Fire Hazard and Mitigation Analysis
Systematic Approach to Documenting Fire Hazards and Evaluating Mitigations Using BakerRisk’s FireHAT® Software

An innovative approach that bridges the gap between qualitative reviews and quantitative modeling

Why Perform a FHMA Study?

- Perform hydraulic modeling to ensure adequate firewater supply
- Ensure appropriate firewater coverage based on quantitative, design basis fire case scenarios
  - Accurately and efficiently determine firewater demands
- Determine locations that have deficient passive fire protection
- Develop fire pre plans based on quantitative fire results and integrated emergency response

Benefits of BakerRisk Approach

- Evergreen Model
  - Links consequence and risk results from existing FSS/QRA studies with robust hydraulic modeling and fireproofing evaluation tools
  - Can easily be updated to include new process units, new fire fighting equipment, and new firewater supplies/improvements
- Accurately define firewater demands
  - By reviewing design basis fire cases, firewater demands are estimated based on existing/proposed systems rather than prescriptive coverage calculations
- Facilitate Fire Pre Plan Creation
  - Structured to allow selected design basis fire cases and firewater response workshops to feed the creation of fire pre plans
- Consistent Documentation
  - Quantitative results show selected design basis fire cases, the firewater coverage, and firewater demands
  - Qualitative input from a workshop setting shows emergency response actions and timeline sequence of firefighting capabilities

Integrated Analysis Approach

Site Hazards
- Existing FSS/QRA
- Define fire cases from PFDs

Flow Capabilities and Water Coverage

Coverage for Identified Hazards

System Network

System Performance