Method Statement and Risk Assessment (MSRA) Tool: User Guide

Welcome to the Method Statement and Risk Assessment (MSRA) Tool! This web application helps you create, manage, and export comprehensive Method Statements and Risk Assessments for your projects.

I. Getting Started

To begin, simply open the index.html file in your web browser. You'll see the main interface divided into sections.

II. MSRA Information

This section allows you to fill in the general details of your MSRA document.

1. **Job Name:** Enter the name of the job or project (e.g., "HVAC System Installation", "Electrical Panel Upgrade").
2. **Prepared By:** Type the name of the person preparing the MSRA (e.g., "John Doe").
3. **Contractor Name:** Enter the name of the contracting company (e.g., "ABC Construction").
4. **Contractor Person Name:** Enter the name of the contact person from the contractor (e.g., "Jane Smith").
5. **Date of Preparation:** Select the date the MSRA is being prepared using the date picker.
6. **Type of Work:** Check the boxes that apply to the type of work involved in your project (e.g., "Height", "Hot", "Electrical", "Confined Space", "Lifting").
7. **PPEs to be Used:** Check the boxes for all Personal Protective Equipment (PPE) that will be required for the job (e.g., "Safety Shoes", "Gloves", "Helmet", "Harness").

As you fill in this information, you'll see a summary automatically update in the "MSRA Overview" section below.

III. Tasks & Risks Input

This section is where you detail the specific tasks involved in your job and identify their associated risks.

A. Adding a New Task

1. **Task Description:** In the "Task Description" text area, briefly describe the step-by-step task you'll be performing (e.g., "Disconnect the electrical supply to the HVAC system.").
2. **Add New Task Button:** Click this button. The task will be added to the main MSRA table below, and its Task ID will be set as the "Current Task" for adding risks.

B. Adding Risks to a Task

Once a task is added (or if you've imported an MSRA), you can add risks to the **current task** in the "Add Initial Risk Details to Current Task" subsection.

1. **Risk Description:** Describe the potential hazard or risk associated with the current task

(e.g., "If Cables disconnected without incoming supply cutoff, will result in electrocution.").
2. **Initial Likelihood:** Select how likely the risk is to occur from the dropdown menu. Options range from "A - Almost certain to occur" to "E - May occur but only in rare circumstances".
3. **Initial Severity:** Select how severe the consequences would be if the risk occurred. Options range from "1 - Insignificant" to "5 - Catastrophic".
4. **Add Risk to Current Task Button:** Click this button. The risk, along with its calculated "Initial Risk Level", will be added under the current task in the MSRA table.

Tip: After adding a task, you can immediately add multiple risks to it without re-selecting the task.

IV. MSRA Overview Table

This is the main display area where all your tasks and associated risks are organized.

- **Task Header Rows:** Each task you add will have a grey header row displaying its "Task ID" and "Task Description".
  - **Add Risk Button:** Located within the task header row. Click this to open a modal and add a new risk specifically to *this* task.
  - **Insert Task Below Button:** Located within the task header row. Click this to open a modal and insert a brand new task immediately after the current task.
- **Risk Rows:** Below each task, individual risk rows are listed.
  - **Risk ID:** Unique identifier for each risk.
  - **Risk Description:** Details of the risk.
  - **Initial Likelihood (Init. L) & Initial Severity (Init. S):** The values you selected.
  - **Initial Risk Level:** Automatically calculated and color-coded (Green=LOW, Yellow=MEDIUM, Red=HIGH, Dark Red=CRITICAL) based on the risk matrix.
  - **Countermeasure:** This column will initially show "N/A" until you add countermeasures.
  - **New Likelihood (New L) & New Severity (New S):** These will be "N/A" until countermeasures are added.
  - **Residual Risk Level:** Automatically calculated and color-coded after countermeasures are applied.
- **Risk Actions Column:**
  - **Edit Risk Button (Yellow):** Click this to open a modal and modify the **Risk Description, Initial Likelihood, and Initial Severity** of that specific risk.
  - **Add CM / Edit CM Button (Grey):** Click this to open the "Countermeasure & Residual Risk" modal.
    - **Countermeasure / Control Measures:** Describe the steps you will take to mitigate this risk.
    - **New Likelihood (After Countermeasure):** Select the expected likelihood of the risk *after* the countermeasures are implemented.
    - **New Severity (After Countermeasure):** Select the expected severity of the risk *after* the countermeasures are implemented.
    - Click **Save Countermeasure** to apply the changes. The table will update with the Countermeasure details and the new Residual Risk Level.
  - **Delete Risk Button (Red):** Click this to permanently remove the specific risk from the task.

V. Import & Export Options

The tool allows you to save and load your MSRA data, as well as export it in various formats.

- **Import MSRA from CSV:**
    1. Click the "Import MSRA from CSV" button.
    2. A file dialog will open. Select a .csv file that was previously exported from this tool.
    3. The tool will load the data, populating the MSRA information and table. **Note:** This will overwrite any unsaved data currently in the tool.
- **Export MSRA to CSV (Top & Bottom Buttons):**
    1. Click either "Export MSRA to CSV" button.
    2. Your browser will download a file named method_statement_risk_assessment.csv containing all your MSRA information, tasks, and risks. This file is ideal for saving your work and re-importing later.
- **Convert Excel CSV:**
    - If you've opened an exported CSV in Excel and then saved it, Excel might alter the file's formatting (e.g., remove quotes around fields with commas, change date formats). This can cause import issues.
    - Click "Convert Excel CSV". Select the CSV file that was saved by Excel. The tool will attempt to reformat it correctly and download a _converted.csv file, which should then be compatible with the "Import MSRA from CSV" function.
- **Download CSV Template:**
    - Click "Download CSV Template" to get an empty CSV file with the correct header structure. You can use this as a guide if you prefer to prepare your data in a spreadsheet program before importing.
- **Export MSRA to Image:**
    1. Click the "Export MSRA to Image" button.
    2. The tool will generate a PNG image of the entire "MSRA Overview" section, including the MSRA information and the table. Your browser will then download this image file.
- **Export MSRA to PDF:**
    1. Click the "Export MSRA to PDF" button. This may take a moment.
    2. The tool will generate a multi-page PDF document of the entire "MSRA Overview" section, including MSRA information, the table, and a signature block at the end for manual sign-off. Your browser will then download the PDF file.

VI. Unsaved Changes Warning

A yellow warning message "You have unsaved changes. Please export to CSV to save your work." will appear at the top of the page whenever you make modifications to the MSRA data. Remember to export your work to CSV regularly to avoid losing data.

VII. Help

Click the "Help" button to open a modal that explains what an MSRA is and introduces the "THRIVE" methodology for conducting risk assessments.

Important Notes:

- **Data Persistence:** This tool stores data only in your browser's memory. It is **crucial** to regularly use the "Export MSRA to CSV" function to save your work to your computer. If you close your browser tab or window without exporting, your data will be lost.
- **Risk Level Calculation:** The risk levels (Initial and Residual) are automatically calculated based on the Likelihood and Severity values you select, using a predefined risk matrix within the tool.

For any further questions or assistance, you can contact Kavin S A G at sagkavin@gmail.com.