

DARCO® BG 1 ACTIVATED CARBON REDUCED COSTS, SAVED TIME, AND INCREASED LOADING CAPACITY

ABOUT SCS ENERGY

SCS Energy processes landfill gas provided by Waste Management to produce biogas for the University of New Hampshire. After the raw landfill gas is purified to meet biogas specifications, it travels a 12.7-mile pipeline from the SCS facility to UNH, where it replaced commercial natural gas as the primary fuel source.

During the purification process, hydrogen sulfide (H₂S) needs to be removed to create biogas. SCS Energy experienced several key challenges attributed to using an iron oxide media for H₂S removal.

SCS ENERGY

Location: Rochester, NH

Overview: A landfill gas-to-energy project established by SCS Energy creates biogas from a Waste Management landfill to provide power for the University of New Hampshire. In May 2009, UNH became the first university in the nation to use landfill gas as its primary fuel source.

"We're getting double ... We're getting 16 weeks for DARCO change out instead of 8 weeks on an [iron oxide] change."

*- Robert Dimambro
Plant Operations Manager*

KEY CHALLENGES



Frequent and time-consuming media removal and replacement.



Heavy and dense media that bricked and was difficult to change out.



Significant pressure utilized due to lack of flow through media.



Greater mechanical wear and tear and possible corrosion if not properly filtered.

SOLUTION

In 2018, after using the iron oxide product for about seven years, SCS Energy initiated a test of DARCO BG 1 in each of its tanks. They immediately experienced greater flow with lower pressure. Additionally, DARCO BG 1 had more than doubled the life of the old media and was much easier to change out without bricking.



“We’re saving money because we’re getting a better product that lasts longer. Now we’re also saving money because it’s not taking us as long to change out.”

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RESULT

By switching to DARCO BG1, SCS Energy is saving more than \$500,000 per year in media and service costs alone, a greater than 50% savings. They now can avoid change outs during the winter months. The spent media is easily vacuumed from the vessels.



Longer media life



Reduced pressure



Easier change out



Greater H2S removal



Less mechanical issues



Overall cost savings

ABOUT NORIT

Norit Activated Carbon is the world’s largest and most experienced producer of activated carbon. Norit products are used to remove pollutants, contaminants and other impurities from water, gas and air, food and beverages, pharmaceutical products and other liquids in an efficient and cost-effective manner. Building on a 100+ year history of innovation, we have created more than 150 different grades of activated carbon, so customers get precise solutions.