

COOLEY DICKINSON HOSPITAL
Northampton, Massachusetts



Client

Cooley Dickinson Hospital

Description

Cooley Dickinson Hospital recently embarked on a \$50 million expansion to its facility, adding a four-story, 116,000 square foot building to house eight operating rooms, 32 patient rooms, a new joint replacement center, laboratory and sterile processing center. A new 30 MBTU (600 HP) wood chip boiler was selected to heat the facility using a renewable energy source.

Tighe & Bond was retained to assist the hospital in obtaining an air permit from the MA Department of Environmental Protection for the AFS Energy Systems biomass boiler. The firm scheduled a pre-application meeting with DEP to discuss air pollution controls, project schedule, expectations and applicability of state and federal air requirements. We completed the permit application and coordinated and oversaw the air emissions compliance testing required by DEP. This is the first air permit of its kind issued in the State of Massachusetts.

The system uses de-barked virgin wood chips, which keep sulfur dioxide emissions low. Generation of nitrogen oxides and carbon monoxide emissions are minimized through combustion control and recirculation of flue gases. Particulate control is achieved via cyclone collector and high temperature baghouses that will meet or exceed 99.5% particulate removal. Gases are exhausted through a 120-foot tall carbon steel stack. The system will save the hospital an estimated \$300,000 per year in energy costs.