Arkansas solid waste district arranges to have 4.5 million tires used in a dam construction project.

Lisa Rooke

LIKE many states, Arkansas created a fund for solving the problem of waste tire disposal by establishing a fee on new purchases of tires. After banning disposal of tires in landfills in the early 1990s, Arkansas imposed a fee of $1.50 per tire to fund a recycling program, and in 1997, the legislature raised it to $1.75 per tire. Each of the nine regional solid waste management districts received some of the collected funds.

The Northwest Arkansas Regional District in Harrison covers a five-county region with a population of 111,000. Approximately $100,000 per year have been awarded to the district from tire fees collected statewide. According to Program Director Bill Lord, the Northwest Arkansas Board decided that the most cost-effective solution to dispose of the tires was to pay a contractor to pick up the waste tires from local collection centers in each county, take them to a permitted baling operation, and place them in a dam construction project located north of Mountain Home, Arkansas. The successful bidder would collect and process the tires at 73.5 cents per tire. The district also contracted with DAMCO, a Mountain Home company, at a cost of 21.5 cents per tire for dam construction.

DAM PROJECT

The contract was approved and work on the water-impounding dam began in 1995. The dam will encompass about ten surface acres of water and use in excess of 4.5 million tires.

One-ton tire bales are used as lightweight fill material on both the upper and lower sides of the dam. Placed closely together, tire bales are used as fill material on both the upper and lower sides of the dam.

Compacted clay is used as a second layer — after an initial layer of light soil — on top of the tire bales to achieve the desired dam height.

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