

GALE 3.1 Change Log

Release Date July 31, 2018

Code/File Changes:

- Added the ability to read in a different GALE input file than the GALE input file that is produced upon execution of the GALE 3.1 code.
- For international RAMP members, added the function to change units from the traditional imperial units (i.e. gallons, lb, and Ci) to SI units (i.e. L, kg, and Bq) in both the GALE 3.1 input and output files including the Excel spreadsheet plots (same Excel files handles both units).
- GALE Modernization preparation updates were performed. Code source files that support the Graphical User Interface were updated and renamed from “.for” to “.f90” to facilitate a newer source file structure. This enabled easier updates that supported GALE 3.1. Changes to these source files include indentation, separation of variable declaration to single lines, and general cleanup of source code lines to enhance readability and ease of future changes.

Graphical User Interface (GUI) Changes:

- Change the Legacy Input section of the Introductory Screen to include the GALE86 input and output files as the default values in the gaseous file fields (e.g., PWRGE86.in and PWRGE86.out) and liquid file fields (e.g., PWRLE86.in and PWRLE86.out). Additionally, the legacy gaseous and liquid file fields remain greyed out until the Read Legacy Input radio button is checked. The default value for the Read Legacy Input radio button is unchecked.
- Added the range buttons for every input entry field on the General Reactor Parameter Screen, Liquid Radwaste Treatment System Screen and Gaseous Radwaste Treatment System Screen except for “Yes”/”No” type option boxes. These range buttons open individual windows which provide the allowable range of input entries into the associated field in both imperial and SI units.
- Updated the function of the Save buttons on the General Reactor Parameter Screen, Liquid Radwaste Treatment System Screen and Gaseous Radwaste Treatment System Screen to allow the user to save changes at any point in the data entry process. Additionally, added an OK button to the Liquid Radwaste Treatment System Screen and Gaseous Radwaste Treatment System Screen which allows the user to make changes to the input file without saving the changes.
- Added the radio button to the Introductory Screen for user selection of units (either imperial or SI).