

PROJECT DESCRIPTION

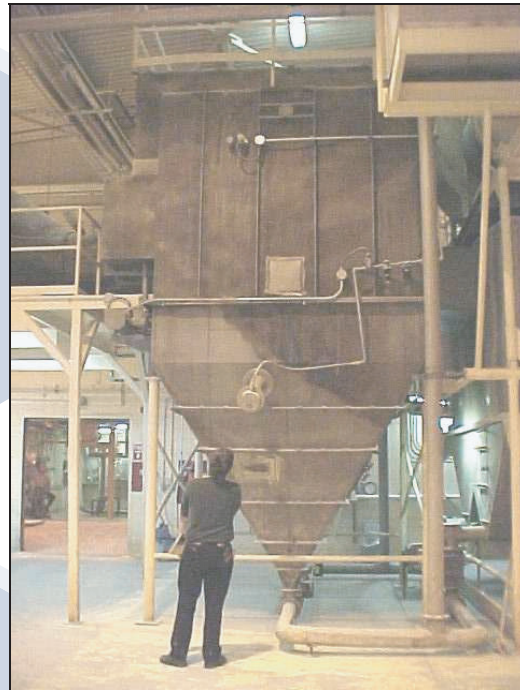
Yeast and Ethanol Abatement System ALLTECH BIOTECHNOLOGY Alexandria, ON

PROJECT SCOPE

The project consisted in treatment of exhaust gas emissions coming from yeast recovery plant to comply with Air Regulations in Ontario.

Mesar / Environair was mandated to provide supply and engineering of a particulates and scrubbing system to the Alltech plant at Alexandria in Ontario.

At Alexandria plant, the waste stream to be treated comes from two yeast spray dryers. The major contaminants were yeast (fine particulates) and ethanol vapor.



The treatment system consists in a baghouse unit followed by a quench and a packed tower scrubber. The baghouse unit knocks out particulates, and the quench cools the exhaust gas and saturates it with water vapor. The packed tower is a caustic/hypochlorite scrubber where any ethanol vapor is easily removed.

Other equipment like recirculation pump, metering pump, mist eliminator and fan were supplied to insure a safe system design.

RESULTS

The system was installed in October 2001 as scheduled. Performance trials in the following months showed that the abatement system consistently operates, and the yeast recovery gives a significant payback on the project investment.

The system efficiencies were 99% on yeast, and of 90% in ethanol removal.