

# A Case Study;



## Walnut Ridge, Arkansas Wastewater Treatment Plant

The TORNADO Aerator is a self-aspirating aerator that is particularly good at mixing. It is unique because it is

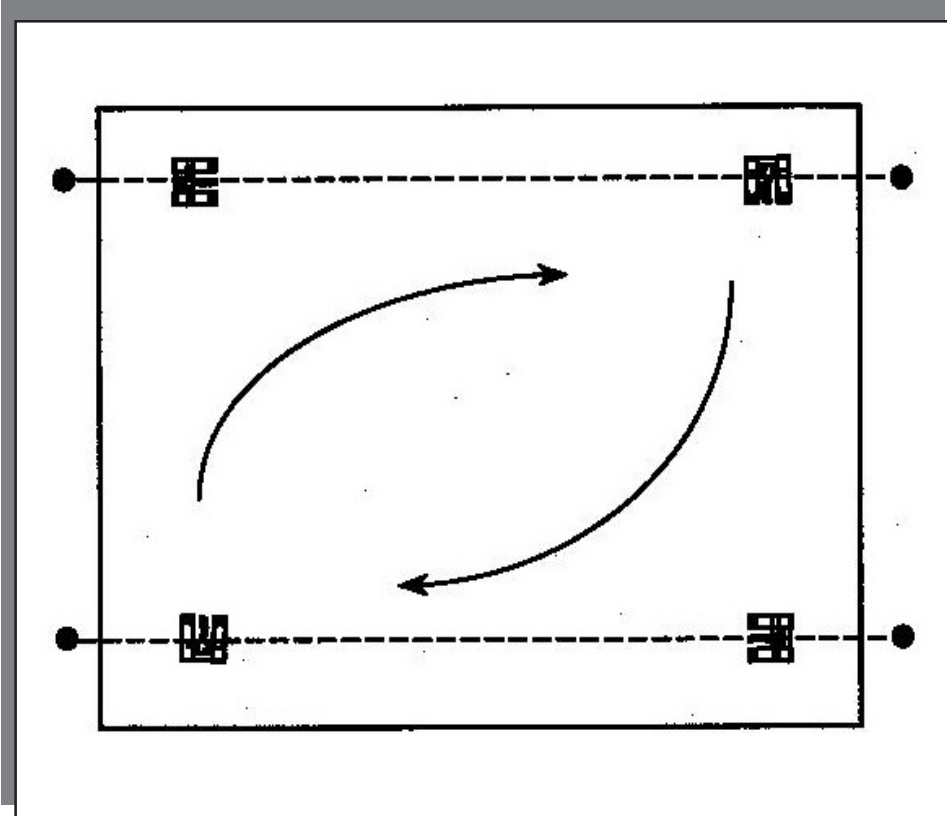
a directional aerator. In other words, it can be pointed at problem areas. By adjusting the angle of the aerator up or down, one can mix more or less vertically. By using multiple units together, one can set up large circulation

## Background

The city of Walnut Ridge, Arkansas, with a population of about 4600 people, has been operating the current 1.2 MGD Wastewater Treatment Plant since the last 1980's. The plant was originally designed using an aeration basin with a BIOLAC diffused air system. The problem with the plant was that although they were getting good oxygen transfer, the corners and side of the basin were not being mixed properly.

## Solution

Ron Pirece, with Garver Engineers, has always been very instrumental in the repair and rehab of the plant at Walnut Ridge. He worked with Lester Herring, Wesley Adams, and Terry Pickerell who operate and maintain the plant to find a solution to the problem. They contacted AEROMIX in August 2000. AEROMIX Systems, put together a package including (4) 7.5HP TORNADO Aerators.



## Results

AEROMIX recommended placing the four aerators in each of the corners. By

placing the aerators in the proper direction, they were able to scour the problem areas and to induce a larger circulation pattern throughout the basin. Lester Herring stated, "The units have done a very good job, not only mixing, but have helped provide additional mixing in the main basin.

