

GexCon US

LARGE LOSS

INVESTIGATIONS



GEXCON SERVICES:

- Explosion Consulting
- Dust Explosion Consulting
- Large Loss Investigations
- Atmospheric Dispersion Consulting
- LNG Consulting
- Offshore Explosion Safety

Contact

Scott G. Davis, Ph.D., P.E., CFEI
 President – Principal Engineer

Phone: (301) 915-9940
 E-mail gexconus@gexcon.com

With over 40 years of experience, GexCon can assist with investigating large losses ranging from residential fires to chemical processing, petrochemical, manufacturing, and other industrial facilities. Our expertise includes site inspections using advanced techniques to map the environment, locate gas and vapor pathways, detect chemical residue, and collect and preserve physical evidence.

GexCon's computational fluid dynamics (CFD) package, FLACS, is an advanced tool capable of simulating dust, gas, aerosol, and vapor cloud explosions, gas and vapor dispersion, liquid releases with flashing or pool formation, and toxic chemical dispersion, and can be used for evaluating large loss scenarios.

Accident Scene Investigation

- Documentation of damage and debris
- 3D laser scanning and model reconstruction
- Ground penetrating radar (GPR) for detecting potential migration pathways
- Sampling/chemical analysis and evidence collection
- Interacting with government agencies and other involved parties

Explosion and Blast Modeling

- Reconciliation of near and far-field blast damage
- Examination of release and/or leak scenarios, vapor dispersion
- Identification of blast origin and evaluate ignition sources

Toxic Chemical Releases

- Evaluation of releases resulting from tank or pipeline failures, spills, fires, explosions, or industrial operations
- Characterization of high and low-pressure gas releases, flashing liquid or pool spills, and cryogenic liquid spills.
- Examination of toxic gas dispersion, chemical exposure, stack emissions and atmospheric conditions

Litigation Support

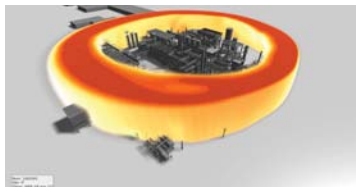
- Development of high-quality exhibits and animations
- On-site expert services



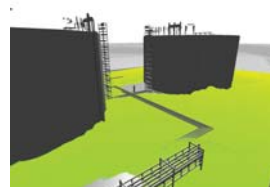
BUNCEFIELD EXPLOSION



3D LASER SCAN - POINT CLOUD



EXPLOSION & BLAST WAVES



CHLORINE RELEASE



LARGE SCALE TESTING

GexCon US

Bethesda: 4833 Rugby Ave,
 Ste 100, Bethesda, MD, 20814

Houston: 11757 Katy Freeway,
 Suite 1300, Houston, TX, 77079

www.gexconus.com