Risk Analyst

breeze

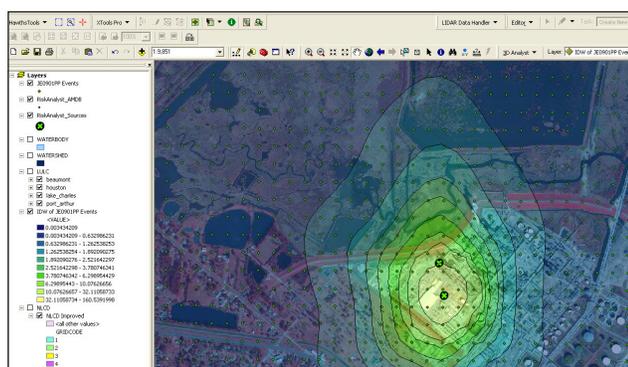*Modeling Software for EHS Professionals*

Health Risk Assessment

BREEZE® Risk Analyst is a human health and ecological risk assessment modeling system designed to conduct multi-pathway human health risk assessments and food-web based ecological risk assessment modeling. BREEZE Risk Analyst seamlessly combines all the necessary tools, databases, GIS functionality, and fate, transport, and exposure modeling equations into an affordable and easy to use software application.

Risk Analyst integrates with ArcGIS to perform geospatial health risk assessment.

Regulatory and Non-regulatory Risk Assessments

BREEZE Risk Analyst provides the framework for conducting risk assessment modeling for both regulatory and non-regulatory applications, including:

- Air toxics risk assessments
- Environmental impact statements
- Air monitoring health impact analysis
- HHRAP-RCRA hazardous waste combustion permitting
- Community-based cumulative risk assessment programs
- Ecological risk assessments
- Toxic tort and odor/nuisance litigation
- Air toxics permitting
- Air toxics risk assessment library methodologies
- Cumulative risk
- Environmental justice
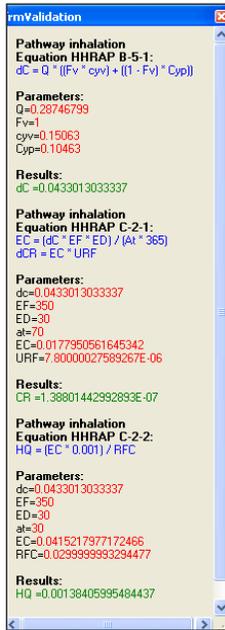- Hot spots guidelines
- Residual risk

GIS Functionality

BREEZE Risk Analyst is available as an Esri ArcGIS® Extension. Risk Analyst users can utilize ArcGIS's powerful capabilities including visualizing, managing, creating, and analyzing geographic data. Fundamental to risk modeling, users can understand the geographic context of the data, visualize relationships, and identify patterns in new ways never before possible without geospatial awareness.

Media Specific Fate and Transport Modeling

Air   Soil   Water   Sediment

Exposure Scenarios

Resident and Fisher Adult and Child

Farmer Adult and Child

Industrial Worker

Exposure Pathways

Inhalation
Soil
Fish
Breast Milk
Dermal
Drinking Water

Produce
Beef
Pork
Chicken
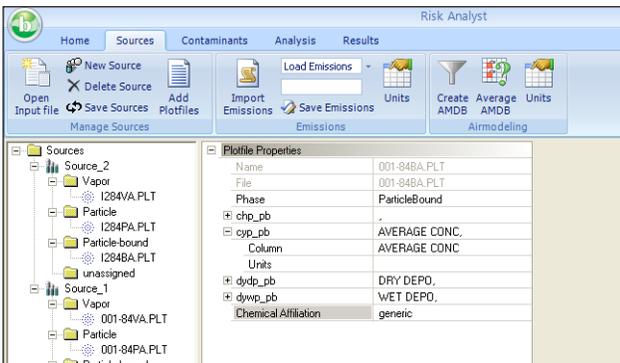Eggs
Milk

Robust Tools and Features

Modern user interface with intuitive process flow
The user interface provides robust, user-friendly GIS-driven project setup, results analysis, and project management. Functionality is organized based on steps common to the risk assessment process and grouped within context tabs and grouped toolbars.

Advanced error logging and numeric validation reporting options
This powerful feature provides fully transparent modeling results and error logging options that enable the efficient and t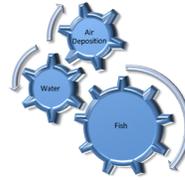ransparent communication of risk results to stakeholders. Report options include equations, parameters inputs, intermediate calculations, and final results. This feature is also extremely useful for identifying key input parameters and risk drivers.

Flexible air modeling Import Wizard
The Import Wizard guides users to import modeling results from a wide variety of air dispersion models and data formats (e.g., ISCST3, AERMOD, CALPUFF, and SCIPUFF). Import formats are not limited or predefined by rigid software requirements. BREEZE Risk Analyst reads input and output file formats and provides the tools necessary to "map" air modeling results with the correct equation input parameters. Air dispersion modeling runs are often quite time consuming to complete. The Import Wizard saves time and money since existing modeling results can be used without the need to reformat.

Easy to use Mercury Wizard
The Mercury Wizard guides users of all experience levels through the complicated process of mercury speciation and phase allocation.

Fully editable input parameters
Users have full access to all equation input parameters including site-specific; emission; exposure scenario; chemical-specific fate, transport, and toxicity; and equation default variables. Users can fully reference or add comments to all input variables.

Results analysis and mapping capabilities
- Use powerful sort, filter, query, threshold, and exceedance options
- Analyze geospatial data with advanced, yet easy-to-use analytics and analysis tools
- Export results to Google Earth™, Microsoft Excel®, Microsoft Access®, Esri shapefiles, XML, text, or HTML formats
- Quickly access underlying attribute information such as detailed emission source or facility information
- Calculate risk estimates for multiple sources, chemicals, exposure scenarios, exposure pathways, and locations simultaneously

For a demonstration of Risk Analyst or for more information, contact the BREEZE team at +1 (972) 661-8881 or breeze@trinityconsultants.com.

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