PILOT PLANT PERFORMANCE OF A SDA/FF ON A SIMULATED MSW FLUE GAS

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Abstract

A mobile spray dryer absorber (SDA) and a fabric filter (FF), both rated at 3000 cfm (85 m³/min), have been connected to a natural gas-fired modular incinerator to study their efficiency in controlling acid gases generated during the combustion of municipal solid waste (MSW). The MSW flue gas was simulated by doping the off-gas from the natural gas-fired incinerator with controlled amounts of water, HCl, SO₂, and flyash. The flyash was obtained from a municipal waste incinerator. In addition to the four variables mentioned above, the other variables were the stoichiometric amount of lime slurry used and the inlet and outlet temperatures of the SDA. The test matrix consisted of 72 runs. The SDA/FF system was able to achieve removal efficiencies of greater than 95% for the HCl and greater than 90% for the SO₂.

TECHNOLOGY TRANSFER/POLLUTION PREVENTION

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Abstract

The U.S. Environmental Protection Agency recognizes that many of the serious environmental problems facing this country will not be solved through the use of traditional end-of-the-pipe controls, therefore we have initiated program plans/activities to emphasize technology transfer and pollution prevention.

The Technology Transfer mission is to achieve improved environmental results by creating a climate that fosters cooperative approaches for solving environmental problems, building the knowledge and skills needed to take positive action, and expanding the use of technology transfer through technical assistance, training, and focused information dissemination.

As a part of this program, Region 6 established the Environmental Institute for Technology Transfer in cooperation with the University of Texas at Ar-