

Wastewater plants have made greatest cuts

By Karl Blankenship

Since the mid-1980s, wastewater treatment plants have slashed their nitrogen discharges by 35 percent, and their phosphorus discharges by 54 percent. Measured by percentage, they have made the greatest cuts of any major nutrient source to the Chesapeake.

But they are expected to do almost that much more in the next few years. Under regulations approved by state and federal agencies in 2005, so-called "point sources" (so-called because they discharge at a specific point—the end of a pipe) will have specific limits for nitrogen and phosphorus written into their permits.

More than 400 "significant" nutrient dischargers identified in state tributary strategies will be affected. It is the first time nitrogen limits have been required in permits. It will also be the first time most plants have been required to control phosphorus discharges, although some have needed to control that nutrient to protect local water quality in the past.

The EPA will require limits in permits as they come up for renewal. That would take five years to incorporate permits at all facilities. But the agency is promoting the use of "watershed permits," which would set a nutrient cap for all facilities in a given watershed, and allow plants to trade to meet the overall cap. Such a permit could be issued faster.

More than 100 municipal and industrial facilities already treat wastewater with technology to remove nitrogen. According to the EPA, this is the largest number in any of the nation's watersheds.

Reductions in point source discharges are particularly beneficial to the Bay cleanup effort. Unlike runoff (or nonpoint) controls which take time—often years—to show results, point source upgrades produce instant benefits. Nutrient reductions are realized as soon as the discharge leaves the pipe and hits the river.

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