

## **BIOGAS RECOVERY AND REUSE**

**STATE PROGRAM:** Virginia Department of Environmental Quality

ASSISTANCE RECIPIENT: Harrisonburg-Rockingham RSA

**ASSISTANCE AMOUNT: \$5.7M** 



## **PROJECT DESCRIPTION**

The Harrisonburg Rockingham Regional Sewer Authority (HRRSA) conducted an evaluation of energy savings and energy recovery opportunities at the North River Wastewater Treatment Plant. The results showed that biogas from the anaerobic digester should be reused to power a sludge dryer to dewater biosolids to reduce disposal costs. In developing this project, the treatment facility wanted to dry enough sludge to have capacity for 100 days of onsite biosolids storage and decrease the dependence on the land application of Class B biosolids. A several-month pilot system was created that reviewed the facility's digester sludge and one food processing waste stream to quantify biogas generation rates, gas content, and to determine safe loading limits. The determination was made to use an indirect sludge drying alternative to achieve the highest amount of savings for handling their biosolids. The CWSRF funded the total project costs of \$5.7 million and will produce energy savings worth an estimated \$103,000 in the first year of operation.

To read more about this case study, please visit <u>https://www.epa.gov/sites/default/files/2018-</u>11/documents/pisces\_2018\_compendium\_0.pdf.

