Hot Issues – Week of 3/7/05
Water Monitoring and Standards

Issue: **Mercury, PCB and DDT Treatment Feasibility**

On November 18, 2002, the Department proposed new criteria for mercury, PCBs and DDT based on wildlife protection in an effort to resolve a Biological Opinion filed by the U.S. Fish and Wildlife Service. The Service determined that NJ's aquatic life criteria may not adequately protect bald eagles, osprey, and peregrine falcons. Few states outside the Great Lakes have adopted wildlife criteria. The Department decided not to adopt the new criteria for these bioaccumulative substances due to public comments concerning the implementation of these new more stringent criteria (e.g., proposed mercury wildlife criteria ~0.5 ng/l). EPA Region 2 successfully obtained contractor support to conduct an evaluation of the technical feasibility of wastewater treatment at NJPDES point sources to meet these very stringent criteria. A draft report prepared by Science Applications International Corporation was provided to the Department in October 2004. New Jersey's comments were provided by Region 2 to the contractor and a revised final draft was provided to the Department on January 20, 2005. A copy of the Final Draft TECHNOLOGICAL FEASIBILITY OF PROPOSED WATER QUALITY CRITERIA FOR NEW JERSEY was shared with the Department.

The Final Draft report concluded that treatment to meet the proposed criteria is not readily available and that additional testing of available end-of-pipe treatment technologies is necessary to ensure that installation of a particular technology will achieve the proposed criteria. Pollution Prevention was found to be a potentially more cost-effective strategy and could produce gains toward achieving standards without imposing the costs of unproven end-of-pipe technologies. The contractor concluded that until more sensitive analytical methods are adopted by EPA for PCBs and DDT no action should be required for these two contaminants, as we are unable to quantify whether these pollutants are present at very low levels.

The Department plans to use these findings as the basis to establish a "state-wide" variance to impose alternative water quality-based requirements for mercury, including pollutant minimization and analysis using the new approved mercury method 1631. Several of the Great Lake States (Ohio, Minnesota, Wisconsin and Indiana) have adopted or are working to adopt state-wide variances for mercury. States have not had to address a variance for PCBs due to the lack of an approved analytical method. However, in December 2003, EPA established a TMDL for PCBs in the Delaware Estuary that required the NJPDES dischargers to the Delaware Estuary to use method 1668A, although still not approved. Therefore, the Department plans to establish a "state-wide" PCB variance that would require analysis using the new proposed more sensitive method 1668A and pollutant minimization. No action is planned for DDT as no newer, more sensitive method is known to be available for this contaminant.

At this time, EPA is seeking our approval to finalize the Technological Feasibility report.

EPA plans to share the Final Report with interested parties including the US Fish and Wildlife Service, other EPA Regional Offices and permittees. It is expected that other states may use this report to support their development of "state-wide" variances for mercury and PCBs.

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Action Needed by the Commissioner: Approval to allow EPA to finalize and distribute the report prepared by SAIC and approval to move forward with developing "state-wide" variances for mercury and PCBs.