Instructions for the SLEIS_CSV_File_Editor_v21.02.08

The workbook will open your SLEIS CSV files and load the data into the worksheets. The workbook may be used to update and maintain the CSV files for use with SLEIS and uploading emissions data.

BIG NOTE: SLEIS uses CSV files for uploading the emissions data. **Excel does NOT play nice with CSV files**. This workbook has been specifically formatted to make (force) Excel to play nice with the CSV files. If you change formatting within the worksheets you may cause dysfunction in the handling of the data and writing of the CSV files.

Second note: Because SLEIS uses CSV files and the workbook is being forced to work correctly with the CSV files, most all data formatting in this workbook is text. The impact here is that you cannot add functions into this workbook to make calculations. To do so will require re-formatting the worksheets. The BIG NOTE tells you why to not do this.

Pre-Use instructions – The 2 CSV Files are available within SLEIS. Go to the current year Emissions Report for your Facility and click on the Download Template button. Download the zip file created and save it to your computer hard drive in a folder you select. After saving the zip file, extract the 2 CSV Files (Processes.CSV and ProcessEmissions.CSV) from the zip folder and save them in a folder you select. It is advised that you save the CSV Files and the CSV File Editor to the same folder. Save back-up copies.

First time use instructions

Here you will open the two CSV files loading the data into the worksheets, re-save the data back to the CSV files, and save the editing workbook with the data contained in the worksheets.

1) Open the work book. Select the tab titled "Instructions". Six green buttons are available.

    a) "**SLEIS CSV file – Read & Write**" button to open the program window providing the ability to read the CSV files and write them again after editing the data.
    b) "**Processes Data Checks**" button to run programmed data validation checks
    c) "**Process Emissions Data Checks**" button to run programmed data validation checks.
    d) "**Process Emission Factor Data Checks**" button to run programmed data validation checks.
    e) "**View EPA Codes Used for Data Validation Checks**" button or key sequence **Ctrl-Shift-S**.
    f) "**Check that Processes Match in both Worksheets**" button shows lists of what matches.

2) Read the CSV files into the worksheets by clicking on the "**SLEIS CSV file – Read & Write**" button.

    a) Begin by clicking the gray "**Clear Everything from Tables**" button at the bottom of the program window.

    b) Then a purple "**Read Processess.CSV file**" button appears at the bottom of the program window. **Click it**. A Windows Open File dialog box appears. Navigate to the location on your computer where you saved the two CSV files. Select the Processes CSV file, and click the OPEN button. **The Processes CSV file will be loaded into the Processes worksheet**.

    c) Then a gold "**Read ProcessEmissions.CSV file**" button will appear at the bottom of the program window. **Click it**. A windows Open File dialog box appears showing the location from where the Processes CSV file was selected. Select the ProcessEmissions CSV file, and click the OPEN button. **The ProcessEmissions CSV file will be loaded into the ProcessEmissions worksheet**.

3) Click the blue "**Select Save Location for CSV files**" button. A Windows Select a Folder dialog box appears. **Select the folder location where the CSV files were selected**, then **Click the OK button**. The folder location will be written into the program window below the button.

4) Write the CSV files back to the folder selected as the save location. Click the blue "**Write the CSV files**" button. The program will write the two CSV files to the save folder previously selected. The file path and name for both files is written in the program window below the button.

5) The workbook has two worksheets named "Processes" & "ProcessEmissions" into which all of the data contained in the two CSV files has been copied. Save this workbook with all the information in tact by clicking the blue "**Save this workbook**" button. A windows Save As dialog box opens. **Select the folder previously selected. Enter a File name and end it with .xlsm**, then **Click the Save button**. The file path and name for the workbook is written in the program window below the button.

6) The "**Save this workbook**" button **is intended to be used only on the first use of the workbook**. Successive uses of the workbook to edit data for the CSV files only require the workbook to be saved using the standard Excel file save function.

Edit Processes and/or ProcessEmissions data to prepare the data for the next Emissions Inventory.

Editing the Process and/or ProcessEmissions data can be done with or without using the program built into the workbook. The program provides easy sorting of both worksheets and editing capability for each line of data in each workbook. The choice of how the data is edited in the workbook is for the user to choose.

For each worksheet the program has a View button, a Sort button, and an Edit button. These are provided for ease of use. They are not required to be used.

The program is needed to easily write the edited data back to the two CSV files which are required to upload data into SLEIS. The only other data entry is manual data entry which is very laborious and tedious. Also, if emissions factors are used to have SLEIS calculate the emissions from process throughput, the CSV files are the ONLY method available for entering the process throughput data.

After entering data into the two worksheets it is strongly advised that data checks be performed in the workbook to avoid encountering errors when uploading data to SLEIS. There are some data validation checks that SLEIS makes and then provides clear error messages to help resolve the errors. There are also some data validation checks that SLEIS makes and then provides very vague error messages for. These errors can be very difficult to find and resolve. The workbook is programmed to make these same data validation checks and provide much better error messages to more easily find and resolve the errors.

The data validation checks provided by the workbook do not include all of the SLEIS error checks. For those errors not checked for by the workbook, SLEIS gives good error messages. If you find this to not be true, you need to email APC.Inventory@tn.gov and share with us your experiences so we can at least attempt to improve this process. Your assistance is valuable to us.

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Data Validation checks are available for both the Processes and the ProcessEmissions data.

Errors found during data validation are highlighted in orange. The program will clear error messages and highlighted cell colors at the beginning of each check. So, after making error corrections you need just to re-run the error checks. Only remaining errors will be messaged and highlighted.

Click the green "**Processes Data checks**" button to make the following data validation checks.

Process ThroughputUOM in column D (column 4)
- Values are compared against the current EPA published list.

Process ThroughputType in column E (column 5)
- Values are compared against the current EPA published list.

Process ThroughputMaterial in column F (column 6)
- Values are compared against the current EPA published list.

Process ActualHours in column S (column 19)
- This value must be reported as an integer.
- Must be greater than or equal to 1 and less than or equal to 8784.

Process AvgHrsPerDay in column T (column 20)
- This value must be reported as a decimal number with only 1 decimal digit maximum.
- Must be greater than or equal to 0.1 and less than or equal to 24.

Process AvgDaysPerWeek in column U (column 21)
- This value must be reported as a decimal number with only 1 decimal digit maximum.
- Must be greater than or equal to 0.1 and less than or equal to 7.

Process AvgWeeksPerYear in column V (column 22)
- This value must be reported as an integer.
- Must be greater than or equal to 1 and less than or equal to 52.

Process SeasonalPercents in columns W through Z (columns 23 through 26)
- The seasonal percentages must either all be reported or none be reported for each process.
- These values must be reported as a decimal number with only 1 decimal digit maximum.
- The seasonal percentages must sum to a total of 100 +/- 0.5

Process AshContent in column AD column 30)
- This value must be reported as a decimal number with 2 decimal digits maximum.
- If the value is entered the value must be between 0.01 and 30, inclusive.

Process SulfurContent in column AE (column 31)
- This value must be reported as a decimal number with 2 decimal digits maximum.
- If the value is entered the value must be between 0.01 and 10, inclusive.

Errors found during data validation are highlighted in orange. The program will clear error messages and highlighted cell colors at the beginning of each check. So, after making error corrections you need just to re-run the error checks. Only remaining errors will be messaged and highlighted.

Click the green "**Process Emissions Data Checks**" button to make the following data validation checks.

Process Emissions PollutantCode in column C (column 3)
- Values are compared against the current EPA published list.
- HAP-VOC pollutants are noted as such in column 9 to aid in the emissions checks.

Process Emissions CalculationMethod in column D (column 4)
- Values are compared against the current EPA published list.

Process Emissions EmissionQty in column G (column 7)
- Emissions Values Must be Numeric and Non-Negative
- PM species must obey the EPA relationship rules as follow when the species are reported.
  - PM10-PRI must be greater than or equal to PM10-FIL for each process.
  - PM25-PRI must be greater than or equal to PM25-FIL for each process.
  - PM10-PRI must be greater than or equal to PM-CON for each process.
  - PM25-PRI must be greater than or equal to PM-CON for each process.
  - PM10-FIL must be greater than or equal to PM25-FIL for each process.
  - PM10-PRI must be greater than or equal to PM25-PRI for each process.
  - PM10-PRI must equal (PM10-FIL plus PM-CON) for each process.
  - PM25-PRI must equal (PM25-FIL plus PM-CON) for each process.
- VOC and VOC-HAP must obey the EPA required relationship as follows when reported.
  - VOC must be greater than or equal to the sum of HAP-VOC for each process.

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Click the green "**Process Emission Factors Data Checks**" button to make the following data validation checks.

Process Emissions PollutantCode in column C (column 3)
- Values are compared against the current EPA published list.
- HAP-VOC pollutants are noted as such in column 9 to aid in the emissions checks.

Process Emissions CalculationMethod in column D (column 4)
- Values are compared against the current EPA published list.

Process Emissions EmissionFactor in column E (column 5)
- Emission Factor Values Must be Numeric and Non-Negative
- PM species must obey the EPA relationship rules as follow when the species are reported.
  - PM10-PRI must be greater than or equal to PM10-FIL for each process.
  - PM25-PRI must be greater than or equal to PM25-FIL for each process.
  - PM10-PRI must be greater than or equal to PM-CON for each process.
  - PM25-PRI must be greater than or equal to PM-CON for each process.
  - PM10-FIL must be greater than or equal to PM25-FIL for each process.
  - PM10-PRI must be greater than or equal to PM25-PRI for each process.
  - PM10-PRI must equal (PM10-FIL plus PM-CON) for each process.
  - PM25-PRI must equal (PM25-FIL plus PM-CON) for each process.
- VOC and VOC-HAP must obey the EPA required relationship as follows when reported.
  - VOC must be greater than or equal to the sum of HAP-VOC for each process.

Process Emissions EmissionFactorUnit in column F (column 6)
- Values are compared to the corresponding Process ThroughputUnit in the Processes worksheet.