

Presentation of Paul Kramer, VP Rahr Malting Company

“FIND ANOTHER WAY”

Rahr Malting Company is a 153 year old privately held corporation whose sole product is malt for the beverage and food industries. Rahr’s Shakopee MN facility is the largest producer of malt from a single site in the world. This presentation outlines Rahr Malting Co.’s foray into the world of process wastewater treatment.

The process began in the early 90’s with the economic evaluation of the construction of a plant to discharge treated effluent directly to the Minnesota River, bypassing the local WWTP. Rahr was soon to find that this was the simple part of a complex process that would eventually involve city, county, state governments and environmental organizations.

Once the decision had been made based on long-term economic payback the permitting effort began. The permitting process involved the following entities in this order:

- 1) The city of Shakopee – Comprehensive Plan Amendment Required
- 2) The Metropolitan Council (a seven county governmental agency responsible for the POWT facilities)
- 3) Minnesota Pollution Control Agency

In 1996 the permitting process hit a roadblock due to the non-attainment status of the Minnesota River downstream of the discharge point. Negotiations between Rahr and the Minnesota Pollution Control Agency centered on the concept of trading point source discharge against reductions in non-point source discharge. An agreement was reached that was:

- Cost Effect for the permittee
- Defined procedures for calculating non-point reductions
- Incorporated > 2x safety factor in reduction calculations
 - Imposed accountability on maintaining non-point source improvements
- Implemented most stringent NPDES permit conditions to the Minnesota

River

The trading agreement focused on trading nutrient loads of non-point source for the equivalent point discharge BOD load. Four non-point load reduction projects have been agreed upon between the MPCA and Rahr Malting Co. These projects will be covered in this presentation. Rahr Malting Co.'s experiences with trading and Rahr's views on the future of trading will be addressed.

Rahr Malting Co.'s water treatment facility began operation in June of 1999. The design, performance and operation of this facility is discussed.