersion
- Building Infiltration & Exfiltration
- Complex Terrain Windfield
- Fire and Explosion
- Particulate Dispersion and Deposition

### APPLICATIONS

**Real-Time  
Emergency  
Response**

**Live  
Training  
Drills**

**Workforce  
Protection**

**Risk  
Mitigation**

**Post Event  
Analysis**



## PATENTED MODELING ALGORITHMS

### Advanced Back Calculation™

An estimation of the release rate from a user-specified source location or a location calculated by the Source Area Locator™ (SAL). By specifying the chemical, location of the event, and actual measured downwind concentrations, Real-Time® can estimate the release rate.

### Source Area Locator™

Source Area Locator™ (SAL) pinpoints the source of a chemical release using meteorological data and two or more concentration measurements from the chemical released.

### Combustion Analysis Model™

The Combustion Analysis Model™ (CAM) is a first of its kind analysis and decision support tool for those involved in preparing for, responding to and assessing the health, safety and environmental impacts of industrial and transportation incident related chemical fires.



**SAFER**  
SYSTEMS

# SAFER One® RT

## Illustrated Overview

**1** Search for location

**2** Map Location

**3** Snapshot

**4** 9-45 (50 min)

**5** Tank Release Event

**6** Administration

**7** Possible Impacted Places

**8** Plume Vertical Profile

**9** Manual Input

**10** Fort Saskatchewan

**11** GIS/scenario/emission source search tool

**12** Wind shifted plume snapshot @ 50 minutes

**13** Total Impacted Area over 2 hours

Go To Administration

Tank Release Event

AAA Chlorine Cylinder Fusible Plug Failure

Toxicity (ppm) 0.5 2 20

Distance (km) 4.24 2.97 0.95

Chemical: CHLORINE

Release Time: 2015-12-10 08:55

Tank Length: 1.83 m

Tank Diameter: 0.76 m

Wall Thickness: 1.2 cm

Mass: 907 kg

Source Angle: Horizontal

Hole Diameter: 1 cm

Hole Elevation: Bottom of Tank

Duration: Continuous

Tank Temperature: 22.2 deg F

Pool Area: 900 ft^2

Pool Duration: Continuous

Substrate: Concrete

Pool Substrate Temperature: 22.2 deg F

Aerosolization: Let Model Decide

IO Files Update and Run Close

Name Type Dist

Hill Street / Veterans... Drawing 0.14 km

Corunna Fire Station Fire St... 0.17 km

Hwy 33 / St. Clair Pa... Drawing 0.71 km

Canada Post Govern... 0.4 km

Parkway Pentecosta... Religious 1.08 km

Plume Vertical Profile

Height (m) / Distance (km)

0.5 ppm 2 ppm 20 ppm

Manual Input

Max Speed: 1.1 m/s

Feels Like: -4.6 deg C

Temperature: -3 deg C

Humidity: 78 %

Solar: 0 W/m^2

Stability(H/V): 5/5

Wind from: NW

1.1 m/s

Map data ©2016 Google Imagery ©2016, ©Aerial/Spot Image, DigitalGlobe, Landsat 500 m Report a map error

1. Browser based deployment for anywhere, anytime access
2. "Click on Map" user control
3. Incident Reporting/Traffic/Measurement Tools
4. Snapshot/Footprint Time Control
5. Incident details & update and run panel
6. Incident & Chemical ID with concentrations & distances
7. Color coded potentially impacted places
8. Vertical dispersion profile
9. Incident Meteorology
10. GIS/scenario/emission source search tool
11. Wind shifted plume snapshot @ 50 minutes
12. Total Impacted Area over 2 hours