

Safety in Design: Self-Assessment

- If you are someone who makes decisions that affect engineering design outcomes, are you aware of:
 - The sections of the WHS or OHS **Act and Regulations** that apply to your design work?
 - The legal requirement for you to be able to demonstrate that your designs are safe so far as is reasonably practicable (**SFAIRP**)?
 - The **Codes of Practices** that apply to your work?
 - The Australian and/or International **Standards** and guidelines that apply to your work?
 - The difference between **hazard and risk**?
 - How to identify the **hazards** related to your designs?
 - How to control and manage hazards using the **Hierarchy of Controls**?
 - How to determine what is **Reasonably Practicable**?
 - The steps, tasks and activities that need to be part of your safe design (or safety in design) **process**?
- For design changes (or projects), are you actively seeking and recording **lessons learned** from the past, to inform your design work and to avoid repeating mistakes of the past?
- Do you have a safe design (safety in design) **plan**, covering your design work / decision-making?
- Do you use techniques or workshops to **systematically identify the hazards** related to your designs?
- During engineering design, are you **consulting with end-users**? i.e. those who will construct, commission, operate and maintain your designed asset
- Is there a clear design **change management plan** for your design work?
- Is all of your engineering design work **verified**, and evidence of verification recorded. (Definition of verification as per ISO 9001)
- Is all of your engineering design work **validated**, and evidence of validation recorded. (Definition of verification as per ISO 9001)
- Do you keep records of identified hazards, and what has been done to address each hazard according to the hierarchy of controls?
- Do you manage the competence of your designers and designate who can authorise designs?
- Are you comfortable signing-off that your design decisions are safe SFAIRP for all human and environmental interactions with the design, for the whole of life of the designed asset?
- When you have identified hazards and documented control measures for the hazards, are you making sure that this information reaches all of the end-users who need to know? e.g. constructors, commissioning staff, operators, maintainers, decommissioning and disposal staff
- When you find a safety **lesson learned** that other designers and decision-makers might need to know about, do you have a process for recording and communicating it?