

Safety in Design

Module 2: Leading a Review

Identifying Potential Damaging Energies During Design Reviews

The phases from concept to commissioning presents a unique opportunity to identify and mitigate potential damage for downstream users (constructors, operators, maintainers). The role of the Design Review Leader is crucial in ensuring the effective use of time / resources during the design review process. The cost of changing design features during operation is 3 – 10 times the cost of identifying the preferred design features and constructing accordingly at the outset.

Many organisations have adopted the scientifically based Damaging Energies Framework for identifying Hazards in their workplace. This Framework is used by InterSafe in design standards, design review, workplace inspections, audits and incident investigations. The Damaging Energy Framework is a powerful predictor for future damage during the design review process.

This course is suited to designers, draftsperson, engineers, specification writers and their leaders.



Outcome of this Course

This course is designed to assist participants to:

1. Understand the Pareto Principle (80/20) and how it applies to Design Reviews.
2. Understand the Damaging Energy Framework and those Damaging Energies which are most likely to produce fatal or permanent damage in the future.
3. Evaluate the effectiveness of existing and proposed controls for Human, Gravitational and Vehicle Energies.
4. Become familiar with Risk / Hazard Study techniques – What If, Checklist, Energy Analysis, HAZOP.
5. Understand and apply the principles of Sectioning.
6. Understand the critical issues in scoping, preparing and leading a Safety in Design Review.
7. Develop an agenda and lead a Safety in Design Review using a Damaging Energy / Check List analysis technique.



Course Outline

1. The Context of a Safety in Design Review
2. Framework 1 – The Pareto Principle or 80 / 20 Rule
3. Framework 2 – Damage not Injury or Disease
4. Framework 3 – The Size of the Personal Damage Problem
5. Framework 4 – Damage as a Consequence of an Energy Exchange
6. Framework 5 – Taxonomy or Pattern Analysis
7. Framework 6 – Egocentric and Ergonomic Model
8. Framework 7 – Incident Prevention Extended to Damage Reduction
9. Sectioning
10. Analysis Techniques
11. HAZOP
12. What If / Checklist
13. Damaging Energy Analysis
14. Scoping a Safety in Design Review
15. Writing an Agenda
16. Leading the Review
17. Writing the Report
18. Auditing a Safety in Design Review

Course Detail

This 2 day course is normally delivered on-site using client training facilities for 5 - 6 persons who are required to lead a Safety in Design Review during any of a project's phases. The course can be reduced to a 1 day course if participants have participated in Safety in Design – Module 1: The Theory.



Other InFormed™ Courses and Resources

This course can be built on by a range of other courses and resources in the InFormed™ series, including:

- Safety in Design – Module 1: The Theory
- Safety in Design – Module 3: Critical Issues for Scoping and Auditing a Review
- Health, Safety and Environment (HSE) in Design Philosophy with associated Design Criteria

Next Steps

If you would like to discuss an InFormed™ course or how InterSafe could assist you please contact one of our team on:

+61 7 3895 8111

or enquiries@intersafe.com.au

Who is InterSafe?

InterSafe specialises in incident investigation. InterSafe has assisted our clients in effectively controlling the future through preparation of more than 10,000 comprehensive incident reports (dealing mostly with fatal/permanently disabling occurrences) throughout 60 years of collective experience.

This experience has led to a unique way of thinking about, investigating and preventing incidents. InterSafe shares these powerful and effective investigation models and techniques through a range of courses and services.



InterSafe

Protecting People

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