

Project Name:	Oxidation Pond Construction
Project Location:	Heth, Arkansas
Project Completion Date:	August 1998
Project Duration:	2 Months
Project Value:	\$115,000
Client Name:	MAPCO Inc.
Client Contact:	Mr. Ken Whatley
Client Phone Number:	615-346-2820
Technology Utilized:	Synthetic Liner

Project Description

SEMS was contracted by MAPCO Inc. (MAPCO) to design and perform oversight for the construction of an oxidation pond. The pond was constructed to provide secondary treatment of wastewater from an existing 5,000 gallon per day sewage treatment plant. Construction of the oxidation pond included the following:

- C Design of a rectangular pond with a surface area of approximately 0.67 acres (450 feet by 430 feet by 130 feet). The pond fluid depth was designed at five feet, with an estimated pond fluid volume of approximately 1,080,000 gallons. The pond retention time (excluding rainfall/evaporation) was calculated to be 215 days.
- C Permitting through the Arkansas Department of Pollution Control and Ecology (ADPC&E).
- C Removal of three feet of soil from the pond area to form the pond levees.
- C Construction of pond levees approximately four feet above the ground surface and seven feet above the base of the pond. The levee slopes were constructed at a 2:1 ratio, with a two foot crown.
- C Installation of a hypalon, PVC liner.
- C Installation of transfer sumps, pumps, and piping to and from the existing sewage treatment plant and oxidation pond.