

## Aero-Tube™ Air Lift Versus Paddlewheel Dye Test

Recently, Colorite commissioned a study comparing the water movement and mixing capabilities of a 1 hp Aero-Tube™ Air Lift and a 1 hp Paddlewheel in two 6 foot deep, 0.4 hectare ponds. Both aerators were started five minutes before the test and dye was released in both ponds at precisely the same time. You can see the comparison in the time lapse photos below.



*18 minutes after dye release*

Both aerators were left running long after the dye had been distributed throughout the ponds. (Below: Top pond has the paddlewheel and the bottom pond the **Aero-Tube™ Air Lift**). Over time the dye began to settle to the bottom in the paddlewheel pond but the **Aero-Tube™ Air Lift** continued to mix and circulate water throughout the pond. This is evident from the color change in the paddlewheel pond from purple back to the natural green color. In summary, the **Aero-Tube™ Air Lift** and the paddlewheel circulated the water in the pond at a similar rate. However, the **Aero-Tube™ Air Lift** provided better vertical mixing in the water column.



*30 minutes after dye release*



*55 minutes after dye release*