

1. Welcome**2. Housekeeping**

- 2.1. Emergency response
- 2.2. Location of toilets
- 2.3. Expected duration & breaks. Ask for other time constraints.

3. Introductions

Go once around the room: Who is who and why are they here? Ask everyone to sign attendance sheet (if required.) Make clear everyone understands the roles of the following key people:

3.1. Facilitator

Here to guide the HAZOP process. Not a technical matter expert. Village idiot: Allowed to ask stupid questions.

3.2. Scribe

Essential for the quality of the review. The whole team should watch out for the scribe and make sure that the scribe can keep up.

3.3. Design engineer

Presents the design. A lot of thought and effort has gone into the design. Try to put design engineer at ease. It is very easy for someone to become defensive if all the review is about criticising “their” design.

4. Review documents that form part of the review, ensuring that everyone has the same information**5. HAZOP Mechanics****5.1. The HAZOP Process**

Check if everyone is familiar with the HAZOP process – if not, do a quick introduction of the goals (Identify hazards in process) and process (Cause – Consequence – Safeguards – Action)

5.2. Minutes

The minutes will be projected onto the wall and it is in every team members responsibility to speak out if they do not agree with what is being captured. Emphasise the need for clear, concise language and the use of tag numbers where possible.

5.3. Risk

Describe how risk (likelihood) is going to be covered during the review. It could be “accept/not accept” – as the most basic type of qualitative risk assessment or assigning likelihoods (before and/or after safeguards) on a risk matrix.

5.4. Design parking lot

Establish a design parking lot for items that do not belong in the HAZOP minutes but should be captured (e.g. design considerations to prevent a design discussion in the HAZOP).

5.5. Actions

5.5.1. Only use strong actions with a clear outcome.

5.5.2. Ensure actions are understandable out of context and cover the “what, where and why”

5.5.3. Only one action party, who is present in the meeting

6. HAZOP Ground Rules

- 6.1. Open discussion
- 6.2. Invite questions and sharing of experience
- 6.3. No put downs
- 6.4. Mindset – think “what happens if” and not “why not do it another way”
- 6.5. Get agreement on timeliness and ensure everyone buys into adhering to time constraints

7. Design Overview (by Design Engineer / Project Engineer)

- 7.1. Consider asking about big ticket items or major hazard concerns up front.