

## Facility Siting

### Benefits of Facility Siting

A properly performed facility siting study provides you with the data necessary to make informed decisions to address risks from fire, explosions or toxic substances.

ioMosaic offers a broad understanding of facility siting concepts and standards. We have a wide range of facility siting project experience, ranging from refineries, chemical and petrochemical plants, pharmaceuticals and liquefied natural gas facilities. ioMosaic can apply any of the main facility siting approaches (risk-based, consequence-based, or look-up tables) depending on client or project requirements.

### The Need for Facility Siting

Facility siting allows you to identify possible risks to personnel, equipment, structures and surrounding areas from fire, explosion and toxic substances. OSHA process safety management regulations require facility siting assessments as part of a comprehensive process hazard analysis.

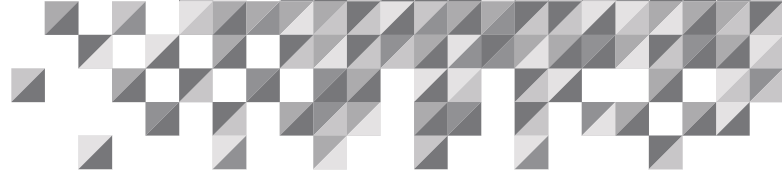
### Experienced Professionals

ioMosaic personnel have extensive experience in conducting facility siting studies, assessing plant facilities and providing recommendations to manage risk. The results of our process safety and risk management studies have been used by proactive companies in the petroleum, chemical and utility industries to effectively manage the risks of highly hazardous operations.

We are particularly proud that so many of our clients return to us for facility siting studies and guidance regarding expansions, modifications and new facilities; and that they continue to rely on us for integrity, insight and value. Our recommendations are practical and based on sound engineering practices, while keeping operability and cost-effectiveness in mind.

### Facility Siting Tools

Our Process Safety Office® SuperChems™ component is a commercially available software package, which combines expertise in chemical hazard characteristics, advanced numerical computations and process safety analysis with rigorous models for source terms, dispersion, and fires and explosions. The equations are based on first principles of conservation and continuity and embody the fundamental chemical engineering principles of thermodynamics, heat and mass transfer, fluid flow, chemical rate and transport behavior. These models have been validated both qualitatively and statistically using large-scale experimental data.



## About ioMosaic Corporation

Through innovation and dedication to continual improvement, ioMosaic has become a leading provider of integrated process safety and risk management solutions. ioMosaic has expertise in a wide variety of areas, including pressure relief systems design, process safety management, expert litigation support, laboratory services, training and software development.

ioMosaic offers integrated process safety and risk management services to help you manage and reduce episodic risk. Because when safety, efficiency, and compliance are improved, you can sleep better at night. Our extensive expertise allows us the flexibility, resources, and capabilities to determine what you need to reduce and manage episodic risk, maintain compliance, and prevent injuries and catastrophic incidents.

Our mission is to help you protect your people, plant, stakeholder value, and our planet.

### Overview of most services / products we provide:

- Asset integrity
- Auditing
- Chemical reactivity management
- Combustible dust hazard analysis (DHA) and testing
- Due diligence support
- Effluent handling design
- Facility siting
- Fire and explosion dynamics
- Incident investigation, litigation support, and expert witness
- Liquefied natural gas (LNG) safety
- Pipeline safety
- Pressure relief and flare system design
- Process engineering design and support
- Process hazard analysis (PHA)
- Process safety management (PSM)
- Quantitative risk assessment (QRA)
- Risk management program development
- Software solutions
  - Process Safety Enterprise®
  - Process Safety Learning®
  - Process Safety Office®
  - Process Safety Project Opportunity Marketplace (PSPOM™)
  - Process Safety tv®
- Structural dynamics
- Training (open enrollment, online, and customized)

For more information on ioMosaic, please visit: [www.ioMosaic.com](http://www.ioMosaic.com)

