proposing to require all POTWs to test for these biological indicator organisms in their discharged effluents. The Agency is also proposing, however, to allow the use of fecal coliform as the biological indicator for those applicants where the applicable permitting authorities have not yet switched to monitoring requirements for enterococci and *E. coli*. EPA solicits comments on allowing the use of fecal coliform in cases where permitting authorities have not switched from using fecal coliform as the pathogen indicator. The Agency also solicits comment as to whether testing for enterococci and *E. coli* should be required at all before the Agency has developed approved test methods for these parameters.

The Agency proposes that all POTWs report chlorine and ammonia levels. EPA's experience with toxicity identification evaluations (TIEs) at many POTWs indicate that chlorine and ammonia frequently cause effluent toxicity. Additional studies also reveal frequent adverse effects by these compounds within receiving waters. Therefore, at POTWs that chlorinate their wastewaters without subsequent dechlorination prior to discharge, chlorine may be present in concentrations sufficient to cause toxicity in receiving waters. Ammonia, which is common in nearly all sanitary sewage, is highly toxic to aquatic life in its un-ionized form. The ratio of the relatively toxic un-ionized ammonia form (NH_3) compared with the considerably less toxic ionized ammonium form (NH_4^+) is dependent on pH and temperature.

Chlorine and ammonia are listed in many State water quality standards, and ''The Quality Criteria for Water 1986'' (EPA 440/5–86–001, also known as the ''Gold Book'') lists criteria for both pollutants. Chlorine and ammonia can react to form chloramines, which can be toxic, and are more persistent in the aquatic environment than elemental chlorine. In estuaries or ocean water, bromamines can also form. Analytical methods recommended for the quantification of total residual chlorine (TRC) also indicate the presence of chloramines and bromamines. If a disinfectant other than chlorine is used, the permitting authority has the discretion to require additional data for that disinfectant. If alternative disinfection technologies are used, the applicant must submit a description of the alternate process.

Depending on the type of treatment provided, different sampling regimes may be appropriately required. For example, POTWs that do not use chlorination for disinfection, and do not otherwise use chlorine in their treatment processes, perhaps should not be required to sample for chlorine. The Agency solicits comment on whether to waive chlorine data from such POTWs.

EPA criteria for nitrate, nitrite, and phosphorus are published in The Gold Book. Because these parameters are prevalent in most POTW effluents and because of their impacts on receiving waters, EPA is proposing to require all applicants to test for them. Nitrogen and phosphorus are often limiting nutrients in marine and fresh water systems, respectively. Excessive loadings of nitrogen (discharged as ammonia (including ammonium), nitrate, nitrite, and organic nitrogen) and phosphorus (discharged as phosphate) can stimulate algae growth, interfering with shoreline aesthetics and recreational uses. In addition, decaying algae can reduce dissolved oxygen concentrations, thus impairing the aquatic environment. At concentrations not typically encountered in surface waters, nitrate is toxic to fish.

Today, EPA proposes monitoring and reporting requirements for total nitrate plus nitrite, Kjeldahl nitrogen, and total phosphate. EPA is proposing to request the reporting of nitrate plus nitrite, combined rather than separately, because the chemical equilibrium between the two forms can change rapidly when chemical conditions in effluents and receiving waters differ. Such differences can cause concentration ratios between these two nitrogen oxide forms to change rapidly shortly after effluents enter receiving waters. Thus, separately knowing the effluent concentrations of nitrate and nitrite often bears little significance to their likely concentrations shortly after discharge into receiving waters. Kjeldahl nitrogen concentrations (a measure of organic nitrogen concentrations) are requested to allow permit writers to evaluate the total concentration and total mass of nitrogen discharged, determined by summing concentrations of discharged ammonia, nitrate plus nitrite, and Kjeldahl nitrogen, when all are reported in equivalent nitrogen concentrations (NH_3-N and NO_2+NO_3-N). Phosphate is to be reported in equivalent phosphorus concentrations (PO_4–P). Concentrations of elemental phosphorus in most effluents occur at less than potentially toxic levels; consequently, no reporting requirements are proposed for elemental phosphorus.

The Gold Book also provides criteria values on concentrations of oil and grease. Concentrations of oil and grease sufficient to create a sheen on the receiving water not only affect aesthetic qualities of these waters, but may also reduce the re-aeration rate of the receiving waters, potentially contributing to dissolved oxygen sag problems. Oil and grease may also indicate the presence of other high-molecular-weight organic pollutants of concern, because they are often discharged with or act as a sink for such pollutants. Finally, oil and grease interfere with POTW operations. Therefore, today's proposal includes monitoring and reporting requirements regarding concentrations of oil and grease.

Standard Form A currently requires applicants to test for most of the parameters discussed above. Today EPA is proposing to delete reporting requirements for the following parameters, which are currently included on the list for which sampling is required on Standard Form A:

Chemical Oxygen Demand
Fecal Streptococci
Settleable matter
Total Coliform Bacteria
Total Organic Carbon
Total Solids

EPA is proposing to delete chemical oxygen demand (COD) and total organic carbon (TOC) because biochemical oxygen demand (BOD_5 or $CBOD_5$) is generally more relevant to municipal treatment systems. EPA is proposing to delete settleable matter and total solids because there is considerable overlap between these parameters and total suspended solids and total dissolved solids. The Agency believes that the two selected parameters provide sufficient information to permit writers. Finally, the Agency proposes to drop reporting requirements for fecal streptococci and total coliform bacteria because the Agency believes that the selected pathogens (*E. coli*, enterococci, and fecal coliform) are better indicators for risk. The Agency requests comments on its proposal to delete the above Standard Form A parameters from the proposed application requirements.

In addition to the parameters discussed above, Standard Form A requires that POTWs indicate the presence of (but not provide quantitative data for) certain pollutants, if known. Such pollutants include metals, as well as other toxic and non-conventional pollutants. The Agency is proposing to require that some POTWs sample and report on certain toxic (priority) pollutants, as described in the discussion, ''Reporting of Additional Pollutants for Some POTWs'' (at III.B.3.b). The Agency is proposing, however, not to include POTW reporting requirements for the following pollutants listed on Standard Form A: