WASTE-TO-ENERGY PLANT USES SCALEBREAK-MP ON DUMP CONDENSER – GETS SPARKLING CLEAN RESULTS

Case Study

Waste-to-energy plants burn municipal solid waste (garbage or trash), to produce steam in a boiler. That steam is used to power an electric generator turbine. This solid waste is a mixture of paper, plastics, yard waste, and products made from wood. Without waste-to-energy plants, all trash would just end up in landfills.

Within these facilities, preventive maintenance equipment is imperative to efficient operation.

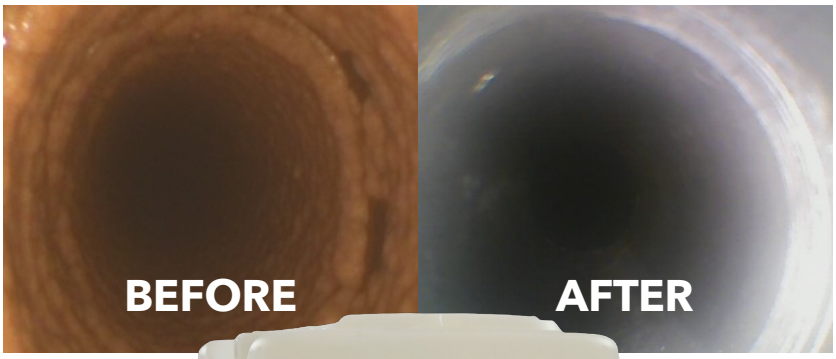
We are sharing a story from one of our customers that utilized Goodway's ScaleBreak to perform a chemical tube cleaning in a waste-to-energy plant on the East Coast.

> ***The results were perfect as shown in the tube pictures, ScaleBreak-MP completely removed all the scale accumulations.***

In this plant, a loss of efficiency in the dump condenser was detected, initiating a cleaning work order for a scheduled shutdown. The dump condenser is one of the many pieces of equipment found in these facilities where preventative maintenance is imperative to efficient operation. These condensers recover excess heat generated by steam before it is uselessly put into the atmosphere. During fluctuating steam loads, turbine start-up, turbine trip off, or bypass, the excess steam that would ordinarily be vented can be diverted to a dump condenser for recovery as they act as a standby and/or emergency heat sink for the mainstream flow to the Turbine. However, when steam formed deposits accumulate on condenser tube surfaces, it creates an insulating barrier, which minimizes efficient heat transfer of the condenser.

The solution used was Goodway Technologies ScaleBreak-MP (Multi-Purpose), a citric based biodegradable descaling solution which dissolves 2.5 pounds of scale per gallon. Since the condenser tubes were stainless steel, the cleaning required a compatible descaling solution to ensure the stainless steel would not be damaged. The condenser had a total volume of 3,854 gallons including waterboxes and piping. The scale thickness ranged between 1/16" of scale throughout the tubesheet. The decision was made to utilize 660 gallons of ScaleBreak-MP (a 17% mixture) and circulated for 8 hours. The results were perfect as shown in the tube pictures, ScaleBreak-MP completely removed all the scale accumulations.

Contact the experts at Goodway Technologies to ask how we can help your facility restore efficient equipment operation and reduce energy consumption.



GOODWAY®
420 West Avenue, Stamford, CT 06902-6384 U.S.A.
Phone: +1.203.359.4708 | Fax: 203.359.9601
goodway@goodway.com • www.goodway.com