

FOOD AND KINDRED PRODUCTS (SIC 20)

Company: BREEDEN POULTRY AND EGG, INC.

Location: City of Morganton
Burke County

Application: Poultry Broilers and Fowl (SIC 2016)
On-site Recovery and Reuse

Description: Breeden Poultry initially discharged approximately 0.400 MGD of process water into the City of Morganton's sewer collection system for final treatment and disposal. In an effort to reduce the mass of both BOD and solids being discharged, and find a satisfactory means of disposal for the sludge being generated, the company investigated several options prior to selecting land farming. Breeden's existing treatment facility was upgraded to include fine mesh screening and sludge generation facilities. These modifications resulted in the generation of 3,000 to 4,000 gallons of sludge per day.

The company applies the sludge to land being utilized in the production of corn for use as chicken feed. The sludge is a source of nitrogen for the corn and provides organic material which serves as a soil conditioner. After the sludge is applied, it is plowed/disc'd into the soil immediately to reduce nitrogen loss and to help control odor. The corn grown on the site is utilized in the company's feed mill. Breeden has reported a nine percent higher corn yield on sludge test plots versus plots not receiving sludge.

Savings: The company has reported a savings in sewer use and sewer surcharge of \$150,000 annually. The additional savings in reduced fertilizer costs and revenues from higher crop yield, while obvious benefits to the company, were not included in the savings.