

## Errata Sheet: Wet and Dry Scrubbers Cost Calculation Spreadsheet (January 2023)

The US EPA notes that the following corrections have been made in the wet flue gas desulfurization (WFGD) Cost Estimate tab of this cost calculation spreadsheet:

- In cell C76 in the WFGD Cost Estimate tab, change "SDA" to "WFGD."
- In cell B84 in the WFGD Cost Estimate tab, change "SDA" to "WFGD."
- In cell G18 in the WFGD Cost Estimate tab, change "SDA" to "WFGD."

In addition, the capital recovery factor (CRF) formulas in the whole of this spreadsheet now has parentheses enclosing the whole of the denominator. Estimates of the CRF are not changed by this addition, but it clarifies the format of the formulas.

The US EPA notes that the following corrections and clarifications have been made in the packed bed scrubber tabs of this cost calculation spreadsheet:

### Tab: PB Scrubber Data Inputs

- 1) Correct spelling of "concentration" in cell B7
- 2) Correct spelling of "minimum" in cell B17

### Tab: PB Scrubber Design Parameters

- 3) Added "actual" subscript to cell B18 to clarify that  $L_s/G_s$  actual, not minimum, should be used
- 4) Corrected a typo in cell A13 ("ratio" not "ration").
- 5) Changed "Xo" to "Xout" and "Xi" to "Xin" in cell A22 for clarity
- 6) Corrected equation in cell C22 to be  $(y_{out}^* - y_{in}^*) / (x_{out} - x_{in})$  instead of  $(Y_{out}^* / x_{out})$  [note lower and upper case letters]
- 7) Cell A45 is " $L_{in}$ " (the solvent flow rate) but the equation to estimate this value also uses " $L_{in}$ ". Have replaced  $L_{in}$  with  $(L_{sft,in})_{min}$ , the superficial liquid flow rate.
- 8) Cell B51 should be "stainless" not "tainless".
- 9) Cell C50 (HCl removed per year) has been corrected to  $(G_{mass,p} \times t_{op}) / 2000 \times (\text{Removal efficiency}) / 100$ . In addition, the calculation for this cell is now in tons per year, not pounds per hour.
- 10) Clarified in cell C52 that 390.6 is the CEPCI for 1991.
- 11) Cell C72 (Sorbent consumption rate ( $Q_{sorbent}$ )) has been corrected to  $0.5 \text{ moles of sorbent} \times G_{mass,p} \times MW_s \times (\text{Removal efficiency } (\eta) / 100)$ .

### Tab: PB Scrubber Cost Estimate

- 1) Have deleted duplicate word in cell A38.
- 2) Have corrected spelling of "maintenance" in cell A57.
- 3) Have corrected reference in cell C68 to the CFR in the "PB Scrubber Design Parameters" tab instead of linking to the CFR in the "SDA Design Parameters" tab.