NOTICE OF PROPOSED RULEMAKING DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL QUALITY BOARD

(25 Pa. Code, Chapter 92a) National Pollutant Discharge Elimination System Permitting, Monitoring, and Compliance

Preamble

The Environmental Quality Board (Board) proposes to delete and reserve 25 Pa. Code, Chapter 92 (relating to National Pollutant Discharge Elimination System permitting, monitoring, and compliance) and replace it with a new Chapter 92a of the same name. These regulations describe the process that the Department of Environmental Protection (Department) uses to issue National Pollutant Discharge Elimination System (NPDES) permits for point source discharges of treated wastewater and stormwater, in order to meet the requirements of the Federal Clean Water Act and the Pennsylvania Clean Streams Law. The primary goal of the proposed rulemaking is to reorganize the existing Chapter 92 so that it will be consistent with the organization of the companion Federal regulations as set forth in 40 CFR Part 122. This general reorganization is extensive, and it requires that Chapter 92 be replaced with a new chapter, Chapter 92a, to avoid confusion. A new NPDES permit fee structure designed to cover the Commonwealth's share of the cost of running the NPDES program is being proposed. Several new provisions to incorporate recent new requirements in the Federal program are also proposed. Certain treatment requirements are proposed to be added or reorganized to standardize the Department's approach to discharges of treated sewage and industrial wastewater.

This proposal was adopted by the Board at its meeting of _____

A. <u>Effective Date</u>

These amendments will go into effect upon publication in the Pennsylvania Bulletin as final rulemaking.

B. <u>Contact Persons</u>

For further information contact Ronald Furlan, Environmental Program Manager, Division of Planning and Permits, P. O. Box 8774, Rachel Carson State Office Building, Harrisburg, PA 17105-8774, (717) 787-8184 or William S. Cumings, Jr., Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464 (e-mail: <u>wcumings@state.pa.us</u>). Information regarding submitting comments on this proposal appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This proposal is available electronically through the DEP Web site at <u>www.depweb.state.pa.us</u>.

C. <u>Statutory Authority</u>

The proposed rulemaking is being made under the authority of sections 5(b)(1) and 402 of the Clean Streams Law (35 P.S. § § 691.5(b)(1) and 691.402) which provides for the adoption of regulations necessary for the implementation of the Clean Streams Law and section 1920-A of the Administrative Code of 1929 (71 P.S. § 510-20) which authorizes the Board to promulgate rules and regulations to implement the provisions of the Clean Streams Law (35 P.S. § 691.1 – 691.1001).

D. <u>Background and Purpose</u>

This proposed rulemaking deletes and reserves Title 25, Chapter 92, *National Pollutant Discharge Elimination System Permitting. Monitoring, and Compliance*, and creates a new Chapter 92a of the same name. The National Pollutant Discharge Elimination System (NPDES) is the primary means by which pollution from point sources is controlled to protect the water quality of this Commonwealth's rivers and streams, in order to achieve the requirements of the Federal Clean Water Act and the Pennsylvania Clean Streams Law.

The primary goal of the proposed rulemaking is to reorganize the existing NPDES regulations outlined in Chapter 92 so that the organization of the regulations is consistent with the organization of the companion Federal regulations set forth in 40 CFR Part 122. By aligning the State and Federal regulations, it becomes clear where the regulations are identical and where they differ. This will help both Department staff and the regulated community understand the requirements of the program, and where additional or more stringent provisions apply in Pennsylvania. Every effort has been made to revert to the baseline Federal requirements except where additional or more stringent requirements in Chapter 92 were clear, well understood, and have an appropriate basis in the Pennsylvania Clean Streams Law or other appropriate basis.

The proposed rulemaking includes a new NPDES permit fee structure that is designed to cover the cost to the Commonwealth for the administration of the NPDES program. The existing \$500 application fee, payable every five years would be replaced by a sliding scale of application fees and annual fees based primarily on the size of the point source discharge. The proposed fee structure is projected to produce \$5 million annually, which is the Commonwealth's share of the total estimated annual cost of running the program, compared to the \$0.75 million that is collected per year under the existing fee structure. Also, certain treatment requirements have been added or reorganized to standardize the Department's approach to discharges of treated sewage and industrial wastewater.

The proposed rulemaking also includes new provisions designed to keep the program current with changes at the Federal level. Some of these provisions are needed to ensure continued Federal approval of Pennsylvania's program by the U.S. Environmental Protection Agency (EPA). Approval of the final regulation by EPA is required. These new provisions include requirements related to:

- Stormwater Phase II Final Rule requirements (MS4s and small construction activities)
- Cooling water intake structures 316(b)
- NPDES provisions for applications of pesticides

These new provisions generally are designed to achieve the Federal requirements without any more stringent requirements.

At the July and October 2008 meetings of the WRAC (Water Resources Advisory Committee), the proposed regulation was reviewed, and comments received were resolved. At the October 2008 meeting, the WRAC recommended the proposed regulation for advancement to the EQB. At the meeting of the Agricultural Advisory Board on June 17, 2009, the provisions related to Concentrated Animal Feeding Operations (CAFOs), and Concentrated Aquatic Animal Production (CAAP) facilities were considered. Several concerns related to fees for CAFOs were raised, and the fee structure was adjusted in response to these comments.

E. <u>Summary of Regulatory Requirements</u>

The proposed Chapter 92a is organized by subchapters that generally mirror the organization of 40 CFR Part 122 by subparts, and describe each functional step in the permitting process:

- A. Definitions and General Program requirements.
- B. Permit Application and Special NPDES Program Requirements
- C. Permits and Permit Conditions
- D. Monitoring and Annual Fees
- E. Transfer, Modification, Revocation, Termination, Reissuance of Permits
- F. Public Participation
- G. Permit Coordination with the Administrator
- H. Civil Penalties for Violations of NPDES Permits

The remainder of this section summarizes the substantive proposed revisions to the content of the regulation, other than those that are wholly new Federal regulations incorporated by reference.

Detailed Description of Proposed Revisions to Chapter 92 Transferred to the Chapter and New Additions

Note: As noted above, provisions of existing Chapter 92 are proposed to be transferred into Chapter 92a. The parallel sections containing the provisions of Chapter 92 being transferred to this Chapter are noted in parenthesis following the title of the section listed in the regulation. For example, § 92a.5 is entitled "Prohibitions." The number in parenthesis following that title is 92.73. That number refers to existing § 92.73, which contains the parallel provision of Chapter 92 which would be replaced by Proposed § 92a.5.

There is no discussion in this Preamble regarding any section of Chapter 92 where no significant change is being proposed to an existing section of Chapter 92 being transferred to Chapter 92a or to a Federal regulation previously incorporated by reference in § 92.2.

Section 92a.2. Definitions.

This section contains a number of new definitions which do not appear in existing Chapter 92. Among the newly defined terms are: "aquaculture project," "authority," "BOD5 – Biochemical oxygen demand, 5-day," "BTA – Best technology available," "CBOD5 – Carbonaceous biochemical oxygen demand, 5-day," "DMR – Discharge Monitoring Report," "disturbed area," "EHB – Environmental Hearing Board," "EPA," "earth disturbance activity," "entrainment," "expanding facility or activity," "GPD – Gallons per day," "immediate," "impingement," "major amendment," "major facility," "mining activity," "minor amendment," "minor facility," "monthly average discharge limitation," "municipality," "no exposure," "nonpoint source," "permit by rule," "privately owned treatment works," "significant biological treatment," "small flow treatment facility," "TMDL – Total Maximum Daily Load," "TSS – Total Suspended Solids," "treatment works," and "weekly average discharge limitation."

A number of definitions in existing § 92.2 will not be transferred, and will thus be deleted. Among the terms proposed to be deleted are: "industrial user," "log sorting and log storage facilities," "minor discharge," "NPDES primary industry categories," "NPDES reporting form," "primary industrial facility," "rock crushing and gravel washing facilities," and "silvicultural point source." Some of the definitions being deleted are defined in 40 CFR 122.2 (relating to definitions) which would be incorporated by reference under proposed § 92a.3(b)(1).

A small number of definitions from § 92.2 which will be retained in § 92a.2 are revised. These include "BMP – Best Management Practices," "discharge," "POTWs," and "pollution prevention."

Section 92a.3. Incorporation of Federal Regulations by Reference.

Existing § 92.2 contains a listing of all Federal regulations relating to the administration of the NPDES program which have been incorporated by reference. It is proposed to place the regulations so incorporated in those sections of Chapter 92a which correspond to the applicable Federal provision. For example, the Federal provisions of 40 CFR 122.4 relating to prohibitions are incorporated by reference in § 92a.5 which also relates to prohibitions. The remaining regulations incorporated into existing § 92.2 will be retained in § 92a.3 (a).

Section 92a.4. Exclusions.

Existing § 92.4 outlines the exclusions from permit requirements. Some of those exclusions have no counterpart in the applicable Federal regulation, 40 CFR 122.3(a) – (g), which would be incorporated by reference. The existing Federal exclusion relating to the application of pesticides, 40 CFR 122.3(h) would not be incorporated by reference. Pesticide application requirements would be covered by a permit-by-rule being proposed in § 92a.25. Current exclusions in § 92(a)(4) relating to oil and gas activities and conditions relating to indirect discharges in §92(a)(6) will be deleted from the exclusion provisions since they are not included in the Federal exclusion regulation.

Section 92a.5. Prohibitions.

Existing § 92.73 outlines situations where an NPDES permit may not be issued. All but one of the prohibitions are identical to or closely parallel the Federal prohibitions set forth in 40 CFR 122.4. The prohibition which has no Federal counterpart relates to sanitary sewer overflows, § 92.73(8). This provision provides that no permit may be issued for a sanitary sewer overflow, except as provided for in the Federal regulations. This provision has been transferred to § 92a.5(b), except that the qualifier providing for exceptions as provided for in Federal regulations has been deleted.

Section 92a.10. Pollution Prevention.

Existing § 92.2b establishes a hierarchy for measures for the environmental management of wastes, in descending order of preference. That hierarchy consists of reuse, recycling, treatment and disposal. It is proposed to change this hierarchy by encouraging the consideration of two new measures, process change and materials substitution prior to the consideration of those listed above.

Section 92a.11. Other chapters applicable.

Existing § 92.17 provides that whenever the application of certain enumerated chapters produces a more stringent effluent limitation than would be produced by application of Federal requirements, the more stringent limitation would apply. It is proposed to amend this section by adding chapters 16 (relating to water toxics management strategy), 77, 87, 88 and 89 which relate to mining activities to the list of chapters to which this section would apply.

Section 92a.12. Treatment requirements.

Provisions of existing § 92.2a and § 92.8a are transferred to this section. The treatment requirements set forth in existing § 92.2a remain largely unchanged except that new chapters, 16, 77, 87, 88, 89, 90 and 102 are being added to the list of chapters to which treatment requirements are applicable. Thus, permittees would be subject to the more stringent of the treatment requirements applicable to activities covered by those chapters, particularly mining activities and erosion and sediment control activities.

Provisions relating to changes in treatment requirements set forth in existing § 92.8a are transferred to subsections (d) - (f). In subsection (d), the language of existing § 92.8a(a) has been revised by adding a number of chapters to the list of chapters to which revisions may be made which would trigger a notice from the Department to a permittee to respond to those changes. The revision also makes it clearer that it applies to plans or determinations approved by the Department as opposed to whenever the Department adopts a plan or makes a determination which would change or impose additional water quality criteria or treatment requirements.

Existing § 92.8a(c) provides, in part, that whenever a point of projected withdrawal for a new potable water supply not previously considered is identified by "an update to the State Water plan or a river basin commission plan, or by the application for a water allocation permit from the Department", the Department will notify a discharger of total dissolved solids, nitrite-nitrate nitrogen and fluoride of more stringent effluent limitation needed to protect the point of withdrawal. The quoted language is deleted and replaced with simply "the Department." The remainder of existing subsection (c) is unchanged.

Section 92a.24. Permit-by-rule for SRSTPs

The Department requires that SRSTPs (Single-Residence Sewage Treatment Plants) be designed and constructed consistent with robust technology-based requirements, and these systems inherently have little potential to malfunction or cause environmental harm. The Permit-by-Rule provision is designed to maximize the effectiveness of the Department's resources while at the same time minimizing the paperwork burden on permittees without reducing the design, operation, inspection, sampling, or reporting requirements for SRSTPs. (Certain effluent quality and sampling and reporting requirements will be moved from the NPDES general permit to a new water quality management

general permit for SRSTPs.) The Department does not encourage the installation of SRSTPs, but in some cases they may be the only environmentally-sound option. SRSTPs are expensive, and the Permit-by-Rule provision is unlikely to result in increased use of these systems. The provision also reduces the time and effort required of the homeowners who own and maintain these systems. The proposed provisions allow the Department to require coverage under a general or individual permit if a noncompliant discharge requires more rigorous controls.

Section 92a.25. Permit-by-Rule for Application of Pesticides.

Applications of pesticides on or near surface waters had previously been considered by EPA as an activity that does not require coverage under an NPDES permit, as provided in 40 CFR 122.3(h) (relating to exclusions). However, based on recent legal developments, the Federal exclusion may no longer be applicable. The U.S. Court of Appeals for the Sixth Circuit issued a ruling earlier this year vacating the EPA rule exempting pesticide application from NPDES permitting requirements. *National Cotton Council et al. v. EPA* (C.A. 6, No. 06-4630)(Jan. 7, 2009). EPA has requested the Court to grant it a two-year stay. The requested stay was granted on June 8, 2009. In the meantime, an industry group has petitioned the court for an *en banc* rehearing of the case. In view of the fact that a final rule would become effective near the expiration of the stay, the Board is proposing to provide for such coverage in the Commonwealth's program. The Board is especially interested in public comment on this issue.

Application of pesticides has the potential to have adverse effects on water quality, and the source could reasonably be described as a point source, so coverage under an NPDES permit is appropriate from that standpoint. The potential adverse, unintended effects of pesticides have long been recognized, and the use and application of pesticides are controlled under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), (7 U.S.C.A. §§ 136 – 136y). FIFRA requires registration of pesticides, and regulates all aspects of the proper use of restricted-use pesticides. An important goal of FIFRA is to minimize potential impacts on the environment during application. A label instructing the final user on the proper usage of the pesticide is attached to the final product, and if the instructions are not followed, users are liable for any negative consequences.

The Board believes that the application of pesticides has little potential for adverse environmental effects, provided that the pesticides are properly registered, controlled, and applied by trained and certified applicators as per the requirements of FIFRA. Under these conditons, and considering the expected sources as well as the fate and transport profiles of restricted-use pesticides, there should be minimal overlapping or cumulative effects from multiple sources. The Board proposes to authorize the Department to regulate the application of pesticides under a Permit-by-Rule, as long as the requirements of FIFRA are achieved in full. The proposed provisions would allow the Department to require coverage under a general or individual permit if a noncompliant applicator requires more rigorous controls for any reason.

Section 92a.26 New or increased discharges, or change of waste streams.

The appropriate action of a permittee whose wastewater or process change will result in a change in the pollution profile of the treated effluent is clarified. Increases in discharges of permitted pollutants that have no potential to exceed effluent limitations may be initiated without prior approval of the Department, but must be reported within 60 days. Any change in the pollution profile of the effluent

that may exceed effluent limitations, or require new effluent limitations, requires prior notification of the Department. The Department determines whether to require a new application from the permittee, depending on the nature of the process change. Under the existing regulation, a new application is required automatically under some conditions. The revised language in proposed subsection (a) allows more flexibility, and limits the burden on both the permittee and the Department by requiring a new application only for the reasons specified in this section.

Proposed subsection (b) requires that a permittee with coverage under a stormwater permit associated with construction activities will notify the Department before excavating or otherwise disturbing land areas that were not identified in the permit application. The Department determines whether to require a new application from the permittee, depending on whether the new earth disturbance is substantial enough to require new or amended permit conditions.

Sections 92a.28 and 92a.62. Application fees and annual fees.

The existing \$500 application fee for individual NPDES permits which is payable once every five years at the time an application for a new or reissued permit is submitted is proposed to be replaced by a sliding scale of both application and annual fees based primarily on the size of the point source discharge (see Table 1 and Table 2). The maximum allowable application fee for the 5-year term of a general permit is proposed to be raised from \$500 to \$2500. Any increase in the fee for a general permit, however, would require a revision to the general permit, and would be subject to public notice and comment separate from this rulemaking.

The Commonwealth has long subsidized the costs of administering the NPDES program and the associated regulation of point source discharges of treated wastewater, but this is no longer financially feasible or environmentally appropriate. The proposed fee structure will cover only the Commonwealth's share of the cost of administering the NPDES permit program (about 40% of the total cost, with the other 60% covered by Federal grant). The proposed fees are still only a minor cost element compared to the cost of operating a sewage or industrial wastewater treatment facility. The artificially low fees that have been charged have been increasingly at odds with the Department's emphasis on Pollution Prevention and nondischarge alternatives. The proposed fee structure will better align the revenue stream with the true cost of point source discharges to surface waters, from both management and environmental standpoints. The sliding-scale fee structure assures that smaller facilities, which may be more financially constrained and also have a lower potential environmental impact, are assessed the lowest fees. The Department's proposal to provide for a Permit-by-Rule for discharges from SRSTPs, and the application of pesticides under § 92a.24 and § 92a.25, relieves some permittees of any fee.

The proposed fee structure generally requires application fees for new permits that are twice the fees for reissuance applications and for annual fees, reflecting the greater initial cost of processing a new permit. The annual fees are designed to cover the lesser ongoing costs associated with maintaining the permit coverage, including the cost of compliance inspections, sampling, and reports. Setting application fees higher also better compensates the Department for processing applications for new permits that are submitted on a contingency basis, and that may or may not result in a facility being built. Integrating annual fees into the process spreads the cost of the permit over the 5-year permit cycle, and avoids penalizing facilities that may suspend or terminate permit coverage during the cycle.

Setting the permit reissuance fee the same as the annual fee means that permittees generally can count on a uniform fee every year when producing the annual budget.

Table 1. Summary of NPDES Application Fees

Applications fees for individual NPDES per SRSTP Small flow treatment facility Minor facility $< 50,000$ GPD Minor facility $\ge 50,000$ GPD < 1 MGD Minor facility with CSO Major facility ≥ 1 MGD < 5 MGD Major facility ≥ 5 MGD	\$100 for new; \$100 for reissuance. . \$250 for new; \$250 for reissuance . \$500 for new; \$250 for reissuance \$1,000 for new; \$500 for reissuance . \$1,500 for new; \$750 for reissuance . \$2,500 for new; \$1,250 for reissuance
Major facility with CSO	
Applications fees for individual NPDES per Minor facility not covered by an ELG Minor facility covered by an ELG Major facility $< 250 \text{ MGD}$ Major facility $\ge 250 \text{ MGD}$ Stormwater	rmits for industrial waste are: . \$1,000 for new; \$500 for reissuance . \$3,000 for new; \$1,500 for reissuance \$10,000 for new; \$5,000 for reissuance \$50,000 for new; \$25,000 for reissuance
Application fees for individual NPDES per CAFO CAAP MS4 Mining activity	.\$1,500 for new; \$750 for reissuance . \$1,500 for new; \$750 for reissuance . \$5,000 for new; \$2,500 for reissuance

Table 2. Summary of NPDES Annual Fees

Minor facility covered by an ELG	\$1,500
Major facility < 250 MGD	.\$5,000
Major facility ≥ 250 MGD	\$25,000
Stormwater	\$1,000

Annual fees for individual NPDES permits for other facilities or activities are:

CAFO	\$ 0
CAAP	

MS4	\$500
Mining activity	\$0

NOTES:

TTO I DO.	
AEU	Animal Equivalent Unit
CAAP	Concentrated Aquatic Animal Production
CAFO	Concentrated Animal Feeding Operation.
CSO	Combined Sewer Overflow
GPD	Gallons per Day
MGD	Million Gallons per Day
MS4	Municipal Separate Storm Sewer System
SRSTP	Single-residence Sewage Treatment plant

The proposed rulemaking provides for a general review of the permit fee structure every three years, to assure that the fees continue to cover the cost of maintaining the program.

Section 92a.34. Stormwater Discharges

Under subsection (b), stormwater discharges associated with industrial facilities may qualify for a conditional exclusion from the need for permit coverage under some conditions, including that the discharge of stormwater associated with industrial activities is composed entirely of stormwater uncontaminated by industrial pollutants. This conditional exclusion is not new, and is provided for under Federal regulations at 40 CFR 122.26(g). However, under the proposed regulation, the Board clarifies that a stormwater discharge to a surface water classified as High Quality Water or Exceptional Value Water under Chapter 93 is not eligible for the conditional exclusion. This clarification is appropriate in order to assure that any discharges to High Quality Waters or Exceptional Value Waters are nondegrading as per the requirements of Chapter 93.

Section 92a.26. Cooling water intake structures.

Section 316(b) of the Clean Water Act sets design criteria for cooling water intake structures. The implementation requirements of § 316(b) are still being developed at the Federal level. The Board believes that under the § 316(b) process, the permittee is obligated to have the 316(b)-mandated Best Technology Available (BTA) for any cooling water intake structure, and the Department is required to perform a BTA determination in all cases where the permittee has a cooling water intake structure. The Board, therefore, regards the proposed provisions in 92a.36 as the minimum requirements of § 316(b) at this point, and it is consistent with what at least one other state has incorporated into its regulations. Section 92a.36 is subject to revision pending developments at the Federal level as the proposed rulemaking progresses. The Board is particularly interested in receiving comment on this issue.

Section 92a.36.Department action on permit applications.

The Board proposes to list the conditions that would prevent the Department from issuing an NPDES permit to an applicant. These conditions generally are not new or more stringent than provided for in the existing Chapter 92 -- they are simply organized in one section. However, the Department would now consider Local and County Comprehensive Plans and zoning ordinances when reviewing permit

applications, which is not specifically provided for in the existing Chapter 92. This proposed provision is designed to better assure an integrated approach to water resources management. No new specific requirement applies to applicants, but applicants should be motivated to consider how their proposed discharge fits with all applicable plans and ordinances before submitting an application to the Department.

Section 92a.41. Conditions applicable to all permits.

This section generally incorporates all permit conditions applicable to NPDES permits as set forth in 40 CFR 122.41(a)-(m), which were incorporated into existing § 92.2(b). This section would replace existing § 92.51 relating to standard conditions in all permits except as noted below.

Existing § 92.51(6) provides "That the discharger may not discharge floating materials, oil, grease, scum, foam, sheen and substances which produce color, taste, turbidity, or settle to form deposits in concentrations or amounts sufficient to be, or creating a danger of being, inimical to the water uses to be protected or to human, animal, plant, or aquatic life." This language paraphrases the requirements of the general water quality criteria in Chapter 93 (§ 93.6). The qualifier that refers to "amounts sufficient to be…inimical to the water uses…" is thought to be too cryptic and nebulous to be useful, with the result that even substantial visual or odiferous indicators of problems with effluent quality may be overlooked during an inspection. An unqualified prohibition on most of these listed conditions is appropriate, but minor, transient foaming in effluent is not necessarily an indication of problems with the treatment process. The revised provision prohibits all of these conditions except for foam. "Floating materials" refers to floating solid materials, and foaming would still be considered an unacceptable condition if the foaming is visually objectionable, or persists for any distance away from the immediate vicinity of the discharge. The language of § 92.51(6) is proposed to be clarified in subsection (c).

Section 92a.47. Sewage permit.

Subsection (a) outlines a process requiring that sewage, except that discharged from a CSO, be given a minimum of secondary treatment. By streamlining the technology-based secondary treatment standard (STS) for discharges of treated sewage, and inserting the STS into Chapter 92a, permitting requirements for these facilities would be clarified and standardized. Both 40 CFR Part 133 and this proposed subsection define the STS as treatment that will achieve a 30-day average discharge concentration of 25 mg/L Carbonaceous Biochemical Oxygen Demand, 5-day (CBOD₅) and 30 mg/L Total Suspended Solids (TSS), so the basic requirements of the STS would be unchanged and consistent between the Federal and State requirements. Certain exemptions and adjustments provided for in 40 CFR Part 133 would no longer be applicable, because these exemptions and adjustments are outdated and have been misinterpreted in some cases. The STS is 40 years old, and represents a barebones standard of treatment for sewage treatment facilities. Any competent sewage treatment operation can readily achieve the STS.

Two other recurring issues are resolved with the proposed STS:

1. Permit conditions that assure effective disinfection of treated sewage, and implement the water quality criteria for fecal coliform bacteria in Chapter 93, are standardized.

2. Only facilities that are defined as Publicly-owned Treatment Works (POTWs) are required to meet the 85% pollutant removal efficiency for CBOD₅ and TSS. Certain industrial facilities have very weak influent and, in these cases, removal efficiency is not a valid measure of treatment effectiveness.

The proposed STS requires:

- 1. Monthly average discharge limitation for CBOD₅ may not exceed 25 mg/L and TSS may not exceed 30 mg/L.
- 2. Weekly average discharge limitation for CBOD₅ may not exceed 40 mg/L and TSS may not exceed 45 mg/L.
- 3. On a concentration basis, the monthly average percent removal of CBOD₅ and TSS must be at least 85 % for POTW facilities.
- 4. From May through September, a monthly average discharge limitation for fecal coliform of 200/100 mL as a geometric mean and an instantaneous maximum effluent limitation not greater than 1,000/100 mL
- 5. From October through April, a monthly average discharge limitation for fecal coliform of 2000/100 mL as a geometric mean and an instantaneous maximum effluent limitation not greater than 10,000/100 mL.
- 6. Provision for the disposal or beneficial use of sludge.
- 7. pH: 6 to 9 standard units.
- 8. Total residual chlorine: 0.5 mg/L.

Subsections (b) and (c) outline a new technology-based tertiary treatment standard (TTS) for discharges of treated sewage. The TTS would apply to all new or expanding discharges of treated sewage to impaired waters where the impairment has been attributed to discharges of treated sewage, or to surface water designated as a High Quality or an Exceptional Value (antidegradation) water. Existing facilities would not be affected until such time as the permittee proposes to expand the facility. The requirement to implement the TTS would be triggered by a proposed expansion of an existing facility, that would result either in an increased hydraulic capacity of the facility, or an increase in loading of any pollutant of concern to the affected surface water, or both.

In all cases for point sources, the more stringent of the applicable technology-based effluent limit and the water quality-based effluent limit (WQBEL) is applied. For discharges to impaired or antidegradation waters, the WQBEL is expected to be the governing factor in determining the appropriate effluent limits. However, technology-based requirements should be developed and applied independent of water quality-based requirements. The TTS is a more stringent treatment standard than the secondary treatment standard, and a more stringent technology-based treatment standard is appropriate in water quality-limited surface water segments for several reasons:

- In order to reduce possible disparities in treatment requirements amongst multiple point sources.
- An adequate WQBEL may not be available when it is needed (for example, a sewage treatment plant is proposed for expansion, but the TMDL has not yet been scheduled or completed). Applying a more stringent technology-based standard will minimize possible distortions in the planning and design process that may be introduced when the WQBEL is inadequate or

unavailable. The facility may be grossly under-designed, necessitating a costly overhaul of the facility. Applying the TTS in scenarios where advanced treatment clearly will be required will minimize this risk, without increasing the risk that the facility may be over-designed.

• The relationship between the source and an impairment may be reliable, but it may not be effectively tied to any one or more pollutants. An impairment initially attributed to nutrient enrichment may, upon further study or with more data, subsequently be attributed to organic enrichment. Or an impairment that really is due to nutrient enrichment, and that is mitigated with effective nutrient controls, may simply be replaced by an impairment that is attributable to organic enrichment. By assuring a balanced approach to all likely pollutants of concern, vulnerabilities in the WQBEL process can be minimized without undue burden on the permittee.

In addition to all the requirements of the STS, the proposed TTS provides that:

- 1. Monthly average CBOD₅ and TSS may not exceed 10 mg/L.
- 2. Monthly average total nitrogen may not exceed 8 mg/L.
- 3. Monthly average ammonia nitrogen may not exceed 3 mg/L.
- 4. Monthly average total phosphorus may not exceed 1 mg/L.
- 5. Dissolved oxygen must be 6 mg/L or greater at all times.
- 6. Seasonal modifiers may not be applied for tertiary treatment.

These effluent treatment requirements are sufficiently stringent to require advanced treatment as compared to secondary treatment for sewage, but are not state-of-the-art. In impaired or antidegradation waters, treatment at least this stringent will be required.

Section 92a.48. Industrial waste permit.

This section outlines requirements for industrial waste permits. Much of existing § 92.2d would be transferred to this section. A new proposed provision would require that industrial discharges of conventional pollutants be assigned technology-based limits of no greater than 50 mg/L CBOD₅ and 60 mg/L TSS. This provision is intended to address situations where the application of certain outdated technology-based requirements for industrial sources may result in inappropriately permissive technology-based effluent limits. For industrial sources, the Federal Effluent Limitation Guideline (ELG) often is the applicable technology-based requirement. In some cases, the Federal ELG is based on units of mass pollutant loading per unit of production, such that a production operation might be assigned a permissible number of pounds of CBOD₅ that may be discharged per unit of production. When converted into concentration units, the effluent limits may be inappropriately permissive (over 100 mg/L CBOD₅). Consequently, proposed paragraph (a)(4) would require that all discharges of conventional pollutants from industrial discharges achieve 50 mg/L CBOD₅ and 60 mg/L TSS. Since the great majority of industrial sources of conventional pollutants already meet these treatment requirements, this requirement will affect few industrial facilities. The Board is especially interested in public comment on this issue, and expects to address any concerns from individual facilities in the public notice process.

Section 92a.50. CAAP.

Concentrated aquatic animal production (CAAP) facilities are fish hatcheries or fish farms. The discharge from CAAPs normally is of a high quality with low pollutant concentrations, but the high discharge flows can offset the low concentrations, and still result in high pollutant loadings to the receiving stream. Also, CAAPs may be located on streams designated as High Quality Water in Chapter 93, which sets a higher standard for water quality. Based on experience, the Department has determined that it is less effective to regulate CAAP discharge flows with strict, concentration-based limits for conventional pollutants (CBOD₅ and TSS). Concentration-based limits are assigned for all pollutants of concern, but a Pollution Prevention-based approach is most effective in controlling the primary source of the pollutants in the discharge. The proposed rulemaking requires that all CAAPs develop a Best Management Practice (BMP) plan with the primary goal of minimizing excess fish feed in the system. This has proven to be the best way to mitigate the environmental impact of these facilities, and has other benefits to the facility in terms of reductions in feed, maintenance, and treatment costs. BMP plans have become established as good practice within the CAAP industry in recent years.

CAAPs may use therapeutic drugs such as antibiotics and fungicides to control disease in the fish population. The proposed rulemaking requires that CAAPs report the use of these drugs at established intervals, and places strong restrictions on the use of therapeutic drugs that may be carcinogenic. The use of these therapeutic drugs generally is safe and of low environmental concern, but tracking use rates will support investigation of any potential environmental impact of the drugs, or allegation of same.

Section 92a.53. Documentation of permit conditions

This section outlines the minimum content requirements for fact sheets prepared for NPDES permits. A fact sheet is a synopsis of the basis for the issuance of an NPDES permit. It provides information about the facility and the receiving water, describes any technology-based treatment requirements that were applied, and describes how the permit conditions will assure that water quality standards will be achieved in the receiving water. The proposed rulemaking explicitly describes the minimum required content of fact sheets, and makes it clear that these fact sheets are available to the public and other interested agencies upon request.

The existing regulation describes at § 92.61(c) a fact sheet that the Department will produce and forward on request. This provision was limited to discharges of 500,000 gallons per day or greater and does not include all of the information that a fact sheet produced under applicable Federal requirements must include. It is not clear that this provision is intended to fulfill the requirements of a fact sheet produced under applicable Federal requirements. To eliminate this confusion and consistent with the overall goal of the reorganized regulation, the proposed rulemaking requires that the Department produce a fact sheet for all discharges. The required contents of the fact sheet more closely tracks the Federal requirements, and is produced in support of the draft permit, the final permit, or both.

Section 92a.75. Reissuance of expiring permits.

The existing provisions of § 92.13 relating to reissuance or renewal of permits do not provide adequate guidance regarding administrative extensions of existing permits. The proposed rulemaking

limits administrative extensions of existing permits to minor facilities with good compliance histories, and for a period not to exceed five years.

Sections 92a.82 and 92a.88. Public notice of permit applications and draft permits and notice if reissuance of permits.

The requirements for public notice and applications outlined in existing § 92.61 and § 92.67 are being reorganized to describe clearly the information that must be included in public notice postings for applications and draft permits. In the existing regulation, the public notice requirements for applications and draft permits are intermingled and less clearly described. As a result of the proposed amendments, it is now clear that there will be a 30-day period following public notice of draft permits during which persons may submit written comments before the Department makes final determinations. The optional 15-day extension period that is provided for in the existing regulation is retained.

Sections 92a.82(c), 92a.83 and 92a.84(b). Public notice of permit applications and draft permits, public notice of hearing and public notice of general permit.

The proposed rulemaking more clearly defines the public hearing process. Public hearings can be requested by any interested persons during the public comment period for any draft individual permit or proposed general permit. A hearing will be held if there is significant public interest in a draft or proposed permit and public notice of the hearing will be published at least 30 days in advance.

F. <u>Benefits, Costs and Compliance</u>

Benefits

Chapter 92a will help protect the environment, ensure the public's health and safety, and promote the long-term sustainability of the Commonwealth's natural resources by ensuring that the water quality of our rivers and streams is protected and enhanced. Chapter 92a implements the requirements of the Federal Clean Water Act and the Pennsylvania Clean Streams Law for point source discharges of treated wastewater to the rivers and streams of this Commonwealth.

The proposed revision primarily is designed to improve the effectiveness and efficiency of the NPDES permits program. The major problem with the existing Chapter 92 is that it often uses different language than the companion Federal regulation 40 CFR Part 122 to describe requirements, and it is not often clear if Chapter 92 requirements are more stringent than Federal requirements or not. The primary goal of the proposed rulemaking was to rebuild the regulation from scratch, starting with the Federal program requirements, incorporating additional or more stringent requirements only where there was clearly a basis for them. Where feasible, Chapter 92a reverts to Federal terminology and definitions to minimize possible distortions or ambiguity. Superficially, Chapter 92a is not substantially different from Chapter 92 in most areas, but we expect that the reorganization of the NPDES regulation will have a substantive positive effect on Pennsylvania's NPDES program. Permittees and other members of the regulated community will find it easier to determine if Pennsylvania has additional requirements compared to Federal requirements. A supplemental benefit is that turnover in permit engineers and writers should be less disruptive, since new staff should find it easier to understand the streamlined regulatory requirements.

The proposed rulemaking also includes new provisions designed to keep the program current with recent changes at the Federal level. Some of these provisions are needed to ensure continued Federal approval of Pennsylvania's NPDES program by the U.S. Environmental Protection Agency (EPA).

Compliance Costs

No new requirements are proposed in this proposed rulemaking that would require general increases in personnel complement, skills, or certification. The new permit fees are the only broad-based new requirement that would increase costs for permittees, but the fees have been structured to assure that smaller facilities, that are more financially constrained and also have a lower potential environmental impact, are assessed the lowest fees. The cost of securing and maintaining an NPDES permit to discharge to surface waters is small compared to the cost of operating these facilities.

The proposed rulemaking addresses wastewater treatment facilities, including industrial wastewater treatment facilities, publicly-owned treatment works (POTWs), and other facilities that treat sanitary wastewater. The treatment requirements of the NPDES regulation affect operational costs to some extent, but the proposed rulemaking does not include any new broad-based treatment requirements that would apply to most facilities. The compliance costs of the proposed rulemaking for most facilities is limited to the revised application and annual fees. Current annual income from NPDES application fees is estimated at \$750,000, with no annual fees, versus a cost of running the program estimated at \$5 million. The new proposed fee structure is designed to return annual income of approximately \$5 million, such that the total additional cost to the regulated community will be approximately \$4.25 million per year. (A summary of the proposed application and annual fee structure is listed in Tables 1 and 2, presented earlier in this document.)

Compliance Assistance Plan

In cases where the receiving water is water quality-limited (impaired), wastewater treatment facilities may be required to upgrade their treatment capabilities. This would involve a significant compliance cost burden related to engineering, construction and operating costs for upgrading the wastewater treatment facility. The Department's Technical and Financial Assistance Program works with the Pennsylvania Infrastructure Investment Authority (PENNVEST) to offer financial assistance to eligible public water systems. This assistance is in the form of a low-interest loan, with some augmenting grant funds for hardship cases. Eligibility is based upon factors such as public health impact, compliance necessity and project/operational affordability. Other potential sources of financial assistance for wastewater treatment facility upgrades are:

- The Water Supply and Wastewater Infrastructure Program (PennWorks), administered by the Pennsylvania Department of Community Development
- The Community Development and Block Grant Program, administered by the Department Pennsylvania Department of Community Development
- The Growing Greener New or Innovative Water/Wastewater Technology Grant program, administered by the Department

Paperwork Requirements

Most permittees will be required to submit annual fees to the Department.

No other new forms, reports, or other paperwork are required in this proposed rulemaking, except for certain new requirements for concentrated aquatic animal production (CAAP) facilities. CAAPs are fish hatcheries or fish farms. Under this proposed rulemaking, CAAPs would be required to have a written BMP (Best Management Practice) plan to manage feed and nutrients to minimize excess feed that wastes resources and causes pollution without any benefit. Also, therapeutic drug use (e.g. fungicides, antibiotics) must be tracked and reported. The implementation of a BMP plan to manage feed costs and impacts is widely recognized as an appropriate industry practice, and well run facilities already have them in place. Other options that were considered, such as establishing strict mass and concentration-based requirements for discharges of pollutants from CAAPs, were rejected as unnecessary and potentially burdensome. Facilities already are required to secure approval for any discharge of any therapeutic drug that may be detectable in the effluent. The Department generally considers the use of these therapeutic drugs as safe and of low environmental concern, but tracking use rates will support investigation of any potential environmental impact of the drugs, or allegation of same.

G. <u>Pollution Prevention</u>

The Federal Pollution Prevention Act of 1990 established a national policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally-friendly materials, more efficient use of raw materials, and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance.

The proposed rulemaking commits the Department to encourage pollution prevention by providing assistance to the permittee and users of the permittee's facilities in the consideration of pollution prevention measures such as process changes, materials substitution, reduction in volume of water use, in-process recycling and reuse of water and general measures of "good housekeeping" within the plant or facility. Lesser permit fees are assessed on smaller facilities (facilities with lower hydraulic capacity), which effectively motivates permittees to pursue source reduction by reducing the volume of wastewater that requires treatment. The regulation incorporates the established hierarchy for Pollution Prevention, in descending order of preference, for environmental management of wastes: (1) Process change; (2) Materials substitution; (3) Reuse; (4) Recycling; (5) Treatment; and (6) Disposal.

The requirement that CAAPs implement a BMP plan to manage fish feed rates is a good example of source reduction, or process change, to prevent pollution before it is produced, and to reduce the cost of the operation.

H. Sunset Review

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

I. <u>Regulatory Review</u>

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on <u>(blank)</u>, the Department submitted a copy of these proposed amendments to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

Under Section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed regulations within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria that have not been met. The Regulatory Review Act specifies detailed procedures for review of these issues by the Department, the General Assembly and the Governor prior to final publication of the regulations.

J. <u>Public Comments</u>

<u>Written Comments</u> – Interested persons are invited to submit comments, suggestions, or objections regarding the proposed regulation to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 16th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. The Board must receive any comments, suggestions or objections by <u>(blank)</u> (within thirty days of publication in the *Pennsylvania Bulletin*). Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by <u>(blank)</u> (within _days following publication in the *Pennsylvania Bulletin*). The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

<u>Electronic Comments</u> – Comments may be submitted electronically to the Board at <u>RegComments@dep.state.pa.us</u> and must also be received by the Board by (<u>blank</u>). A subject heading of the proposal and a return name and address must be included in each transmission. If the sender does not receive an acknowledgement of electronic comments within two working days, the comments should be retransmitted to ensure receipt.

BY:

JOHN HANGER Chairman Environmental Quality Board