PINK STAINING OF VINYL POOL LINERS

It is very likely that pink blotches, which can appear on liners of all colors (including white), are caused by an indelible pink dye that is excreted by bacterial micro-organisms. Because the dye is highly soluble in the plasticizers used in flexible PVC pool liners, it can easily migrate through the entire thickness of the liner.

The portion of the dye that is exposed on the surface can be bleached by chlorine; however, new dye will migrate to the surface and will appear as though the chlorine is having little or no affect.

The bacterial micro-organisms can become established on either the water side or the back side of the liner. Growth on the water side may occur if free chlorine levels are allowed to drift below 1.5 ppm at the same time that organic matter and bacteria have accumulated in the water. Superchlorination at this stage will rid the pool water of the contamination, but if the dye happened to penetrate below the surface, the staining tends to linger indefinitely.

Growth on the back side may not take place directly on the liner, but rather on some other material in contact with the liner such as soil or a backing material like styrofoam, felts or taping. Even though an anti-microbial agent is incorporated into the vinyl formulation, the dye can migrate from unprotected components and stain areas well beyond the point of infestation. If there is a lot of pink dye visible on the back side or any backing material, it will certainly be the source of the problem.

If the liner is replaced, all contaminated materials must be removed and the entire pool shell (floor/walls) must be disinfected with a liquid chlorine spray or other the applicable disinfectant.

Special problems are presented by locations that have high water tables of which continually bring water loaded with micro-organisms to the back side of the liner. Using disinfectants at these sites may be ineffective, since they will be quickly washed away. A possible defence may be some type of barrier layer; either a plastic sheet, perhaps polyethylene between the pool shell and liner or a barrier coating of some kind applied directly to the pool shell.

Refer also to the next page for a more detailed technical description of the micro-organism responsible for pink staining.