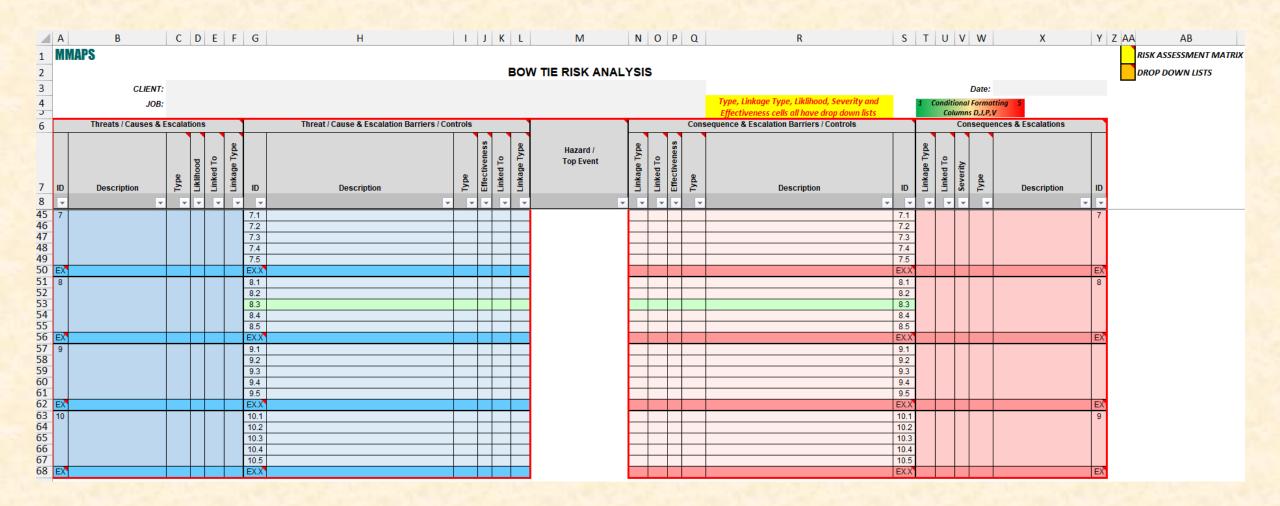


## **BOW TIE RISK ANALYSIS**

- Slide 2: MMAPS Bow Tie Risk Analysis Worksheet Image
- Slide 3: Associated Dropdown Lists

**BOW TIE RISK ANALYSIS WORKBOOK** 

Slide 2 of 3





## **MMAPS**

## BOW TIE RISK ANALYSIS ASSOCIATED DROP DOWN LISTS

| Threat / Cause / Controls |     | Consequences (Matrix) |     | Liklihood (Matrix)    |   | Severity (Matrix) |   | Effectiveness                                      |   | Linkage Type |      |
|---------------------------|-----|-----------------------|-----|-----------------------|---|-------------------|---|--|---|--------------|------|
| Human                     | HUM | People                | PEP | Low / rare            | 1 | Insignificant     | 1 | Very effective / Always / 80 - 100%                | 1 | And          | AND  |
| Management                | MGT | Environment           | ENV | Low-medium / unlikely | 2 | Tolerable         | 2 | Effective / Almost always / 60 - 79%               | 2 | Or           | OR   |
| Design                    | DSN | Equipment             | EQT | Medium / possible     | 3 | Moderate          | 3 | Moderately effective / Much of the time / 40 - 59% | 3 | Precedent    | PREC |
| Operational               | OPS | Production            | PRO | Medium-high / likely  | 4 | Major             | 4 | Somewhat ineffective / Sometimes / 20 - 39%        | 4 | Dependent    | DEP  |
| Maintenance               | MAI | Quality               | QUL | High / almost certain | 5 | Catastrophic      | 5 | Ineffective / Rarely / 0 - 19%                     | 5 |              |      |
| Materials                 | MAT | Reputation            | REP |                       |   |                   |   |  |   | _            |      |
| Procedural                | PRO |                       |     |                       |   |                   |   |  |   |              |      |
| Environmental             | ENV |                       |     |                       |   |                   |   |  |   |              |      |
| Safety                    | SFT |                       |     |                       |   |                   |   |  |   |              |      |
| Quality                   | QLT | ]                     |     |                       |   |                   |   |  |   |              |      |