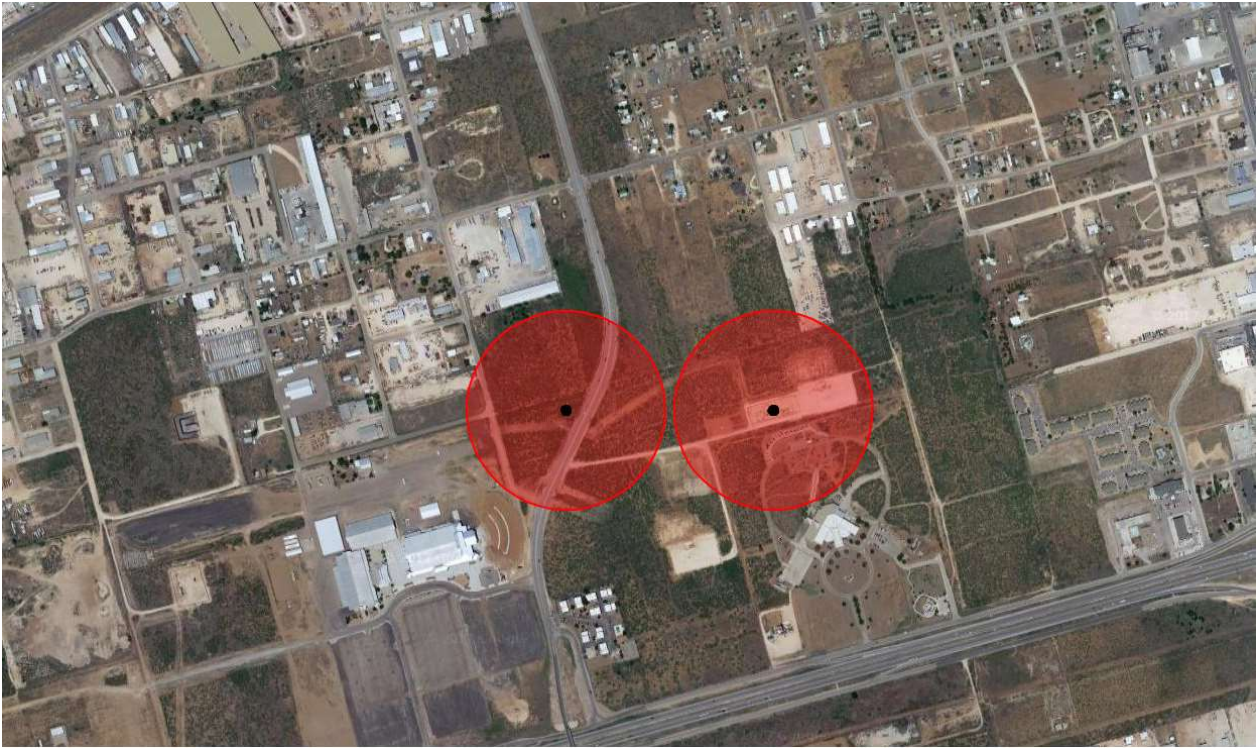


## ASME B31.8S Potential Impact Area (PIA) Tool



ASME B31.X Tools. HCI Systems, Inc.

This article will discuss HCI Systems risk assessment tool as discussed in ASME B31.8S, Section 3 Consequences. This is the third article in this series. If you have not read the previous articles, please visit my LinkedIn page.

ASME B31.8S is all about managing system integrity of gas pipelines. It is about 70 pages of means and methods. OK. It is not an easy read. It does pull-in a set of compliance requirements that most other regulations like PSM, RMP, et. al. have already in place. What is interesting in this supplement is its focus on consequences. Most risk based assessments have a risk and consequence component. (HCI also has a cost component too). But if you have ever participated in a risk assessment session, at times, there seems to be a tendency to lessen the risk factor or the risk factor cannot be accurately assessed.

This assessment is based on a complete line break. Although this may appear a little drastic, it is the base scenario required to be analyzed. (For line leaks, HCI has other modeling tools that may be a better fit.) The intent with this assessment is to determine the area of impact as it relates to the population. The example in B31.8S shows the area



of impacts in proximity to a school. The inference here is that there may be more than one point to be modeled.

So how is this best displayed? Google maps of course. But what about wind affects? Good question. The HCI App allows the user to enter wind direction and speed as well. Want a screen shot? Send me an email as LinkedIn still has issues with multiple images in an article.

The App has links to the Asset Manager App and MI Findings. PIA setup lines-up the pipeline to its design data sheet. Yup. There is an App for that too.

So there you have it. Now your risk assessors have another tool at their disposal. Want to know more?

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Ready for a software upgrade?

HCI Systems, Inc.

[www.hcisoftware.com](http://www.hcisoftware.com)