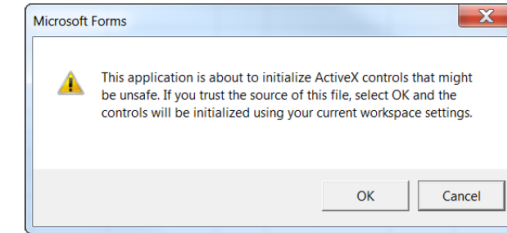
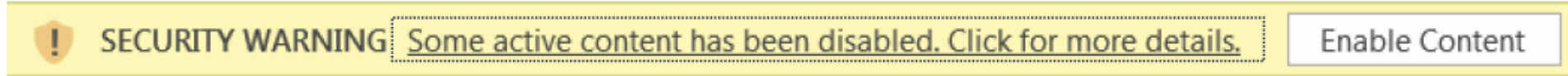
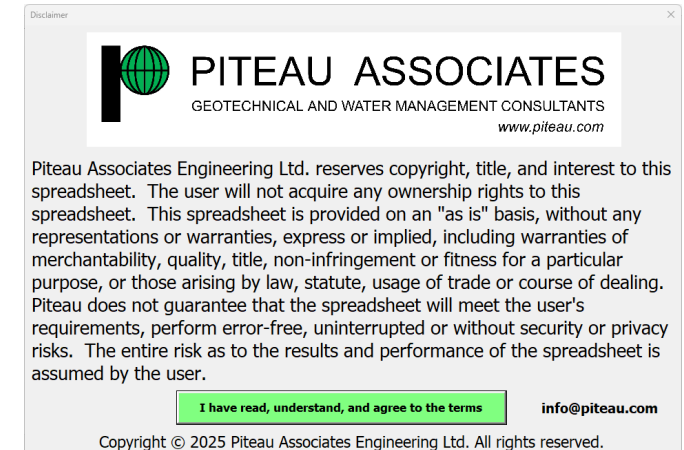
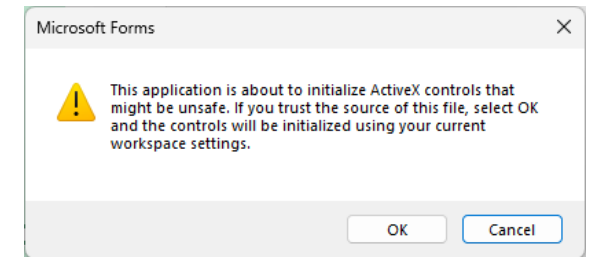
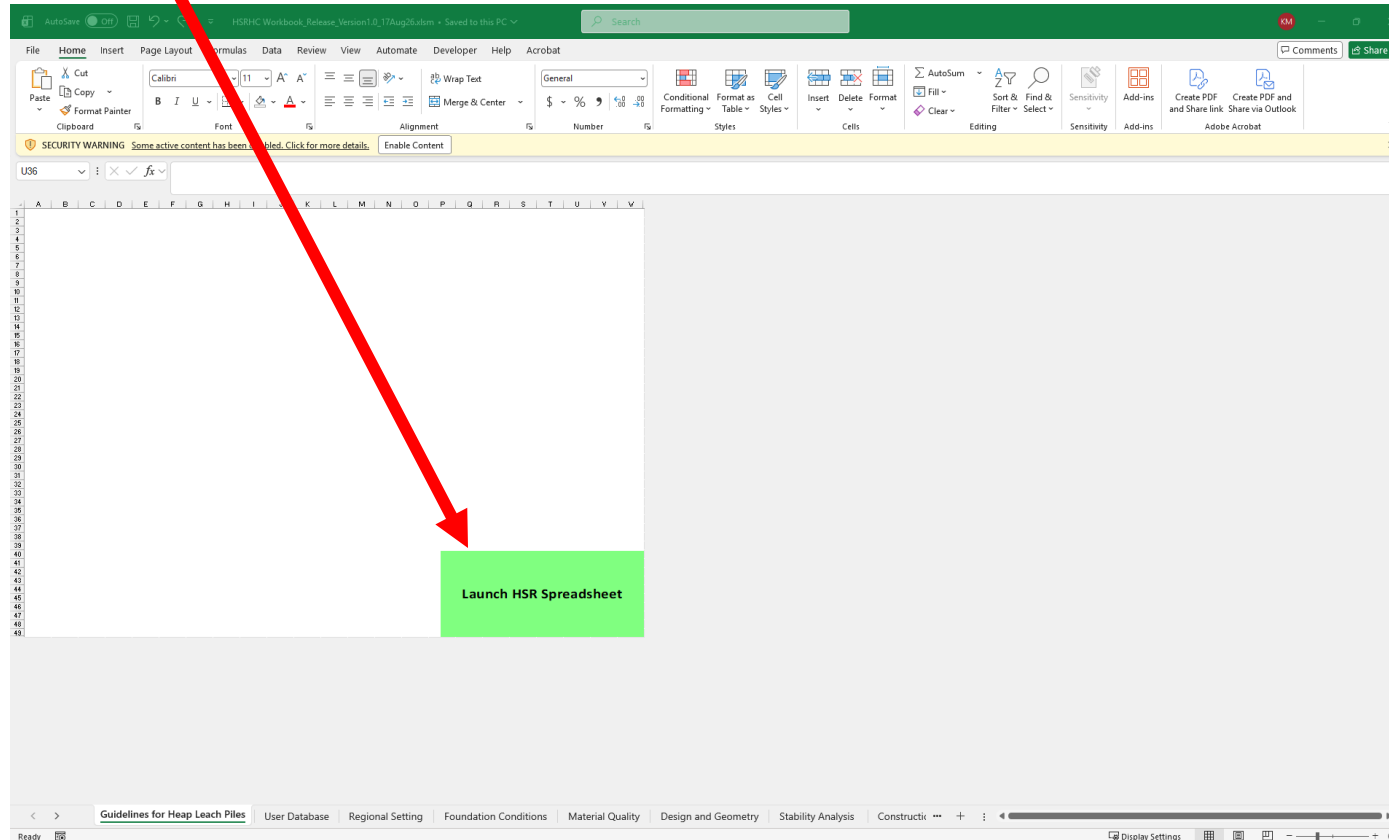


1) Open the HSRHC Excel macro spreadsheet (*HSRHC Workbook_Release_Version1.0_21Aug26.xlsm*)

2) If you get a security warning you will need to enable the content to run the program, and you may receive a warning about Active X controls – select OK to continue.



3)The program will auto-launch when the workbook is opened or you can click the button to start



4)There will be a disclaimer that must be acknowledged before using the program.

NOTE:

If the resolution of the monitor is set too low or if magnification is enabled the form may not display correctly.

Use the Windows Display settings to increase resolution and decrease zoom if this issue arises.

Heap Leach Stockpile Stability Rating : HSR Spreadsheet - Version 1.0 (21-Aug-2026)

Assessment Progress

Regional Setting

Foundation Conditions

Material Quality

Design and Geometry

Stability Analysis

Construction

Performance

Governance and Monitoring

Leach Pad Type and Liner System

Height / Slope Angle / Mass

FACTORS ¹	RATINGS				
Height					
Overall (toe to crest) Height (m)	> 150	110 - 150	50 - 110	20 - 50	< 20
Thickness Over Liner (m)	> 140	100 - 140	50 - 100	20 - 50	< 20
Maximum Individual Lift Thickness (m)	> 50	25 - 50	15 - 25	8 - 15	< 8
Height Rating	-1	0	1	1.5	2
User Defined Value					
Slope Angle					
Overall (Toe to Crest) Angle (° or nominal horizontal : vertical)	> 30 (> 1.7:1)	27 - 30 (1.8:1)	24 - 27 (2.0:1)	20 - 24 (2.5:1)	< 20 (< 2.75:1) Or Dynamic Heap
Slope Angle Rating	-4	-2	0	2	4
User Defined Value					
Mass					
Mass (Mt)	> 250	100 - 250	20 - 100	5 - 20	< 5 Or Dynamic Heap
Mass Rating	0	0.5	1	1.5	2
User Defined Value					

Notes:
1. Select a rating for each factor. Where more than one criterion is shown for a given factor, or the user cannot decide between two ratings, select an average or intermediate rating that best represents the overall condition.
8. The sum of the ratings for the individual

Regional Setting

FOUNDATION CONDITIONS

MATERIAL QUALITY

DESIGN & GEOMETRY

STABILITY ANALYSIS

CONSTRUCTION

PERFORMANCE

GOVERNANCE & MONITORING

HEAP STABILITY RATING

Heap Name

Date Assessed

Enter Record

Reset Form

PITEAU ASSOCIATES
www.piteau.com

Navigate through the factors by Clicking the button at the top

Some of the Factors have multiple pages

Ratings are auto summed in this area as the form is completed

Enter specific rating values in textbox

Enter heap name and date then click the green button to record in the database.

Click the grey buttons to select the appropriate descriptor (optional)

Click the coloured buttons to select the factor (required) or enter rating value in text box

Double click the factor to jump to that page

- 5) Navigate the form using either the page buttons at the top or double-clicking an item in the Assessment Progress on the left. Select descriptors (grey buttons) and rating factors (coloured buttons) for each criterion, or enter a specific rating value into the textbox. Once completed the “Enter Record” button will be enabled. Clicking this will enter the data into the “User Database” tab of the workbook.
- 6) Modifications to existing records must be done manually in the “User Database”, for which cautions is advised, entering a new record is recommended in lieu of modifying existing records.