## Q696. Should combustion emissions from a steam methane reforming (SMR) furnace be reported under subpart C or subpart P? Is the answer different if refinery fuel gas is used to fire the SMR furnace?

Q696. Should combustion emissions from a steam methane reforming (SMR) furnace be reported under subpart C or subpart P? Is the answer different if refinery fuel gas is used to fire the SMR furnace?

A696. For the purposes of the GHGRP, all emissions from the SMR furnace are considered hydrogen production process emissions and should be reported in subpart P following the methodologies in subpart P, rather than subpart C, regardless of the fuel(s) used to fire the SMR furnace. As noted in the technical support document for subpart P, "...a small portion of the natural gas is used ... during normal plant operations to supplement the heat provided by the tail gas as needed to maintain the proper temperature of the reformer/boiler unit (resulting in minor combustion CO2 emissions). The process and combustion emissions go up the same stack from the boiler/reformer unit. Since the emissions are predominately process emissions and because the natural gas combustion products are emitted from the same stack, EPA has treated all the emissions as process emissions." This logic extends to any fuel (e.g. refinery fuel gas) used to supplement the heat provided by the tail gas.

Accordingly, a CEMS used on a stack that includes hydrogen production unit tail gas and SMR furnace combustion emissions should be reported using the "single process" monitoring location configuration. The "shared process/combustion stack" monitoring location configuration should only be selected if the stack includes stationary combustion unit emissions that are not associated with the hydrogen production unit.

Updated on Sep 26, 2019 15:51