Blowdowns & the Fore River Bridge

WHAT COULD GO WRONG?

ALOHA Hazard Modeling Program

ALOHA is a modeling program that allows you to enter details about a real or potential chemical release, and then it will generate threat zone estimates. The ALOHA model was used to measure flammable conditions on the Fore River Bridge under certain weather conditions, and in relation to gas releases from blowdowns.

What's a "blowdown"?

It's the venting of gas from a compressor station. Blowdowns are done for maintenance, to relieve gas pressure, or in the case of an emergency. During a blowdown, untreated fracked-gas is released into the air.

Blowdowns & the draft air pollution permit

How MassDEP addresses blowdowns:

- No pollution control device
- Notify MassDEP/Weymouth BOH for blowdowns > 1 million cubic feet gas
- Stack height: No stack

CONCLUSIONS FROM ALOHA MODELING*:

Small gas releases could create flammable conditions on the Fore River Bridge under some weather conditions.

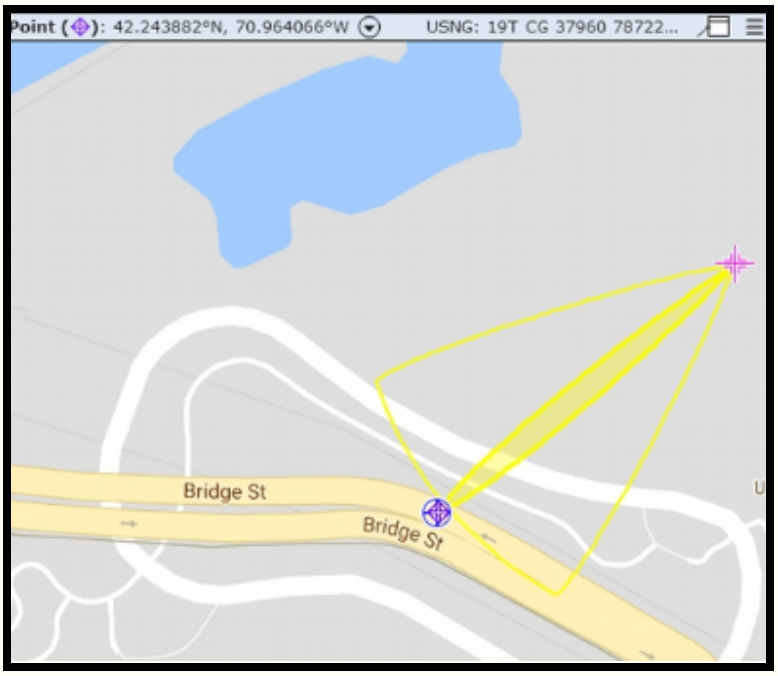
Large gas releases could create flammable conditions on the Fore River Bridge under most weather conditions, if it is downwind at the time of release.

There is no indication at this time that the facility will be operated to ensure no flammable conditions around the site.

**This analysis should be treated as an initial rough estimate.*

More info: NoCompressor.com

ALOHA Modeling Figures

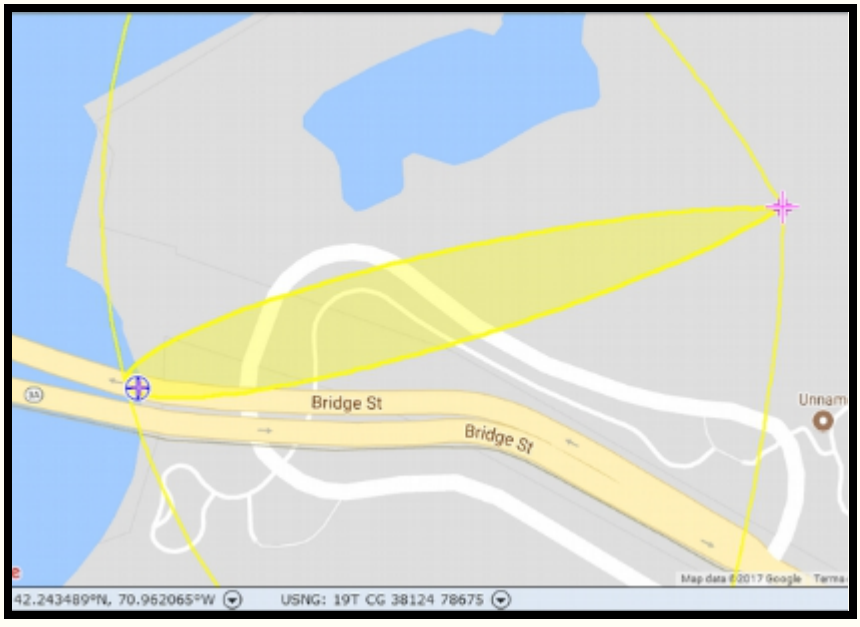


Typical Size Blowdown

- Yellow = LEL, flammable area
- Wind blowing towards bridge
- 26,600 cubic ft. of natural gas
- Released under high pressure
- Neutral atmospheric conditions

"Large release" scenario, near location

- 800-900K cubic feet of natural gas
- Released under high pressure
- Turbulent atmospheric conditions



"Large release" scenario, far location

- 800-900K cubic feet of natural gas
- Released under high pressure
- Turbulent atmospheric conditions