

THE eco/TECH SLUDGE RECYCLING SYSTEM: TWO YEARS OF EXPERIENCE

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ABSTRACT

The eco/Technologies Sludge Recycling System (eco/Tech SRS) was introduced at NAWTEC 10 and has now been operating commercially for two years at the Pioneer Valley Resource Recovery Facility (PVERRF), located in Agawam, Massachusetts. A second system will be installed at the Pittsfield Resource Recovery Facility (PRRF), located in Pittsfield, Massachusetts, in 2004 and EnergyAnswers is now marketing the system to other power plant owners. Presented in this paper is an overview of:

- Operating and maintenance history at PVERRF
- Market conditions and challenges
- Air emissions results
- Design enhancements planned for PRRF

The data presented support the potential for waste-to-energy plants, and by extension all solid fuel power plants, to benefit from additional revenue streams while using a waste product to achieve air emissions reductions.

Edward Champagne is Manager – Capital Projects for EAC Operations, Inc., a subsidiary of EnergyAnswers Corp. He was responsible for the design, installation and start up of the eco/Tech Sludge Recycling System at the Pioneer Valley Resource Recovery Facility in Agawam, Massachusetts. Mr. Champagne is a graduate of Western New England College and resides in Westfield, Massachusetts. Prior to joining EAC Operations, he was employed by International Paper Co. in a number of engineering and power plant positions.

INTRODUCTION

The patented eco/Technologies' Sludge Recycling System (eco/Tech SRS) is a commercially proven technology that provides resource recovery facilities with a new revenue source and the potential for reduced emissions of nitrogen oxides (NO_x) and small particulates. The eco/Tech SRS offers an environmentally sound cost-effective disposal option for municipal sludge and industrial liquid waste producers. Sludge producers are facing increasing regulatory scrutiny for their traditional non-combustion disposal methods such as land filling, composting and land application due to the uncertainty of the final disposition of heavy metals and trace organics contained in the sludge. Traditional sludge combustion technologies are reliant on expensive fossil fuels with high operating costs, while co-combustion facilities, those that burn sludge along with other solid fuels, have struggled to achieve commercial viability.