

RECORDED BENEFITS

- Enhanced MB control throughout mill water and utility circuits
- Reduced IRB in mill water
- Improved workplace safety
- Improved surface condenser efficiency

Enhanced Microbiological Program Reduces Slime and Improves Safety

ClearPointSM Biofilm Detection and Control Program

Customer Challenge

An integrated packaging mill was experiencing microbiological (MB) control issues in its mill water circuit leading to its paper machines. The mill's existing ammonium sulfate-based biocide was insufficient to maintain slime free cooling for critical heat exchangers within the utility circuit. Solenis was chosen to improve general water treatment service and performance by providing a replacement MB control program.

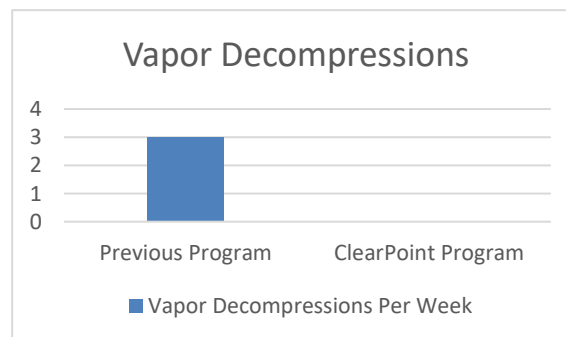
Recommended Solution

Solenis recommended that the mill replace its existing biocide program with ClearPointSM biofilm detection and control program. Comprised of three components—an OnGuardTM 3B analyzer, BiosperseTM CX3195 chlorine stabilizer and Solenis' superior service—the program offers real-time biofouling measurements and automatically adjusts chemical feed to ensure effective, around-the-clock microbiological control.

Results Achieved

The mill achieved the following benefits with the ClearPoint program:

- Chlorine residual increased throughout the mill water circuit to the paper machines, reducing slime and improving thermal transfer
- The amount of iron reducing bacteria (IRB) in the mill water circuit was reduced, lowering iron to the PMs
- Supplemental biocide feed to the cooling towers was significantly reduced and MB control was improved
- Vapor decompressions in the ClO₂ generation process were eliminated, improving safety in the bleaching process
- Surface condenser efficiency improved by increasing vacuum due to the removal of biofouling



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