



## Case Study: Assessment of Occupied Buildings. Location: Various.

### Brief

IKM Consulting Ltd have undertaken the assessment of blast safety at occupied buildings within a number of Petro-Chemical sites.

### Solution

Assessments have entailed the following:

- Calculation of over-pressures, and thermal contour plans.
- Identification of usage and effective population.
- Calculation of individual and societal risk of each location.
- An assessment of building condition and vulnerable elements such as glazing, cladding and brickwork.

Preparation of a ranking and assessment matrix which identifies:

- Workshop location.
- Occupant vulnerability.
- Vulnerable features.
- Cost benefit analysis.
- Cost of upgrading.
- Recommendations.

### Outcome

Using this state of the art analysis, a number of high value buildings have had their effective lives considerably lengthened, saving our clients millions of pounds.





<b>O'PRESSURE</b>	<b>BUILDING OCCUPANCY</b>	<b>BUILDING VULNERABILITY</b>	<b>INDIVIDUAL RISK</b>
150mba	6 people for 2 hours per day	0.3	3.09E-5
120mba	3 people for 2 hours per day	0.22	2.27E-5