



integrated offsite



Planning is the key to **Emergency Preparedness and Response**. Although modeling disaster scenarios is complex, the challenges cannot stand in the way of compliance with regulatory requirements and public expectations.

With the extreme consequences of liquid leaks or spills, it is imperative that a land-based spill model be realistic. This comprehensive spill model, **INTEGRATED OFFSITE**, is founded on proven algorithms that account for variations in factors like surface cover, fluid properties, soil absorption, and terrain/topography.

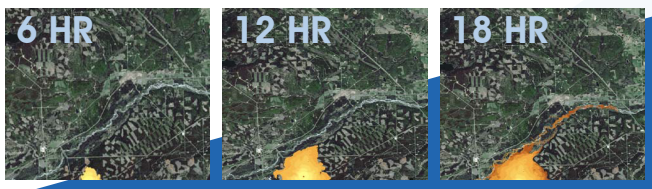
fate and transport modeling. simplified.

Overland Flow Model

This **Add-In for ArcGIS** seeks to cover as many factors that impact overland flow as possible, focusing particularly on terrain, fluid properties, drainage systems, operating condition, release volume, and emergency response time.

The **INTEGRATED OFFSITE** approach is two-fold: First, **establish realistic resistance to flow** over the ground surface by taking into account variation in surface cover, slope (direction), fluid properties, and other key inputs; Second, **calculate spill paths** by passing over a topographic surface, accounting for resistance. Factors like spill travel time, volume, area, and distance are configurable to truly reflect real-world circumstances.

Forecasting Spill Impact



To gain insights into how closely spill travel time and distance are linked, **INTEGRATED OFFSITE** tools give you the power to generate **snapshots of the spill area by time interval**. The

example shown here is a test case for the spill of unlimited amount of product at **6 hours, 12 hours, and 18 hours**.

Industry & Regulatory Application

The main driver behind the Overland Flow model present within the **INTEGRATED OFFSITE** application is its ability to address the needs of the Oil and Gas industry, meeting their Emergency Response requirements. However, this model is not built solely for these businesses.

“Its value reaches far beyond the Natural Resources industry with methodology and results that have direct applicability to other sectors, especially those in Emergency Response and Remediation.”

This model may be used to help first responders with the planning process for response times, establish effective **Emergency Response Control Points**, and even estimate cleanup and remediation costs.

let us help

If your organization is ready to implement the **INTEGRATED OFFSITE** application in your own workflow, contact us to discuss a demonstration, trial, and enterprise licensing.

Questions? Learn more by reaching out to our team at gis@integrated-informatics.com.



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