Spill Impact Analyst Evaluates Pipeline Risk & Allows You to Create Accurate Mitigation Plans

Spill Impact Analyst provides invaluable assistance when developing highly accurate leak mitigation and response plans. With this accurate modeling, operators can create plans to effectively respond to leaks and remedy a situation in less time, with fewer environmental damages, and at an overall lower cost.

Using Spill Impact Analyst, operators can quickly evaluate the potential for pipeline leaks, predict worst-case release volumes, and create plans to mitigate the impact of those potential leaks. The output reporting is straightforward, designed so even casual users can understand the spread of the leak over a terrain and grasp where and how far it will travel.

This flexible Esri ArcGIS desktop extension uses the most advanced overland flow analysis engine available, FLO-2D, to realistically project the speed and spread of the spill over the surface. It also identifies the High Consequence Areas (HCAs) and stream channels that could be affected. This powerful analysis engine provides unmatched in-house capabilities and its advanced features can even calculate pool fire thermal radiation hazards around the resulting spill plume and display those results visually in ArcMap.
Key Benefits

- Ensure emergency preparedness by creating “what-if” scenarios and adjusting variables such as valve types, pipe segments, and depth of cover.
- Uses the FLO-2D model, which utilizes full dynamic wave momentum equations, resulting in a more realistic path of liquid over time.
- Provides user-friendly controls to calculate release points at distance intervals, specified locations, and National Hydrology Datasets (NHD) waterway intersections.
- Calculates release volume based on valve isolation points, line fill, depth of cover, valve closure time, response time, and flow rates to help you.
- Displays detailed analysis results as polygon spill plumes in ArcMap.

Key Features

- Analyzes release points, system shut down time, valve closures, and flow.
- Predicts which stream channels will be affected through the use of channel flow modeling with the National Hydrography dataset.
- Lets you add, edit, and delete downloaded pipeline data.
- Drapes pipeline data over a Digital Elevation Model (DEM).
- Performs water transport trace analysis using USGS NHD and NHDPlus data.
- Supports standard NPMS layers and user defined HCAs.

Product Preview

User specified release points are applied to demonstrate overland spread and water transport analysis for a hazardous liquid pipeline.

Technical Specifications

- ArcView, ArcEditor, or ArcInfo
- Windows XP or Windows 7
- Microsoft .NET Framework

About New Century Software

Since 1994, New Century Software has delivered pipeline integrity management software and services to energy transportation companies. With an ideal blend of innovative software solutions and extensive pipeline expertise, New Century Software is uniquely qualified to serve the oil and gas industry. Our flexible solutions empower your organization to manage pipeline integrity data and navigate regulatory compliance ensuring safety and reliability.