4.7.3 The calculation method described in Section 4.7.2, above, is subject to the following conditions:

• If the results of any required fuel sampling and analysis exceed the assumed value, then that sample result becomes the new assumed value; and

• If the assumed value is from a fuel contract or tariff sheet, and if the contract or tariff sheet is superseded by a new one, then the assumed value may have to be adjusted, or, in some instances, the fuel may have to be re-classified. Consider the following examples:

Example 1: A maximum GCV of 105,000 Btu/100 scf is specified in a valid, active natural gas contract. This GCV value may continue to be used in the heat input rate calculations, provided that it is not exceeded, either by the results of a required monthly GCV sample, or by the maximum GCV value in a new contract.

Example 2: In 2008, the highest percent sulfur (%S) value obtained from the required samples of distillate oil was 0.15 %S, by weight. This %S value may be used in the SO_2 emission calculations throughout 2009, provided that it is not exceeded by the results of any required fuel sample.

Example 3: Daily manual sampling of fuel oil is performed, and on each successive unit operating day, the highest sulfur content, GCV, and density values from the previous 30 daily samples are used in the calculations.

Example 4: The results of a 720-hour demonstration under section 2.3.6 of Appendix D show that a process gas has a low sulfur variability. A default SO_2 emission rate of 0.025 lb/mmBtu is calculated by substituting the 90^{th} percentile value of the fuel's sulfur content from the demonstration into Equation D-1h. This default emission rate may continue to be used unless it is exceeded when Equation D-1h is applied to the results of a required annual sample of the fuel's sulfur content.

Example 5: A fuel initially qualifies as pipeline natural gas, based on historical fuel sampling data. In this year's required annual fuel sampling and analysis, 3 samples are taken and the total sulfur content of all samples is between 1.0 and 1.5 gr/ 100 scf. The fuel is therefore re-classified as "natural gas" and the average total sulfur value from the 3 samples is used in Equation D-1h, to calculate a site-specific default SO_2 emission rate

For a complete listing of all of the available calculation options for fuel oil and gaseous fuels, see Tables D-4 and D-5 in Appendix D. Also note that for each of these options, instructions are given in section 2.3.7 of Appendix D, explaining when and how to apply the fuel sampling results. This helps to ensure national consistency in the reporting of Appendix D data.